

Project/Site: Levy Nuclear Plant - Transmission	n Lines	City/County: Polk	Samp	Sampling Date:9/22/09		
Applicant/Owner: Progress Energy Florida, In	C	State:FL	Samı	Sampling Point: 1		
Investigator(s): Mike Arrants, Erin Heiner	<u> </u>	Section, Township, Range: 17 26S 23E				
Landform (hillslope, terrace, etc.):	I/A	Local relief (concave, convex, none): none Slope (				
Subregion (LRR or MLRA): LRR U	Lat: _28.22763	34Long: <u>-82</u>	.030275	Datum: WGS84		
Soil Map Unit Name: Pomona fine sand			NWI classification:palu	ustrine emergent		
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes	_ No (If no	, explain in Remarks)		
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstances norm	al? Yes <u>√</u> No		
Are Vegetation, Soil	or Hydrology	_ naturally problematic?	(If needed, explain any a	inswers in Remarks)		
SUMMARY OF FINDINGS - Attach s	ite map showing sampl	ing point locations, t	ransects, important	features, etc.		
Hydrophytic Vegetation Present?	Yes✓ No					
Hydric Soit Present?	Yes No	Is the Sampled Area v	vithin a Wetland? Yes_	No		
Wetland Hydrology Present?	Yes No					
Remarks:						
LIVEROLOCY						
HYDROLOGY			Cdldi4 (			
Wetland Hydrology Indicators:			ninimum of two required)			
Primary Indicators (minimum of one is required		(DO)		ace Soil Cracks (B6) sely Vegetated Concave Surface (B8)		
✓ Surface Water (A1)	Water-Stained Leaves	(89)		, , , ,		
High Water Table (A2)	Aquatic Fauna (B13)	DD 11)	Drainage Patterns			
✓ Saturation (A3)	Marl Deposits (B15) (L	•	Moss Trim Lines (E	•		
Water Marks (B1)	Hydrogen Sulfide Odor	• •	Dry-Season Water	, .		
Sediment Deposits (B2)	Oxidized Rhizospheres					
Drift Deposits (B3)	Presence of Reduced I	, ,		on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction	• •	Geomorphic Position (D2)Shallow Aquitard (D3)			
Iron Deposits (B5)	Thin Muck Surface (C7		•			
✓ Inundation Visible on Aerial Imagery (B	7)Other (Explain in Rema	arks)	FAC Neutral Test (	D5)		
Field Observations:	Yes/ No	Donth (inches): 0.12				
Surface Water Present?			1			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yès ✓ No	_ Depth (inches):0	Hydrology			
(includes capillary fringe) Describe Recorded Data (stream gauge, moni	toring well periol photos previo	us inspections) if available	Present? Yes	✓No		
Describe Necorded Data (Stream gauge, mon	toring wen, aeriai priotos, previo	ous mapections), il available	•			
<u> </u>						
Remarks:						

T 01 1 1 1 1 1 1	Absolute %	Dominant	Indicator	Dominance Test Workshe	et:	
Tree Stratum (Plot size:)	Cover	Species?	Status	Number of Dominant Specie	25	
<u>1.</u> 2.				That Are OBL, FACW, or F		(A)
3.				Total Number of Dominant		
4.	<del></del>			Species Across All Strata:	<u>7</u>	(B)
5.	<del></del>			Percent of Dominant Specie	20	
6.				That Are OBL, FACW, or F		(A/B)
7.		-		Prevalance Index workshop		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)		<del></del>	OBL species	x1=	
1. Acer rubrum	2	yes	OBL	FACW species	x2=	_
2. Salix spp.	2	yes	FACW	FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	
5.				Column Totals:	(A)	— <sub>(B)</sub>
6.					`_	<b>-</b> ` ′
7.				Prevalance Index = B//	A =	
	4	= Total Cove	er	Hydrophytic Vegetation In	dicators:	
Shrub Stratum (Plot size:)				✓ Dominance Test is 5	60%	
1. Baccharis sp.	2	yes	FAC	Prevalence Index is	≤3.0 <sup>1</sup>	
2. Cephalanthus occidentalis	2	yes	OBL	Problematic Hydroph	nytic Vegetation <sup>1</sup> (Ex	plain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and	d wetland hydrology r	must
5.				be present, unless disturbed	d or problematic.	
6.				Definitions of Vegetation	Strata:	
7.				<u> </u>		
	4	= Total Cove	er	Tree- Woody plants, excluding		
Herb Stratum (Plot size:	)			approximately 20 ft (6m) or m		. (7.6
Eupatorium capillifolium	60	yes	FACU	cm) or larger in diameter at b	reast height (DBH).	
Panicum hemitomon	20	yes	OBL	Sapling- Woody plants, exclu		
Andropogon glomeratus	10	no	FACW	approximately 20 ft (6m) or m	ore in height and less	than 3
4. Juncus effusus	2	no	FACW	in. (7.6 cm) DBH.		
5. Juncus repens	2	no	OBL	Shrub- Woody plants, exclud		
6. Rhexia spp.	2	no	FACW	approximately 3 to 20 ft (1 to		
7. Typha spp.	2	no	OBL	Herb- All herbaceous (non-w		
8. Hydrocotyle spp.	2	no	OBL	herbaceous vines, regardless		
9. Eleocharis spp.	2	no	OBL	plants, except woody vines, k	ess man approximater	y 3 it (1
10. Hyptis alata	2	no	OBL	] ′		
11. Cyperus spp.	2	no	FACW	Woody vine- All woody vines	s, regardless of neight	
12. Woodwardia virginica	2 400	no	OBL	-		
Moody Vine Stratum (Plot aire:	108	= Total Cove	31			
Woody Vine Stratum (Plot size: _			EAC			
Ampelopsis arborea	2	yes	FAC	4		
2.						<del>.</del>
3.	-					
4. 5.	-			Hydrophytic	Voc / No	
<u> </u>				Vegetation Present?	Yes <u> </u>	<del></del>
	2	= Total Cove	or.			

County/soil: Polk- Pomona

SOIL								Sampling Point:1
Profile De	escription: (Describe t	to the dep	th needed to doc	ument the	indicator or	confirm the abs	sence of indicator	s.)
Depth	Matrix	•		Redox Fe				•
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>z</sup>	Texture	Remarks
0-6	10 YR 3/1							very dark gray fine sand
6-12	10 YR 6/2							light brownish gray sand
					<del></del>			light gray sand
12-21	10 YR 7/2							dark reddish brown loamy fine sand
21-26	5 YR 3/3						· · · · · · · · · · · · · · · · · · ·	dark reddish brown loarny line sand
17 0							21 D1 - D1	Later AA-NA-La
	Concentration, D=Depl	etion, RM=	=Reduced Matrix, (	US=Covered	or Coated S	and Grains.	-Location: PL=Po	ore Lining, M=Matrix.
	oil Indicators:			Datasat	Dala C	-f (CO) (I DD	C T III	Indicators for Problematic Hydric Soils 3:
Histof						rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)				•	S9) (LRR S, T, L	•	2 cm Muck (A10) (LRR S)
	Histic (A3)				-	ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				ed Matrix (F3)			Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR P	', T, U)			Dark Surface	* :		(MLRA 153B)
5 cm	Mucky Mineral (A7) (LF	RR P,T,U)	j	Deplete	ed Dark Surfa	ace (F7)		Red Parent Material (TF2)-
✓ Muck	Presence (A8) (LRR I	J)		Redox	Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	-,			10) (LRR U)			Other (Explain in Remarks)
	eted Below Dark Surfac	e (A11)		Deplete	ed Orchric (F	11) (MLRA 151)	i	
·	Dark Surface (A12)	· ( ,				sses (F12) (LRF		31-31
Coast Prairie Redox (A16) (MLRA 150A)				_	•	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)					Orchric (F17)			problematic.
	y Gleyed Matrix (S4)	-M. C, C,				8) (MLRA 150A,	150B)	
	y Redox (S5)		•			n Soils (F19) (ML		
	ped Matrix (S6)						) (MLRA 149A, 153	3C, 153D)
Dark	Surface (S7) (LRR P, S	3. T, U)						
	e Layer (if observed):							
	Type:	•					ļ	
l	Depth (inches):						Hydric Soil Prese	ent? Yes ✓ No .
Remarks:							Inyuno con ricos	entr res , no .
Remarks.								
İ								
							•	

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk	Sampling Date: 9/22/09			
Applicant/Owner: Progress Energy Florida, Inc.	,	State: FL		Sampling Poir	it: 2 .	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: <u>17 26S 23E</u>				
Landform (hillslope, terrace, etc.): N	Ά	Local relief (concave, convex, none): none Slope (%			Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat:28,2274	60 Long: -82.	032760		Datum: WGS84	
Soil Map Unit Name: Wauchula fine sand			_ NWI classification:	: <u>palustrine em</u>	ergent	
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain	in Remarks)	
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstances	normal?	Yes <u>√</u> No	
Are Vegetation, Soil,			(If needed, explain	any answers ir	n Remarks)	
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations, t	ransects, impoi	rtant feature	es, etc.	
Hydrophytic Vegetation Present?	Yes No		•			
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	vithin a Wetland?	Yes✓	No	
Wetland Hydrology Present?	Yes No	]				
Remarks:		<b>3</b>				
·						
HYDROLOGY						
Wetland Hydrology Indicators:	•		Secondary Indicate	ors (minimum o	f two required)	
Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C	2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Buri	rows (C8)		
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	Saturation Vi	isible on Aerial I	magery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-12				
Water Table Present?	Yes No	Depth (inches): 0				
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)		-	Present?	Yes <u>√</u>	No	
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previo	us inspections), if available	:		·· · · · · · · · · · · · · · · · · · ·	
Remarks:						
remarks.						
1						

<b>VEGETATION</b> - Use scientific name	nes of plants			Sampling Point:
	Absolute %	Dominant	Indicator	
Tree Stratum (Plot size:)	Cover	Species?	Status	
1.		•		Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 6 (A)
3.				Total Number of Dominant
4.		·		Species Across All Strata: 6 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC:
7.				Prevalance Index worksheet:
··		= Total Cove	ar	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:)	C	- 10tai 0010	71	OBL species x1=
1. Acer rubrum	2	yes	OBL	FACW species x2=
Salix spp.		ves	FACW	FAC species x3=
3.		yes	TACVV	FACU species x4=
4.			****	UPL species x5=
5.				4 — — — — —
5.				Column Totals: (A) (B)
6.				
7.				Prevalance Index = B/A =
	4	= Total Cove	er	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:)				✓ Dominance Test is 50%
Cephalanthus occidentalis	2	yes	OBL	Prevalence Index is ≤3.0¹
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7.				1
	2	= Total Cove	er .	Tree- Woody plants, excluding woody vines,
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7.6
1. Typha spp.	25	yes	OBL	cm) or larger in diameter at breast height (DBH).
Panicum hemitomon	25	yes	OBL	Sapling- Woody plants, excluding woody vines,
Panicum repens	25	yes	FACW	approximately 20 ft (6m) or more in height and less than 3
Eupatorium capillifolium	10	no	FACU	in. (7.6 cm) DBH.
Pontederia cordata	2	no	OBL	Shrub- Woody plants, excluding woody vines,
6. Ludwigia peruviana		no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.
Amphicarpum muhlenbergianu		<del></del>	FACW	
Amphicarpum munienbergianu     Juncus effusus	2	no		Herb- All herbaceous (non-woody)plants, including
		no	FACW	herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (
9. Polygonum punctatum	2	no	FACW	m) in height.
10. Euthamia spp.	2	no	FAC	<b>_</b>
11. Aristida stricta	2	no	FAC	Woody vine- All woody vines, regardless of height.
12. Rhyncospora spp.	2	no	FACW	1
	101	= Total Cove	∍r	
Woody Vine Stratum (Plot size:	)			ļ
1.				
2.				
3.				
4.				Hydrophytic
5.				Vegetation Present? Yes <u>√</u> No
	0	= Total Cove	er	1
Remarks: (If observed, list morpho	ological adapta	ations below).		
Percent cover estimates based on	-		oroader cor	mmunity

County/soil:	Dolk	Marchila

SOIL								Sampling Point:2		
Profile De:	scription: (Describe t	to the dep	th needed to doc	ument th	e indicator or	confirm the abs	sence of indicators	.)		
Depth	Matrix	•			Features			•		
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks		
0-7	10 YR 2/1							black fine sand		
7-10	10 YR 5/1							gray fine sand		
10-18	10 YR 6/1							gray fine sand		
18-21	10 YR 2/2							very dark brown fine sand		
		_		_						
ļ							<del></del>			
	Concentration, D=Depl	etion, RM=	Reduced Matrix, C	:S=Cover	ed or Coated S	and Grains.	*Location: PL=Por	e Lining, M=Matrix.		
	I Indicators:							Indicators for Problematic Hydric Soils 3:		
Histol	• •					face (S8) (LRR		1 cm Muck (a9) (LRR O)		
	Epidon (A2)					59) (LRR <b>S</b> , T, L		2 cm Muck (A10) (LRR S)		
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)				y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ed Layers (A5) ic Bodies (A6) (LRR P	. T. U)	•		eted Matrix (F3) x Dark Surface			Anomalous Bright Loamy Soils (F20) (MLRA 153B)		
I -	Mucky Mineral (A7) (LF		•		eted Dark Surfa	` '		Red Parent Material (TF2)		
_	Presence (A8) (LRR t		•		x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)		
		٠,	•		(F10) (LRR U)	(1 0)		Other (Explain in Remarks)		
	Muck (A9) <b>(LRR P,T)</b> ed Below Dark Surfac	- (844)	•			11) (MLRA 151)		Outer (Explain in remarks)		
	eu below Dark Suriac Dark Surface (A12)	e (ATT)	•			sses (F12) (LRF				
	Prairie Redox (A16) (I	Δ)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or						
	Mucky Mineral (S1) (L		<i>^,</i>	Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbed problematic.						
	Gleved Matrix (S4)	-KK O, 3)	•			B) (MLRA 150A,	150R)	·		
<u> </u>	Redox (S5)		•			Soils (F19) (ML				
	ed Matrix (S6)						) (MLRA 149A, 1530	: 153D)		
	Surface (S7) (LRR P, \$	. T III	•		ialous bright Lt	dainy dons (1 20)	, (MEICA 145A, 155C	, 1005/		
	Layer (If observed):						1			
1	Type:									
	Depth (inches):						Hydric Soil Preser	nt? Yes <u>✓</u> No		
Remarks:							•			
l										
}										

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk	9/22/09			
Applicant/Owner: Progress Energy Florida, Inc	).	State: FL Sampling Point:			3	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 17 26S 23E				
Landform (hillslope, terrace, etc.): N	/A	Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U		200 Long: <u>-82.</u>	035954	Da	atum: WGS84	
Soil Map Unit Name: Pomona fine sand				: palustrine eme		
Are climatic / hydrologic conditions on the site t	ypical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal? Ye	esNo	
	or Hydrology		(If needed, explain	n any answers in F	Remarks)	
SUMMARY OF FINDINGS - Attach si			ransects, impo	rtant features	, etc.	
Hydrophytic Vegetation Present?	Yes✓No					
Hydric Soil Present?	Yes✓ No	Is the Sampled Area v	vithin a Wetland?	Yes <u>√</u> No	·	
Wetland Hydrology Present?	Yes✓ No					
Remarks:	•					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of t	wo required)	
Primary Indicators (minimum of one is required	check all that apply)			Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	<del></del>	Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	(55)		atterns (B10)	Currace (Bo)	
<del></del>		DD III		im Lines (B16)		
Saturation (A3)	Marl Deposits (B15) (L	•		` ,		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)	ı	
Sediment Deposits (B2)	Oxidized Rhizospheres					
Drift Deposits (B3)	Presence of Reduced I					
Algal Mat or Crust (B4)	Recent Iron Reduction	• ,		nic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7	•	uitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7	)Other (Explain in Rema	arks)	FAC Neutra	I Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	_	4			
Water Table Present?	Yes No	_ Depth (inches):0	Wetland			
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology			
(includes capillary fringe)			Present?	YesN	D	
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previo	ous inspections), if available	:			
Remarks:	1					
incinarks.						
1						
l						

Profile Description: (Descr	ibe to the de	pth needed to doc	ument the ind	icator or c	onfirm the abse	nce of indicators.)			
Depth Matrix Redox Features									
ches) Color (moist)		Color (moist)		ype¹	Loc <sup>2</sup>	Texture		Rema	arks
6 10 YR 3/1							very dark gray t	ine cand	
10 YR 6/2							light brownish g		
							light gray sand	ray sanu	
2-21 10 YR 7/2 1-26 5 YR 3/3					<del></del>		dark reddish br	oue loomy fo	o cond
-26 3 TR 3/3				<del></del>		<del></del>	uark reduisir bir	owit loanly life	e sanu
ype: C=Concentration, D=I	Doplotion PM	-Poduced Matrix	C=Covered or	Coated Sa	nd Grains	<sup>2</sup> Location: PL=Pore	Lining M=Matrix		
ydric Soil Indicators:	Depletion, Kivi	-Reduced Matrix,	CO-COVERED OF	Coaled 3a	ind Grains.		ndicators for Pro		dric Soils 3:
Histol (A1)			Polyvalue I	Below Surfa	ace (S8) (LRR S		1 cm Muck (a		
Histic Epidon (A2)					9) (LRR S, T, U)		2 cm Muck (A		
Black Histic (A3)					(F1) (LRR O)	_			ide MLRA 150A, B)
Hydrogen Sulfide (A4)			Loamy Gle	•		-			F19) (LRR P, S, T)
Stratified Layers (A5)			Depleted N		(1 2)	-			
Stratified Layers (AS) Organic Bodies (A6) (LF	DD T III		Redox Dar		E6)	_	Anomalous Bi		OIIS (F2U)
							(MLRA 153E	•	
5 cm Mucky Mineral (A7		)	Depleted D			-	Red Parent M		
✓ Muck Presence (A8) (L.	•		Redox Dep		F8)	-	_ ·		(TF12) (LRR T, U)
1 cm Muck (A9) (LRR P			Marl (F10)			=	Other (Explain	ı in Remarks)	
Depleted Below Dark Su					1) (MLRA 151)	0.07			
Thick Dark Surface (A12)					ses (F12) (LRR				ation and wetland
Coast Prairie Redox (A16) (MLRA 150A)		•			(LRR P, T, U)		ydrology must be	present, unle	ess disturbed or
Sandy Mucky Mineral (S		)	Delta Orch		•	•	roblematic.		
Sandy Gleyed Matrix (Sa	4)				(MLRA 150A, 1				
Sandy Redox (S5)					Soils (F19) <b>(ML</b> F				
Stripped Matrix (S6)			Anomalous	s Bright Loa	amy Soils (F20)	MLRA 149A, 153C,	153D)		
Dark Surface (S7) (LRR	P, S, T, U)								
estrictive Layer (If observ	red):								
Туре:									
Depth (inches):					i	Hydric Soil Present	? Yes	✓ No	<del></del>
emarks:			•						

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date: 9/22/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: 4		
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 17 26S 23E				
Landform (hillslope, terrace, etc.): N/	Α	Local relief (concave, convex, none): <u>none</u> Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: 28.227342	Long:82.	037888	Datum: WGS84		
Soil Map Unit Name: Pomona fine sand			NWI classification:	_palustrine emergent		
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	. No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology		Are circumstances			
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)		
SUMMARY OF FINDINGS - Attach sit						
Hydrophytic Vegetation Present?	Yes✓No	Is the Sampled Area within a Wetland? Yes No				
Hydric Soil Present?	Yes No					
Wetland Hydrology Present?	Yes No					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:		<del></del>	Secondary Indicate	ors (minimum of two required)		
Primary Indicators (minimum of one is required;	check all that annly)		Surface Soil			
✓ Surface Water (A1)	Water-Stained Leaves (	B9)		getated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	50)	Drainage Pat	, ,		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	` '		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burn	. ,		
Drift Deposits (B3)	Presence of Reduced In			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction is	• •		Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)			Shallow Aquitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutral			
Field Observations:		···• <b>,</b>				
Surface Water Present?	Yes No	Depth (inches): 0-12				
Water Table Present?	Yes No					
Saturation Present?	Yes ✓ No		Wetland			
(includes capillary fringe)			Hydrology Present?	Yes ✓ No		
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previou	us inspections), if available:	<u> </u>			
Remarks:						
Tremarks.						

Absolute 0/	Dominant	Indicator	Dominance Test Works	heet:		
Cover	Species?	Status	Dominance rest works	iicet.		
			Number of Dominant Spe	cies	Ω	(4)
			That Are OBL, FACW, or	FAC:	<u>o</u>	(A)
			Total Number of Dominar	nt	ρ	(B)
			Species Across All Strata	:	2	(D)
			Percent of Dominant Spe	cies	100.00	(A/B
			That Are OBL, FACW, or	FAC:	100.00	(/\D
			Prevalance Index works	heet:		
	= Total Cove	er	Total % Cover of:	<u>Mt</u>	ultiply by:	
)			OBL species	x1=		_
			FACW species	x2=		_
			FAC species	x3=		_
			FACU species	x4=		_
			UPL species	x5=		_
			Column Totals:	(A)		(B)
			]			
·			Prevalance Index = I	B/A =		
0	= Total Cove	er	Hydrophytic Vegetation	Indicators:		
)			✓ Dominance Test is	s 50%		
2	yes	OBL	Prevalence Index	is ≤3.0 <sup>1</sup>		
			Problematic Hydro	phytic Veget	ation <sup>1</sup> (Exp	olain)
	-					
			Indicators of hydric soil a	and wetland h	ydrology n	nust
			Definitions of Vegetatio	n Strata:		
·			1			
2	= Total Cove	er	Tree- Woody plants, exclu	ding woody vir	nes,	
)						(7.6
20	yes	OBL	cm) or larger in diameter a	t breast height	t (DBH).	
10	yes	OBL	Sapling- Woody plants, ex	cluding woody	y vines,	
10	yes	OBL		more in heigh	nt and less	than 3
10	yes	OBL	in. (7.6 cm) DBH.			
10	yes	FAC	Shrub- Woody plants, exc	luding woody v	vines,	
10	yes	OBL	approximately 3 to 20 ft (1	to 6 m) in heig	ht.	
10	yes	OBL	Herb- All herbaceous (non	-woody)plants	, including	
2	no	OBL				
2	no	FACW		, less than ap	proximately	/ 3 ft (1
2	no	FACW	]m) in height.			
2	no	FACW	Woody vine- All woody vir	es, regardles	s of height.	
2	no	OBL				
90	= Total Cove	er	]			
)						
			Hydrophytic			
			Vegetation Present?	Yes✓	No	<u>.</u>
	= Total Cove		7 -			
	20 10 10 10 10 2 2 2 2 2 2 2 2 2 90	Cover Species?	Cover Species? Status    Cover   Species? Status	Cover Species? Status Number of Dominant Species Column Total Number of Dominant Species Across All Strata Percent of Dominant Species That Are OBL, FACW, or Prevalance Index works Total % Cover of OBL species FACW species FACW species UPL	Cover	Number of Dominant Species   That Are OBL, FACW, or FAC:   B

County/soil: Polk- Pomona

SOIL								Sampling Point:4
Profile De	scription: (Describe	to the dep	th needed to doc	ument the	indicator or	confirm the ab-	sence of indicators	.)
Depth	Matrix				Features			•
			Calas (mais)			Loo²	Tardress	Domestro
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
1								
0-6	10 YR 3/1							very dark gray fine sand
6-12	10 YR 6/2							light brownish gray sand
		. ——						
12-21	10 YR 7/2							light gray sand
21-26	5 YR 3/3							dark reddish brown loamy fine sand
			· <del>· · · · · · · · · · · · · · · · · · </del>					
								·
Type: C=	Concentration, D=Dep	letion, RM=	Reduced Matrix. (	S=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
				Б.1			·	
Histol	, ,					rface (S8) (LRR		1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin [	Dark Surface (	S9) (LRR <b>S</b> , T, l	<b>J</b> )	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loam	v Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		•		y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				ted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR F	P, T, U)		Redo:	x Dark Surface	e (F6)		(MLRA 153B)
F	Musiky Mineral (A7) (1)	DD D T I''		Danie	ted Dark Surfa	ace (F7)		Red Parent Material (TF2)
	Mucky Mineral (A7) (L		-					
Muck	Presence (A8) (LRR	U)		Redo:	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1	Muck (A9) (LRR P.T)			Marl /	F10) (LRR U)			Other (Explain in Remarks)
1 cm	MUCK (A9) (LRR P, I)				rio) (LKK U)			Other (Explain in Remarks)
Deple	ted Below Dark Surfac	e (A11)		Deple	ted Orchric (F	11) (MLRA 151)		
		,	•					
I—I nick	Dark Surface (A12)			iron-N	nanganese ma	isses (F12) (LRF	(O, P, I)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MI RA 150	Δ)	Umbr	ic Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
	, , ,		-, ·		-			
Sandy	Mucky Mineral (S1) (	LRR O, S)		Delta	Orchric (F17)	(MLRA 151)		problematic.
Sand	Gleyed Matrix (S4)			Redu	red Vertic (F1)	B) (MLRA 150A,	150R)	
	Redox (S5)				•	n Soils (F19) (ML	,	
Stripp	ed Matrix (S6)			Anon	alous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)
Dowle	Curfore (CT) (LDD D	C T III						
	Surface (S7) (LRR P,							
Restrictiv	e Layer (If observed)	:					1	
Ì	Туре:						1	
	Depth (inches):						Hydric Soil Prese	nt? Yes ✓ No .
	Deptir (inches).						Invalic Soil Flese	ntr res v NO .
Remarks:								
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Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date: 9/22/09		
Applicant/Owner: Progress Energy Florida, Inc.	<u> </u>	State: FL	·	Sampling Poir	nt: <u>5</u>	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 17 26S 23E				
Landform (hillslope, terrace, etc.):N	/A	Local relief (concave, con	Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: 28.22714	4Long: <u>-82</u>	.038717		Datum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	. <u>N/A</u>		
Are climatic / hydrologic conditions on the site ty	ypical for this time of year?	Yes <u></u> ✓	No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		Yes <u></u> √_No	
Are Vegetation, Soil,			(If needed, explain	any answers i	n Remarks)	
SUMMARY OF FINDINGS - Attach si			ransects, impor	rtant featur	es, etc.	
Hydrophytic Vegetation Present?	Yes✓No					
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes/	No	
Wetland Hydrology Present?	Yes✓ No	]				
Remarks:		<u> </u>	<del></del>			
	•					
HYDROLOGY						
Wetland Hydrology Indicators:		<del>g</del> .	Secondary Indicate	ors (minimum c	of two required)	
Primary Indicators (minimum of one is required;	check all that apply)					
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Surface Soil (	, ,	ve Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Pat				
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li			
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C	:21	
Sediment Deposits (B2)	Oxidized Rhizospheres	• •	Crayfish Burr	•		
Drift Deposits (B3)	Presence of Reduced Ir	- ,		isible on Aerial	Imageny (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	• •	<del></del>		illagery (CO)	
Iron Deposits (B5)	Thin Muck Surface (C7)	, , , , , , , , , , , , , , , , , , , ,				
✓ Inundation Visible on Aerial Imagery (B7)		•		, ,		
Field Observations:	)Ouler (Explain in Nema	iks)	FAC Neutral	Test (Da)		
Surface Water Present?	Yes No	Donth (inches): 0-12				
Water Table Present?	Yes_ ✓ No					
			Wetland			
Saturation Present?	Yes No	_ Depth (inches):u	Hydrology			
(includes capillary fringe)	well essiel photos provin	······································	Present?	Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previol	us inspections), it available	:			
Remarks:						
i						

VEGETATION - Use scientific nar	nes of plants				Sampling Point:	5
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshe	et:	
1. 2.				Number of Dominant Specie That Are OBL, FACW, or FA		(A)
3.		-		Total Number of Dominant		
4.				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Specie	S 400.00	(A /D)
6.				That Are OBL, FACW, or FA		(A/B)
7.				Prevalance Index workshop	et:	
Sapling Stratum (Plot size:)	0	= Total Cove	r	Total % Cover of: OBL species	Multiply by: x1=	_
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	_ (B)
6.						
7.				Prevalance Index = B/A		
Shrub Stratum (Plot size: )	Ū	= Total Cove	ſ	Hydrophytic Vegetation In  ✓ Dominance Test is 5		
	2		OBL		_	
Cephalanthus occidentalis	2	yes	OBL	Prevalence Index is :		احتجاء
2.       3.				Problematic Hydroph	iytic vegetation (Exp	olain)
4.				Indicators of budric soil one	Luctional budrologue	munt
<del>4.</del> 5.				Indicators of hydric soil and be present, unless disturbed		nust
6.	<del></del>	<del></del>		Definitions of Vegetation		
7.					J. 1. 2. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	
		= Total Cove		Tree- Woody plants, excludin	a woody vines	
Herb Stratum (Plot size:	-	, , , , , , , , , , , , , , , , , , , ,	•	approximately 20 ft (6m) or m		(7.6
1. Eleocharis spp.	75	yes	OBL	cm) or larger in diameter at bi	_	•
Panicum hemitomon	15	no	OBL	Sapling- Woody plants, exclu	iding woody vines,	
Andropogon spp.	5	no	FAC	approximately 20 ft (6m) or m		than 3
Scleria spp.	5	no	FACW	in. (7.6 cm) DBH.		
5. Sphagnum spp.	2	no	N/A	Shrub- Woody plants, exclud	ing woody vines,	
6. Xyris spp.	2	no	OBL	approximately 3 to 20 ft (1 to 0	6 m) in height.	
7.				Herb- All herbaceous (non-wo	oody)plants, including	
8. 9.				herbaceous vines, regardless		
				plants, except woody vines, le	ess than approximately	y 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines	, regardless of height.	
12.						
Woody Vine Stratum (Plot size:	)	= Total Cove	r			
1. 2.				1		
3.						
4.	<del></del>			  Hydrophytic		
<del>4.</del> 5.		<del></del>		1 ' '	Yes ✓ No	
		= Total Cove	 r	1 - 2 3 - 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

SOIL								Sampling Point:5		
	scription: (Describe t	o the dept	h needed to docu			n the abs	ence of indicators.)			
Depth (inches)	Matrix Color (moist)	<del></del> -	Color (moist)	Redox Featur		.oc²	Texture	Remarks		
inches	Color (moist)		Color (moist)		<u> </u>		Texture	Nemark\$		
0-6	10 YR 3/1							very dark gray fine sand		
6-12	10 YR 6/2						,	light brownish gray sand		
12-21	10 YR 7/2							light gray sand		
21-26	5 YR 3/3							dark reddish brown loamy fine sand		
							7			
7.	Concentration, D=Depl	etion, RM=	Reduced Matrix, C	S=Covered or	Coated Sand Gr	ains.	<sup>2</sup> Location: PL=Pore			
	il Indicators:			Data alias E	\-l 0f (0	·0\ () DD (		ndicators for Problematic Hydric Soils 3:		
Histol	Epidon (A2)		-		Below Surface (S Burface (S9) (LR			1 cm Muck (a9) (LRR 0) 2 cm Muck (A10) (LRR S)		
	Histic (A3)		-		ky Mineral (F1)		' -	Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)		_		/ed Matrix (F2)	(LKK U)	-	Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	igen Sullide (A4) ied Layers (A5)		_	Loamy Greg Depleted M			-	Anomalous Bright Loarny Soils (F20)		
	nic Bodies (A6) (LRR P	, T, U)	_		Surface (F6)		-	Anomalous Bright Loarny Solis (F20) (MLRA 153B)		
<del>_</del> •	Mucky Mineral (A7) (LF		_	— Depleted D	ark Surface (F7)	١		Red Parent Material (TF2)		
	Presence (A8) (LRR L		_		ressions (F8)	<b>,</b>	-	Very Shallow Dark Surface (TF12) (LRR T, U)		
		"	_	Marl (F10)			-	Other (Explain in Remarks)		
	Muck (A9) (LRR P,T)		_				-	Other (Explain in Remarks)		
	ted Below Dark Surfac	e (A11)	_		rchric (F11) (ML	•				
Thick Dark Surface (A12)				Iron-Manga	nese Masses (F	12) (LRR	O, P,T) 3	Indicators of hydrophytic vegetation and wetland		
	Coast Prairie Redox (A16) (MLRA 150A)		<del>/</del> ) _	Umbric Surface (F13) (LRR P, T, U)Delta Orchric (F17) (MLRA 151)				hydrology must be present, unless disturbed or		
	/ Mucky Mineral (S1) (L	.RR O, S)	_				•	problematic.		
	Gleyed Matrix (S4)		-		ertic (F18) (MLR					
	Redox (S5)		_		loodplain Soils (			450D)		
	ed Matrix (S6)		_	Anomaious	ongnt Loamy S	oiis (F20)	(MLRA 149A, 153C,	1990)		
	Surface (S7) (LRR P, S	· · ·								
Restrictiv	e Layer (If observed):									
	Type:									
	Depth (inches):						Hydric Soil Present	? Yes <u>✓ No</u> .		
Remarks:										
:										
1										
					•					
i										

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk	Sampling	g Date: 9/22/09			
Applicant/Owner: Progress Energy Florida, In	C	State:FL	Sampling	g Point: 6			
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: <u>17 26S 23E/18 26S 23E</u>					
Landform (hillslope, terrace, etc.):N	/A	Local relief (concave, convex, none): Slope (%):					
Subregion (LRR or MLRA): LRR U	Lat: 28.22676	5 Long: <u>-82.</u>	39570	Datum: WGS84			
Soil Map Unit Name: Pomona fine sand			NWI classification:palustr	ine emergent			
Are climatic / hydrologic conditions on the site	ypical for this time of year?	Yes <u></u> ✓	_ No (If no, ex	plain in Remarks)			
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances normal?	Yes <u></u> _✓_No			
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain any answ	vers in Remarks)			
SUMMARY OF FINDINGS - Attach s	ite map showing sampli	ing point locations, t	ansects, important fea	atures, etc.			
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland? Yes	No			
Wetland Hydrology Present?	Yes No						
Remarks:							
HYDROLOGY			-				
Wetland Hydrology Indicators:	•		Secondary Indicators (minim	num of two required)			
Primary Indicators (minimum of one is required	· check all that apply)		Surface Soil Cracks (B				
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Aquatic Fauna (B13)	<b>(</b> ,	Drainage Patterns (B1	` ′			
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim Lines (B16)	,			
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Water Tal				
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burrows (C8)	• •			
Drift Deposits (B3)	Presence of Reduced I		Saturation Visible on A				
Algal Mat or Crust (B4)	Recent Iron Reduction	• •	Geomorphic Position (	urphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aquitard (D3)	,			
✓ Inundation Visible on Aerial Imagery (87			FAC Neutral Test (D5)				
Field Observations:	<i>·</i>						
Surface Water Present?	Yes No	Depth (inches): 0-10					
Water Table Present?	Yes No						
Saturation Present?	Yes ✓ No		Wetland Hydrology				
(includes capillary fringe)		_ , , , ,	Present? Yes ✓	No			
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previo	us inspections), if available	<u> </u>				
Remarks:							
incinarios.							

VEGETATION - Use scientific nar	mes of plants				Sampling Po	oint:	6
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:		
Tree Stratum (Plot size:)	Cover	Species?	Status				
1.				Number of Dominant Spe	ecies	7	(4)
2.				That Are OBL, FACW, or	r FAC:	<u>7</u>	(A)
3.				Total Number of Domina	nt	•	
4.				Species Across All Strata	a:	<u>8</u>	(B)
5.				Percent of Dominant Spe	ecies		
6.				That Are OBL, FACW, or		<u>87.50</u>	(A/B)
7.	· <del></del>			Prevalance Index works			
		= Total Cov	er	Total % Cover of:		Itiply by:	
Sapling Stratum (Plot size:)				OBL species	x1=		
Acer rubrum	2	yes	OBL	FACW species	x2=		
Nyssa sylvatica var. biflora	2	ves	FAC	FAC species	x3=		_
3.	·		17.0	FACU species	x4=		_
4.	· <del></del>		-	UPL species	^~ x5=	······	
<del>5</del> .	· <del></del>		-	Column Totals:	^(A)		- <sub>(B)</sub>
6.				Column Fotais.	(A)	· · · · · · · · · · · · · · · · · · ·	_ (B)
7.			·	Drovolence Index =	D/A		
7.	4	= Total Cov		Prevalance Index = Hydrophytic Vegetation			
Shrub Stratum (Plot size:	·	- 10tal C0V	CI				
·	•		FACUAL	Boilination reset	_		
1. Ilex cassine	2	yes	FACW	Prevalence index		1.=	
2.			- ——	Problematic Hydro	opnytic Vegeta	ation (Exp	ilain)
3.				1			
4.		-		<sup>1</sup> Indicators of hydric soil a			nust
5.				be present, unless distur		natic.	
6.				Definitions of Vegetation	on Strata:		
7.			-	<u> </u> 			
	. 2	= Total Cov	er	Tree- Woody plants, exclu	•		
Herb Stratum (Plot size:	.)			approximately 20 ft (6m) o	•		(7.6
Cyperus erythrorhizos	30	yes	OBL	cm) or larger in diameter a	it breast neight	(DBH).	
Panicum hemitomon	15	yes	OBL	Sapling- Woody plants, ex			
<ol><li>Hydrocotyle spp.</li></ol>	15	yes	OBL	approximately 20 ft (6m) o	r more in heigh	t and less	than 3
Rhyncospora spp.	15	yes	FACW	in. (7.6 cm) DBH.			
<ol><li>Sagittaria graminea</li></ol>	55	no	OBL	Shrub- Woody plants, exc	,	•	
6. Andropogon glomeratus	5	no	FACW	approximately 3 to 20 ft (1	to 6 m) in heigh	ht.	
7. Centaurea cyanus	2	_ no	NL	Herb- All herbaceous (non			
8. Juncus effusus	2	no	FACW	herbaceous vines, regardle			•
<ol><li>Panicum hemitomon</li></ol>	2	no	OBL	plants, except woody vines	s, less than app	roximately	/ 3 ft (1
10. Lachnocaulon spp.	2	no	OBL	m) in height.			
11. Pontederia cordata	2	no	OBL	Woody vine- All woody vir	nes, regardless	of height.	
12. Rhexia spp.	2	no	FACW				
	97	= Total Cov	er				
Woody Vine Stratum (Plot size:	)						
1. Rubus spp.	2	yes	FACU				
2.	· <del></del>						
3.	·		-				
4.				Hydrophytic			
5.		-		Vegetation Present?	Yes✓	No	
<del>            _   _</del>		= Total Cov	er	Trogeration Flesents	103		<del></del>
Remarks: (If observed, list morph			_	I	<u> </u>		
Percent cover estimates based or		-		mmunity.			

County/soil: Polk- Pomona

OIL Ofile Dec	cription: (Describe	to the den	th pooded to dec	umant th	o indicator or	confirm the abo	canca of indicators	Sampling Point:
onie Desi oth	Cription: (Describe Matrix	to the dep	un needed to doc		Features	Commin use abs	serice of indicators	•)
ches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
·/	<b>4</b> (							
	10 YR 3/1							very dark gray fine sand
2	10 YR 6/2							light brownish gray sand
21	10 YR 7/2							light gray sand
26	5 YR 3/3							dark reddish brown loamy fine sand
e: C=C	oncentration, D=Dep	etion, RM=	Reduced Matrix, 0	S=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
ric Soil	Indicators:							Indicators for Problematic Hydric Soils 3:
Histol (A	<b>A1</b> )			Polyv	alue Below Su	rface (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic E	pidon (A2)			Thin	Dark Surface (	S9) (LRR S, T, L	J)	2 cm Muck (A10) (LRR S)
Black H	listic (A3)			Loan	ny Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B
	en Sulfide (A4)		·		y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		•		eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F	P, T, U)			x Dark Surface			(MLRA 153B)
	ucky Mineral (A7) (L		•		eted Dark Surfa			Red Parent Material (TF2)
	. , , ,		•		x Depressions	• •		Very Shallow Dark Surface (TF12) (LRR T, U)
	Presence (A8) (LRR	u)			•			
	uck (A9) (LRR P,T)				(F10) (LRR U)			Other (Explain in Remarks)
•	d Below Dark Surfac	æ (A11)	•		-	11) (MLRA 151)		
Thick D	ark Surface (A12)		,	Iron-I	Manganese Ma	isses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast F	Prairie Redox (A16) (	MLRA 150	A) .	Umbi	ric Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy N	Mucky Mineral (S1) (I	RR O S)		Delta	Orchric (F17)	(MLRA 151)		problematic.
	Gleyed Matrix (S4)	o, o,	•			B) (MLRA 150A,	150B)	
	Redox (S5)		•			n Soils (F19) (ML		
	d Matrix (\$6)		•				(MLRA 149A, 1530	: 153D)
	urface (S7) (LRR P,	C T 111			aloud Bright E	ourny come (i zo)	, (	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Layer (If observed)						T	
	ype:	•						
	ype epth (inches):						Hydric Soil Prese	nt? Yes ✓ No .
narks:	epui (iriches)					<del>.</del>	Invalic Soil Flese	itr res <u> </u>
narko.								

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk	_Sampling Date: 9/23/09				
Applicant/Owner: Progress Energy Florida, In	С.	State: FL		Sampling Point: 7			
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: <u>17 26S 23E/18 26S 23E</u>					
Landform (hillslope, terrace, etc.):N	/A	Local relief (concave, convex, none): none Slope (%):					
		26327 Long: -82.039682 Datum: WGS8					
Soil Map Unit Name:Eaton mucky fine sand,	depressional		NWI classification	:: <u>N/A</u>			
Are climatic / hydrologic conditions on the site	ypical for this time of year?	Yes _ ✓	_ No	_ (if no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology						
Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed, explain	n any answers in Remarks)			
SUMMARY OF FINDINGS - Attach s	ite map showing sampl	ing point locations, t	ansects, impo	rtant features, etc.			
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No			
Wetland Hydrology Present?	Yes No						
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:		į	Secondary Indica	tors (minimum of two required)			
Primary Indicators (minimum of one is required	; check all that apply)		Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (L	RR U)	Moss Trim L	ines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bu	rrows (C8)			
Drift Deposits (B3)	Presence of Reduced I	Iron (C4)Saturation Visible on Aerial Imagery (C					
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7	")	uitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7	')Other (Explain in Rema	arks)	FAC Neutra	Test (D5)			
Field Observations:							
Surface Water Present?	Yes No	_ Depth (inches):0-10	_				
Water Table Present?	Yes ✓ No	_ Depth (inches):0					
Saturation Present?	Yes ✓ No	Depth (inches):0	Wetland Hydrology				
(includes capillary fringe)			Present?	Yes <u>✓</u> No			
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previo	ous inspections), if available					
Remarks:							
incinario.							
L.,							

VEGETATION - Use scient	ific nan	nes of plants			· · · · · · · · · · · · · · · · · · ·	Sampling Point:	7
Tree Stratum (Plot size:	)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshe	et:	
1.					Number of Dominant Speci		(A)
2.					That Are OBL, FACW, or F.	AC: <sup>≤</sup>	(^)
3.					Total Number of Dominant	<u>2</u>	(B)
4.					Species Across All Strata:	<u> </u>	(6)
5.					Percent of Dominant Specie	es 100.00	(A/B)
6.					That Are OBL, FACW, or F.	AC: ——	(700)
7.					Prevalance Index worksh	eet:	
Sapling Stratum (Plot size:_	)	0	= Total Cove	r	Total % Cover of: OBL species	Multiply by: x1=	
1.					FACW species	x2=	
2.					FAC species	x3=	_
3.					FACU species	x4=	_
4.					UPL species	x5=	
5.					Column Totals:	(A)	— <sub>(B)</sub>
6.					<del></del>	· · <u></u>	<del></del> · ·
7.					Prevalance Index = B/	<b>A</b> =	
		0	= Total Cove	r	Hydrophytic Vegetation Ir	idicators:	
Shrub Stratum (Plot size:	)	)			✓ Dominance Test is 5	0%	
1.					Prevalence Index is	≤3.0 <sup>1</sup>	
2.					Problematic Hydropl	nytic Vegetation <sup>1</sup> (Ex	plain)
3.							
4.					<sup>1</sup> Indicators of hydric soil and	d wetland hydrology i	must
5.					be present, unless disturbe		
6.					Definitions of Vegetation	Strata:	
7.					_		
		0	= Total Cove	r	Tree- Woody plants, excludir		
Herb Stratum (Plot size:	)				approximately 20 ft (6m) or m		. (7.6
Eleocharis spp.		40	yes	OBL	cm) or larger in diameter at b		
Panicum hemitomon		20	yes	OBL	Sapling- Woody plants, excl		
<ol><li>Sagittaria graminea</li></ol>		10	no	OBL	approximately 20 ft (6m) or m	ore in height and less	than 3
4. Rhyncospora spp.		10	no	FACW	in. (7.6 cm) DBH.		
5. Cyperus spp.		2	no	FACW	Shrub- Woody plants, exclud	•	
6. Muridannia nudiflora		2	no	FAC	approximately 3 to 20 ft (1 to		
7.					Herb- All herbaceous (non-w		
8.					herbaceous vines, regardless plants, except woody vines, le		
9.		<del></del>			m) in height.	ess than approximate	узиці
10. 11.					Woody vine- All woody vines	rogardless of boight	
					Woody ville- All woody villes	s, regardless of fleight	•
12.					4		
Woody Vine Stratum (Plot s	size:	) 84	= Total Cove	Γ			
1.							
2.							
3.							
4.	<del></del>				Hydrophytic		
5.					Vegetation Present?	Yes <u></u> ∕No	<del></del>
		n	= Total Cove	r	1		

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Polk- Eaton Sampling Point: SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Texture Remarks (inches) Color (moist) Color (moist) black mucky fine sand 10 YR 2/1 10 YR 7/1 6-29 light gray fine sand 29-33 N 5/0 gray sandy clay loam N 5/0 33-80 gray sandy clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) \_1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) \_Redox Dark Surface (F6) (MLRA 153B) Depleted Dark Surface (F7) Red Parent Material (TF2) 5 cm Mucky Mineral (A7) (LRR P,T,U) ✓ Muck Presence (A8) (LRR U) Redox Depressions (F8) \_Very Shallow Dark Surface (TF12) (LRR T, U) \_1 cm Muck (A9) (LRR P,T) \_Marl (F10) (LRR U) Other (Explain in Remarks) \_\_Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T) Thick Dark Surface (A12) <sup>3</sup>Indicators of hydrophytic vegetation and wetland Umbric Surface (F13) (LRR P, T, U) Coast Prairie Redox (A16) (MLRA 150A) hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date	9/23/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point	t: <u>8</u>	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range	: 17 26S 23E			
Landform (hillslope, terrace, etc.):N	'A	Local relief (concave, conv	Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: 28.22634	346 Long: -82.039537 Datum: <u>WG</u>				
Soil Map Unit Name: Pomona fine sand			NWI classification:	N/A		
Are climatic / hydrologic conditions on the site to	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain i	n Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normal?	′esNo	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in	Remarks)	
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations, tr	ansects, impor	tant feature	s, etc.	
Hydrophytic Vegetation Present?	Yes No	,				
Hydric Soil Present?	Yes No	is the Sampled Area w	ithin a Wetland?	YesN	lo	
Wetland Hydrology Present? Remarks:	Yes✓ No					
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicate	ore (minimum of	two required)	
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	ators (minimum of two required)		
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)		Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	()	Drainage Pat			
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	` ,		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Nater Table (C2	2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burr	ows (C8)		
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	Saturation Vi	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	: Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqui	uitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7	)Other (Explain in Rema	rks)	FAC Neutral	Test (D5)		
Field Observations:				,		
Surface Water Present?	Yes No	Depth (inches): 0				
Water Table Present?	Yes No	Depth (inches): 0	M-41			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology			
(includes capillary fringe)			Present?	Yes N	lo	
Describe Recorded Data (stream gauge, moniton Remarks:	oring weil, aeriai photos, previo	us inspections), if available:				

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	8
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	۱ ،
2.				That Are OBL, FACW, or FAC: $\frac{1}{2}$	'
3.				Total Number of Dominant	, I
4.				Species Across All Strata:	'
5.				Percent of Dominant Species	ŀ
6.				That Are OBL, FACW, or FAC:	/B)
7.				Prevalance Index worksheet:	$\dashv$
, , , , , , , , , , , , , , , , , , , ,		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:)	· ·	- Total Cove	,1	OBL species x1=	
l. '					
1.				FACW species x2=	- 1
2.				FAC speciesx3=	ı
3.				FACU speciesx4=	
4.				UPL speciesx5=	ı
5.				Column Totals: (A) (B	(۱
6.					
7.				Prevalance Index = B/A =	
	0	= Total Cove	er	Hydrophytic Vegetation Indicators:	$\Box$
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain	)
3.				,, , , , , , , , , ,	
4.				Indicators of hydric soil and wetland hydrology must	,
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	ᅱ
7.	·			Tomation of Vogotation official	
<u></u>	0	= Total Cove		Trace Marado alasta analodina mandonia	
Herb Stratum (Plot size:	١	- Total Cove	;1	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6	,
·	,		OBI	cm) or larger in diameter at breast height (DBH).	'
Panicum hemitomon	75	yes	OBL	<b>.</b>	
Paspalum notatum	10	no	FACU	Sapling- Woody plants, excluding woody vines,	
3. Eleocharis spp.	5	no	OBL	approximately 20 ft (6m) or more in height and less than	13
Sagittaria graminea	2	no	OBL	in. (7.6 cm) DBH.	
5. Rhexia spp.	2	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Phyla nodiflora	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woody	
9.				plants, except woody vines, less than approximately 3 ft	: (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.				1	
	96	= Total Cove		1	
Woody Vine Stratum (Plot size:	)				
1.					
2.				1	
3.					$\dashv$
	•			Hydrophytic	ŀ
<b>4</b> . <b>5</b> .	·			Hydrophytic	
ບ.		_ T-4-1 O-		Vegetation Present? YesNo	<b></b>
	0	= Total Cove	er .	L	_
Remarks: (If observed, list morph	-	•			
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	

County/soil:	Polk-	Pomona

SOIL								Sampling Point:8
Profile De	scription: (Describe	to the dec	th needed to doc	ument the	e indicator or	confirm the abs	sence of indicators.	
Depth	Matrix				Features			
			0-1(:-1)			Loc²	T4	Remarks
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type'		Texture	Remarks
0-6	10 YR 3/1							very dark gray fine sand
6-12	10 YR 6/2							light brownish gray sand
12-21	10 YR 7/2							light gray sand
21-26	5 YR 3/3	- —						dark reddish brown loamy fine sand
<u> </u>	0 111 0/0							
L								
Type: C=0	Concentration, D=Dep	letion, RM	Reduced Matrix, (	CS≃Cover	ed or Coated S	Sand Grains.	2Location: PL=Pore	e Lining, M=Matrix.
Hydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol				Polyv	alue Below Su	rface (S8) (LRR		1 cm Muck (a9) (LRR O)
_	Epidon (A2)					S9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
							"	
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR F	P, T, U)		Redo	x Dark Surface	€ (F6)		(MLRA 153B)
5 cm !	Musley Minoral (A7) //	DD D T III		Denle	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
i—	Mucky Mineral (A7) (L						•	
✓_Muck	Presence (A8) (LRR	U)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm f	Muck (A9) (LRR P,T)			Marti	(F10) (LRR U)			Other (Explain in Remarks)
i —							•	
Deplet	ted Below Dark Surfac	ce (A11)		Deple	eted Orchnc (F	11) (MLRA 151)		
Thick	Dark Surface (A12)			Iron-I	Manganese Ma	sses (F12) (LRF	RO, P,T)	Indicators of hydrophytic vegetation and wetland
[— <sub>C</sub> ,	D1 D1 (A40) (	MI DA 450		Limbe	ric Surface /E1	3) (LRR P, T, U)		
Coast	Prairie Redox (A16) (	WILKA 150	A)		ic ouriace (i i	o/ (E/((* 1 , 1 , 0 )		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (	LRR O. S)		Delta	Orchric (F17)	(MLRA 151)	ļ	problematic.
Sandy	Gleyed Matrix (S4)			Redu	ced Vertic (E1)	B) (MLRA 150A,	150B)	
	Redox (S5)					Soils (F19) (ML		
								4620)
Stripp	ed Matrix (S6)			Anon	naious Bright L	oamy Solis (F20)	(MLRA 149A, 153C	, 1530)
Dark S	Surface (S7) (LRR P,	S, T, U)						
Restrictive	e Layer (If observed)						1	
							1	
	Type:							t2 Vas / No
	Depth (inches):						Hydric Soil Presen	t? Yes <u>√</u> No
Remarks:								
1								
1								
1								
ĺ								
1								
1								
1								
I								
I								
I								
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Project/Site: Levy Nuclear Plant - Transmission	City/County: Polk		Sampling Date	9/23/09		
Applicant/Owner: Progress Energy Florida, Inc.	State:FL		Sampling Poin	t: 9		
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 17 26S 23E				
Landform (hillslope, terrace, etc.): N/.	Α	Local relief (concave, convex, none): none Slope			Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: _28.22603	7Long: <u>-82.0</u>	39521		atum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:			
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain i	n Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		′es✓No	
	or Hydrology		(If needed, explain	any answers in	Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	tant feature	s, etc.	
Hydrophytic Vegetation Present?	Yes <u>✓</u> No		•		•	
Hydric Soil Present?	Is the Sampled Area w	rithin a Wetland?	Yes/_N	lo		
Wetland Hydrology Present?	Yes✓ No					
Remarks:		<u> </u>				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)	
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Veg	egetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	• •		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2	2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		<del></del> ;			
Drift Deposits (B3)	Presence of Reduced In				magery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	, ,				
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)		,	FAC Neutral			
Field Observations:		They	1	100.(20,		
Surface Water Present?	Yes No <u></u> ✓	Denth (inches):	1			
Water Table Present?	Yes No✓	· · · · · · · · · · · · · · · · · · ·	1			
Saturation Present?	Yes No		Wetland			
	160140	— Hydrology				
(includes capillary fringe)  Describe Recorded Data (stream gauge, monito	oring well aerial photos previo	us inspections) if available	Present?	Yes <u>✓                                    </u>	lo	
Deconso (Cooling Sunger, Memic	Ting from, devial priotos, provio	ao mopodaono), n avanabio.	•			
Remarks:						
•						

VEGETATION - Use scientific nar	mes of plants				npling Point:	9
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u>	(A)
3.				Total Number of Dominant		
4.	-			Species Across All Strata:	<u>1</u>	(B)
2. 3. 4. 5. 6.				Percent of Dominant Species	100.00	/ / /D)
6.				That Are OBL, FACW, or FAC:	100.00	(A/B)
7.				Prevalance Index worksheet:		
Sapling Stratum (Plot size:)	0	= Total Cove	r	Total % Cover of: OBL species	Multiply by: x1=	_
1. 2. 3.				FACW species	_x2=	_
2.				FAC species	_x3=	_
3.				FACU species	_x4=	_
4.				UPL species	_x5=	- ,_,
5.				Column Totals:	_(A)	_(B)
6.	. ———			·		
7.				Prevalance Index = B/A =	-4	
Chrish Caratium (Diat aims)	0	= Total Cove	Γ	Hydrophytic Vegetation Indic  ✓ Dominance Test is 50%		
Shrub Stratum (Plot size:	_)					
1. 2.				Prevalence Index is ≤3.0		lain)
3.		-		Problematic Hydrophytic	vegetation (Exp	nain)
4.				Indicators of budgio pail and wa	tland budralagu m	01.0¢
5.				Indicators of hydric soil and we be present, unless disturbed or		iusi
6.				Definitions of Vegetation Stra		
7.	<del></del>			]		
<i>'</i> .		= Total Cove		Tree- Woody plants, excluding w	oody vines	
Herb Stratum (Plot size:	-	10101 0010	•	approximately 20 ft (6m) or more		(7.6
Panicum hemitomon	40	yes	OBL	cm) or larger in diameter at breas		(
2. Eleocharis spp.	5	no	OBL	Sapling- Woody plants, excluding		
Sagittaria graminea	5	no	OBL	approximately 20 ft (6m) or more		than 3
4. Phyla nodiflora	2	no	FACW	in. (7.6 cm) DBH.	•	
5. Paspalum notatum	2	no	FACU	Shrub- Woody plants, excluding	woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m		
7.				Herb- All herbaceous (non-wood	y)plants, including	
8. 9. 10.				herbaceous vines, regardless of		dy
9.				plants, except woody vines, less	than approximately	3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, reg	gardless of height.	
12.						
	54	= Total Cove	r			
Woody Vine Stratum (Plot size:	)					
1.				]		
2.						
3. 4.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	iNo	<u>.</u>
		= Total Cove	r			

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Polk- Pomona SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) Color (moist) Loc Texture Remarks 10 YR 3/1 lo-6 very dark gray fine sand 6-12 10 YR 6/2 light brownish gray sand 12-21 10 YR 7/2 light gray sand 21-26 5 YR 3/3 dark reddish brown loamy fine sand <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) \_1 cm Muck (a9) (LRR O) \_ \_Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR \$) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Loamy Gleyed Matrix (F2)
Depleted Matrix (F3) \_Hydrogen Sulfide (A4) \_Stratified Layers (A5) Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Depleted Dark Surface (F7) 5 cm Mucky Mineral (A7) (LRR P,T,U) Red Parent Material (TF2) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) Marl (F10) (LRR U) Other (Explain in Remarks) \_1 cm Muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T) \_Thick Dark Surface (A12) <sup>3</sup>Indicators of hydrophytic vegetation and wetland Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbed or problematic. Delta Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Hydric Soil Present? Depth (inches): Yes No Remarks

Project/Site: Levy Nuclear Plant - Transmission I	City/County: Polk		Sampling Date:	9/23/09		
Applicant/Owner: Progress Energy Florida, Inc.	State:FL		Sampling Point:_	10		
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 17 26S 23E/18 26S 23E				
Landform (hillslope, terrace, etc.): N/A	Local relief (concave, convex, none): none Slope (%):					
Subregion (LRR or MLRA): LRR U	Lat: 28.223261	Long: <u>-82.0</u>	39567	Dat	um: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	_palustrine emer	gent	
Are climatic / hydrologic conditions on the site ty	oical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in f	Remarks)	
• •	-	significantly disturbed?	Are circumstances		sNo	
		naturally problematic?	(If needed, explain	any answers in R	emarks)	
SUMMARY OF FINDINGS - Attach sit		ng point locations, t	ansects, impor	tant features,	etc.	
Hydrophytic Vegetation Present?	Yes✓No		······································	•		
Hydric Soil Present?	Yes✓No	Is the Sampled Area w	ithin a Wetland?	YesNo		
Wetland Hydrology Present?	Yes✓No					
Remarks:						
			<del></del> .			
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	o required)	
Primary Indicators (minimum of one is required;	check all that apply)		Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	ely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	•	Drainage Pat	age Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (			Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burr	urrows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro			n Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	Shallow Aquitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutral	FAC Neutral Test (D5)		
Field Observations:	<del></del>					
Surface Water Present?	Yes No	Depth (inches): 0-18				
Water Table Present?	Yes No					
Saturation Present?	Yes✓ No		Wetland			
(includes capillary fringe)			Hydrology Present?	Yes ✓ No		
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previou	us inspections), if available:				
		•				
Remarks:						

VEGETATION - Use scientific i	names of plants	<b>;</b>		Sampling	Point:	10
Tree Stratum (Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	-	
1.	, 5016	ороско.	Oluluo	Number of Dominant Species		
2.				That Are OBL, FACW, or FAC:	<u>1</u>	(A)
3.				Total Number of Dominant		
				Species Across All Strata:	<u>2</u>	(B)
4.		_				
5.		_		Percent of Dominant Species	50.00	(A/B)
6.				That Are OBL, FACW, or FAC:		
7.				Prevalance Index worksheet:		
0 11 04 4 401 4 1	. (	) = Total Cove	er		Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=		_
1.		_		FACW speciesx2=_		
2.				FAC speciesx3=_		_
3.		_		FACU speciesx4=_		_
4.				UPL speciesx5=_		_
5.				Column Totals:(A)_		_ (B)
6.				]		
7.				Prevalance Index = B/A =		
	(	= Total Cove	er	Hydrophytic Vegetation Indicators	:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Vege	etation¹ (Exp	olain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and wetland	hvdrology r	nust
5.				be present, unless disturbed or probl		
6.			· <del></del>	Definitions of Vegetation Strata:		
7.		<del></del>		1		
		= Total Cove	er	Tree- Woody plants, excluding woody v	vines.	
Herb Stratum (Plot size:	)			approximately 20 ft (6m) or more in hei		(7.6
Ludwigia peruviana	50	yes	OBL	cm) or larger in diameter at breast heig		•
Eupatorium capillifolium		yes	FACU	Sapling- Woody plants, excluding woo	dv vines	
Panicum hemitomon	15	no no	OBL	approximately 20 ft (6m) or more in hei		than 3
Cyperus erythrorhizos		no	OBL	in. (7.6 cm) DBH.	_	
5. Rhexia spp.		no	FACW	Shrub- Woody plants, excluding woody	v vines	
6. Phyla nodiflora		no	FACW	approximately 3 to 20 ft (1 to 6 m) in he		
Rhynchospora colorata		no	OBL	Herb- All herbaceous (non-woody)plan	_	
8.				herbaceous vines, regardless of size.		
9.				plants, except woody vines, less than a		
10.	<del>-</del>			m) in height.	PF	, • (.
11.	<del></del>			Woody vine- All woody vines, regardle	es of height	
12.				Troody vine 7 iii vioody vines; regardie	oo or noight.	
12.	98	= Total Cov		1		
   Woody Vine Stratum (Plot size:	= '	- Total Covi	<b>5</b> 1			
l. '	/					
1.						
2.						
3.		_		4		
4.				Hydrophytic		
5.				Vegetation Present? Yes <u>✓</u>	No	
		) = Total Cov	er			
Remarks: (If observed, list mor						
Percent cover estimates based	on meandering	survey of the b	proader co	mmunity.		

County/so	oil: Polk- Pomona							Sampling Point:		
ı	escription: (Describe	to the de	oth needed to doc			confirm the ab	sence of indicators	5.)		
Depth	Matrix			Redox F	Features					
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks		
0-6	10 YR 3/1							very dark gray fine sand		
6-12	10 YR 6/2							light brownish gray sand		
12-21	10 YR 7/2							light gray sand		
21-26	5 YR 3/3							dark reddish brown loamy fine sand		
<u> </u>	-									
	Concentration, D=Depl	etion, RM	=Reduced Matrix, (	JS=Covere	ed or Coated S	and Grains.	*Location; PL=Po	re Lining, M=Matrix.		
	oil Indicators:			0.1	-I - D-I- 0	100\ # <b>DD</b>		Indicators for Problematic Hydric Soils 3:		
	I (A1)					face (S8) (LRR		1 cm Muck (a9) (LRR O)		
_	Epidon (A2)				•	59) (LRR S, T, I	•	2 cm Muck (A10) (LRR S)		
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)		
	ogen Sulfide (A4)				y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ified Layers (A5) nic Bodies (A6) (LRR F	TIN			ted Matrix (F3) x Dark Surface			Anomalous Bright Loamy Soils (F20) (MLRA 153B)		
	Mucky Mineral (A7) (Li				ted Dark Surfa	• •		Red Parent Material (TF2)		
_	k Presence (A8) (LRR I			Redox Depressions (F8)				Very Shallow Dark Surface (TF12) (LRR T, U)		
	Muck (A9) (LRR P,T)	Ο,			F10) (LRR U)	(1 0)		Other (Explain in Remarks)		
	eted Below Dark Surfac	e (Δ11)		— · Deple	ted Orchric (F	11) (MLRA 151)	1			
	Dark Surface (A12)	~ (/ \			•	sses (F12) (LRI		• · · · · · · · · · · · · · · · · · · ·		
	t Prairie Redox (A16) (I	M) DA 45	101		_			<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
_	, , ,		•	Umbric Surface (F13) (LRR P, T, U)  Delta Orchric (F17) (MLRA 151)			,	hydrology must be present, unless disturbed or problematic.		
-	y Mucky Mineral (S1) (I	LRK U, 5)				(MLRA 151) 3) (MLRA 150A,	450D)	,		
_	by Gleyed Matrix (S4)			_	,	Soils (F19) (MI	•			
	y Redox (S5)				•	. , ,	•	C 452D)		
Strip	ped Matrix (S6)			Anom	aious Bright Le	Jamy Julis (P20	) (MLRA 149A, 153	o, 1990)		

Hydric Soil Present?

Yes <u>✓</u> No

\_Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: \_\_\_\_\_ Depth (inches):

Remarks:

Project/Site: Levy Nuclear Plant - Transmission	City/County: Polk		Sampling Date: 9/23/09				
Applicant/Owner: Progress Energy Florida, Inc	• •		Sampling Point: 11				
Investigator(s): Mike Arrants, Erin Heinen	Section, Township, Range: 17 26S 23E						
Landform (hillslope, terrace, etc.):N	Local relief (concave, convex, none): none Slope (%):						
Subregion (LRR or MLRA): LRR U	Lat: <u>28.21619</u>	5 Long: <u>-82.0</u>	39573	Datum: WGS84			
Soil Map Unit Name: Pomona fine sand			NWI classification:	N/A			
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)			
Are Vegetation, Soil	or Hydrology		Are circumstances				
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)			
SUMMARY OF FINDINGS - Attach si	te map showing sampl	ing point locations, t	ransects, impor	rtant features, etc.			
Hydrophytic Vegetation Present?	Yes No	=					
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	ithin a Wetland?	YesNo			
Wetland Hydrology Present?	Yes No	]					
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)			
Primary Indicators (minimum of one is required;	check all that apply)		Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim Li	nes (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season \	Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	rows (C8)				
Drift Deposits (B3)	Presence of Reduced I	ron (C4)Saturation Visible on Aerial Imagery (C9					
Algal Mat or Crust (B4)	Recent Iron Reduction						
Iron Deposits (B5)	Thin Muck Surface (C7	)	Shallow Aqui	itard (D3)			
✓ Inundation Visible on Aerial Imagery (B7	)Other (Explain in Rema	arks)FAC Neutral Test (D5)					
Field Observations:							
Surface Water Present?	Yes No						
Water Table Present?	Yes No		Wetland				
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology				
(includes capillary fringe)			Present?	Yes No			
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previo	us inspections), if available					
Remarks:							
	•						
			•				

VEGETATION - Use scientific names of plants						Sampling Point:	
						T -	

<b>VEGETATION</b> - Use scientific nan	nes of plants			Samp	ling Point:	11
	Absolute %	Dominant	Indicator	T		
Tree Stratum (Plot size:)	Cover	Species?	Status	1		
11.		-,		Number of Dominant Species	•	
2.				That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.				Total Number of Dominant	•	
4.				Species Across All Strata:	<u>3</u> ·	(B)
5.	••			Percent of Dominant Species		ļ
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
<u></u>		= Total Cove		-	Multiply by:	
Canling Stratum (Plot size: )	U	= TOTAL COVE	:T	Total % Cover of:	Multiply by: x1=	
Sapling Stratum (Plot size:)				,		_
1.				·	x2=	_
2.				4 ' <b></b>	x3=	_
3.				_ '	x4=	_
4.				4 ' <u></u>	x5=	
5.				Column Totals:	(A)	_(B)
6.				]		ļ
7.				Prevalance Index = B/A =		
		= Total Cove	<del>r</del>	Hydrophytic Vegetation Indica	tors:	_
Shrub Stratum (Plot size:)	)			Dominance Test is 50%		ļ
1.				Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic		olain)
3.				<del>†                                      </del>	J	
4.				<sup>1</sup> Indicators of hydric soil and wet	land hydrology n	nust
5.				be present, unless disturbed or p		iuc.
6.				Definitions of Vegetation Strat		
7.				1		ļ
· · · · · · · · · · · · · · · · · · ·	0	= Total Cove		Tree- Woody plants, excluding woo	adv vince	.
Herb Stratum (Plot size:)	,	- 10(6) 00.5	4	approximately 20 ft (6m) or more in		/7 A
Alternanthera philoxeroides	30	Vec	OBL	cm) or larger in diameter at breast		(,,,
Panicum hemitomon	20	yes	OBL	<b>-</b>	-	
	20	yes	OBL	Sapling- Woody plants, excluding approximately 20 ft (6m) or more in	•	than 3
Ludwigia leptocarpa     Cyperus odoratus	10	yes	FACW	in. (7.6 cm) DBH.	Theight and 1000	llian C
		no		<b>-</b>	·	
5. Ludwigia linearis		no	OBL	Shrub- Woody plants, excluding w		
6. Phyla nodiflora	2	no	FACW	approximately 3 to 20 ft (1 to 6 m)		
7. Diodia virginiana	2	no	FACW	Herb- All herbaceous (non-woody)		
8. Ludwigia arcuata	2	no	OBL	herbaceous vines, regardless of si		-
9. Setaria spp.	2	no	FAC	plants, except woody vines, less th	an approximately	/3π(1
10. Bacopa monnieri	2	no	OBL	m) in height.		
11. Sesbania spp.	2	no	FAC	Woody vine- All woody vines, rega	ardless of height.	
12. Pistia stratiotes	22	no	OBL			
	96	= Total Cove	er .	1		
Woody Vine Stratum (Plot size:	)			1		
1.				1		
2.				1		
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	✓ No_	
		= Total Cove		1		
Remarks: (If observed, list morpho			<u> </u>			
Percent cover estimates based on		•	adar cai	manan militar		
Feldent dover estimates based on	i ilicandening s	Julyey of the D	Toduci coi	minumey.		

County/soil: Polk- Pomona SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Loc2 (inches) Color (moist) Color (moist) Texture Remarks 0-6 10 YR 3/1 very dark gray fine sand 6-12 10 YR 6/2 light brownish gray sand 12-21 10 YR 7/2 light gray sand dark reddish brown loamy fine sand 21-26 5 YR 3/3 <sup>2</sup>Location: PL=Pore Lining, M=Matrix. <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) \_1 cm Muck (a9) (LRR O) \_ Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Reduced Vertic (F18) (outside MLRA 150A, B) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Stratified Layers (A5) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Depleted Dark Surface (F7) Red Parent Material (TF2) \_5 cm Mucky Mineral (A7) (LRR P,T,U) Redox Depressions (F8) \_Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) Marl (F10) (LRR U) Other (Explain in Remarks) \_1 cm Muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) fron-Manganese Masses (F12) (LRR O, P,T) \_Thick Dark Surface (A12) <sup>3</sup>Indicators of hydrophytic vegetation and wetland Umbric Surface (F13) (LRR P, T, U) \_Coast Prairie Redox (A16) (MLRA 150A) hydrology must be present, unless disturbed or problematic. Delta Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:

Project/Site: Levy Nuclear Plant - Transmission I	City/County: Polk	Date: 9/23/09			
Applicant/Owner: Progress Energy Florida, Inc.	State: FL	Sampling F	Sampling Point: 12		
Investigator(s): Mike Arrants, Erin Heinen	Section, Township, Range: 17 26S 23E/18 26S 23E				
Landform (hillslope, terrace, etc.): N/A	Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U				Datum: WGS84	
Soil Map Unit Name: <u>Eaton mucky fine sand, d</u>			NWI classification: palustrine	emergent	
Are climatic / hydrologic conditions on the site ty			_ No (If no, expl		
· -	or Hydrology		Are circumstances normal?	Yes_ ✓ No	
	or Hydrology		(If needed, explain any answer	rs in Remarks)	
SUMMARY OF FINDINGS - Attach sit			• • •	•	
Hydrophytic Vegetation Present?	Yes✓No			,	
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland? Yes	No		
Wetland Hydrology Present?	Yes✓No			· · · · · · · · · · · · · · · · · · ·	
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minimus		
Primary Indicators (minimum of one is required;			Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (813)		Drainage Patterns (B10)		
Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season Water Table	(C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7	)	Shallow Aquitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral Test (D5)		
Field Observations:					
Surface Water Present?	Yes No				
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present? Yes ✓	No	
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previo	us inspections), if available:			
Remarks:					

VEGETATION - Use scientific na	mes of plants				Sampling Point: _	12
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spe	cies	(4)
2.				That Are OBL, FACW, or	FAC: 2	(A)
3.				Total Number of Domina	nt a	(D)
4.				Species Across All Strata	<u>:</u> 2	(B)
5.				Percent of Dominant Spe	cies	00 (4(0)
6.	•			That Are OBL, FACW, or		<u>00</u> (A/B)
7.				Prevalance Index works		
	0	= Total Cove	er	Total % Cover of:	Multiply	by:
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	
2.				FAC species	x3=	
3.				FACU species	×4=	
4.	<del></del>			UPL species	x5=	
5.	-	<del></del>		Column Totals:	(A)	(B)
6.				-	<del>`</del> `	` ` ′
7.				Prevalance Index =	B/A =	
		= Total Cove	er	Hydrophytic Vegetation	Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is	s 50%	
1. Baccharis sp.	 2	ves	FAC	Prevalence Index	is ≤3.0 <sup>1</sup>	
2.				<del></del>	ophytic Vegetation <sup>1</sup>	(Explain)
3.				7	,	(
4.				<sup>1</sup> Indicators of hydric soil a	and wetland hydrol	oav must
5.				be present, unless distur		
6.	-			Definitions of Vegetation		
7.				1		
-	2	= Total Cove		Tree- Woody plants, exclu	ding woody vines.	
Herb Stratum (Plot size:)				approximately 20 ft (6m) o		3 in. (7.6
Ludwigia spp.	70	yes	OBL	cm) or larger in diameter a	t breast height (DBF	<b>Ⅎ</b> ).
Eupatorium capillifolium	15	no	FACU	Sapling- Woody plants, ex	cludina woody vine:	S.
3. Panicum hemitomon	5	no	OBL	approximately 20 ft (6m) o		
4. Sesbania spp.	2	no	FAC	in. (7.6 cm) DBH.		
5. Setaria spp.		no	FAC	Shrub- Woody plants, exc	luding woody vines,	
6. Bacopa spp.	2	no	OBL	approximately 3 to 20 ft (1	to 6 m) in height.	
7. Cyperus spp.	2	no	FACW	Herb- All herbaceous (non	-woody)plants, inclu	udina
8. Hyptis alata	2	no	OBL	herbaceous vines, regardle	• • • •	•
9.				plants, except woody vines		
10.	-	<del></del>		m) in height.		
11.				Woody vine- All woody vir	nes, regardless of he	eight.
12.						
	100	= Total Cove	 er	1		
Woody Vine Stratum (Plot size:	)					
1.	,					
2.	•			1		
3.						
4.				Hydrophytic		
5.				Vegetation Present?	Yes <u>√</u> N	lo
		= Total Cove	 er	1		
Remarks: (If observed, list morph				1		
Percent cover estimates based of	-		rnader coi	mmunity		

	/soil: Polk- Eaton		Acception Body
SOIL			Sampling Point:
Profile	Description: (Describe to the depth	needed to document the indicator or confirm the absence of indicator	s.)
I	**	5 . 5 .	

Depth	escription: (Describe t Matrix	o me aet	ar needed to doc		re indicator or Features	commit the ab	sence of illuscators	•1			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks			
0-6	10 YR 2/1							black mucky fine sand			
6-29	10 YR 7/1							light gray fine sand			
29-33	N 5/0							gray sandy clay loam			
33-80	N 5/0							gray sandy clay			
ļ											
¹Tyma: C=	Concentration, D=Depl	etion PM:	Paducad Matrix (	·2=Cove	red or Coated (	Sand Grains	2l ocation: PI =Por	re Lining, M=Matrix.			
	oil Indicators:	Cuon, Ixie	-reduced Matrix, C	70-00 <b>v</b> c	rea or coatea t	Jana Oranis.	LOCATION, 1 L-1 O	Indicators for Problematic Hydric Soils 3:			
Histol				Polv	value Below Su	rface (\$8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)			
_	Epidon (A2)		•	_ ′		S9) (LRR S, T, I		2 cm Muck (A10) (LRR S)			
	Histic (A3)		-		,	ral (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)			
Hydro	ogen Sulfide (A4)				ny Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)			
	fied Layers (A5)				leted Matrix (F3			Anomalous Bright Loamy Soils (F20)			
Organ	nic Bodies (A6) (LRR P	, T, U)		Red	ox Dark Surface	e (F6)		(MLRA 153B)			
5 cm	Mucky Mineral (A7) (LF	RR P,T,U)		Dep	leted Dark Surfa	ace (F7)		Red Parent Material (TF2)			
✓ Muck	Presence (A8) (LRR I	J)		Red	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)			
	Muck (A9) (LRR P,T)			Mari	(F10) (LRR U)			Other (Explain in Remarks)			
		- (844)	•			11) (MLRA 151)	•				
	eted Below Dark Surfac	e (A11)			•						
Thick Dark Surface (A12)			-		-	sses (F12) (LRI	· · ·	<sup>3</sup> Indicators of hydrophytic vegetation and wetland			
Coast	t Prairie Redox (A16) (f	MLRA 150	ıΑ) _	Umb	iric Surface (F1	3) (LRR P, T, U)	)	hydrology must be present, unless disturbed or			
Sandy Mucky Mineral (S1) (LRR O, S)				Delta	a Orchric (F17)	(MLRA 151)		problematic.			
Sandy	y Gleyed Matrix (S4)			Reduced Vertic (F18) (MLRA 150A, 150B)							
Sand	y Redox (S5)			Pied	mont Floodplair	n Soils (F19) (MI	LRA 149A)				
Stripp	ed Matrix (S6)			Anoi	malous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)			
Dark	Surface (S7) (LRR P, S	S, T, U)									
Restrictiv	e Layer (If observed):										
	Туре:										
	Depth (inches):						Hydric Soil Prese	nt? Yes <u> </u>			
Remarks:											
1											
1											
]											
	•										
1											
								•			
I											

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date	9/23/09
Applicant/Owner: Progress Energy Florida, Inc.	State: FL		Sampling Poin	t: 13	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 20 26S 23E			
Landform (hitlslope, terrace, etc.): N/.	Α	Local relief (concave, conv	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.218472</u>	2 Long: <u>-82.0</u>	39589	0	Datum: WGS84
Soil Map Unit Name: Eaton mucky fine sand, of	depressional		NWI classification:	palustrine em	ergent
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	. No	(If no, explain i	n Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	′es <u> </u>
	or Hydrology		(If needed, explain	any answers in	Remarks)
SUMMARY OF FINDINGS - Attach sit			ansects, impor	tant feature	s, etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	YesNo	Is the Sampled Area w	ithin a Wetland?	YesN	10
Wetland Hydrology Present?	YesNo				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	getated Concave	e Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (			` ,
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor			Water Table (C2	2)
Sediment Deposits (B2)	Oxidized Rhizospheres				-,
Drift Deposits (B3)	Presence of Reduced In				magery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction is				
Iron Deposits (B5)	Thin Muck Surface (C7)				
✓ Inundation Visible on Aerial Imagery (B7)					
Field Observations:			1	, , , ,	
Surface Water Present?	Yes No	Depth (inches): 0-24	1		
Water Table Present?	Yes ✓ No		1		
Saturation Present?	Yes ✓ No		Wetland		
(includes capillary fringe)		. Dopa. (o.)	Hydrology Present?	Yes <u>√</u>	No
Describe Recorded Data (stream gauge, monito	pring well, aerial photos, previou	us inspections), if available:	<u> </u>		
	,, p, p	,,, ,,, ,,, ,,, ,,, ,,, ,,, ,,, ,,, ,,,			
Remarks:					
					•
	•				:

	Absolute %	Dominant		Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	<u>5</u>	(A)
2.				That Are OBL, FACW, or FAC:	<del>-</del>	•
3.				Total Number of Dominant	<u>5</u>	(B)
4.				Species Across All Strata:		•
5.		·		Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:		
7.		- T-tal Cau	. <u> </u>	Prevalance Index worksheet:	8 # - IA: nl. i b. ii	
Sapling Stratum (Plot size:)	0	= Total Cove	∍r	Total % Cover of: OBL speciesx	Multiply by: 1=	_
1. Salix spp.	2	yes	FACW	FACW speciesx	2=	_
2.				4 · · · · · · · · · · · · · · · · · · ·	3=	_
3.				·	4=	_
4.				·	:5=	_
5.				Column Totals:(A	A)	_(B)
6.						
7.				Prevalance Index = B/A =		
<u></u>		= Total Cove	er	Hydrophytic Vegetation Indicate	ors:	
Shrub Stratum (Plot size:)				✓ Dominance Test is 50%		
1. Baccharis sp.	2	yes	FAC	Prevalence Index is ≤3.0¹	. 1	
2.				Problematic Hydrophytic V	'egetation' (Exp	lain)
3.				<b>.</b>		
4.			,	Indicators of hydric soil and wetla		ıust
5.				be present, unless disturbed or pr		
6.				Definitions of Vegetation Strata	1:	
7.						
Herb Stratum (Plot size:)	2	= Total Cove	∍r	Tree- Woody plants, excluding woo approximately 20 ft (6m) or more in	•	(7.6
1. Ludwigia spp.	30	yes	OBL	cm) or larger in diameter at breast h		•
2. Panicum hemitomon	30	yes	OBL	Sapling- Woody plants, excluding v	woody vines,	
3. Eupatorium capillifolium	10	no	FACU	approximately 20 ft (6m) or more in		than 3
4. Cyperus spp.	10	no	FACW	in. (7.6 cm) DBH.		
5. Typha spp.	5	no	OBL	Shrub- Woody plants, excluding wo		
6. Cyperus odoratus	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) ir	n height.	
7. Sesbania spp.	2	no	FAC	Herb- All herbaceous (non-woody)p	plants, including	
8. Bacopa monnieri	2	no	OBL	herbaceous vines, regardless of siz	e. Includes woo	
9. Amphicarpum muhlenbergianu	ıı 2	no	FACW	plants, except woody vines, less tha	an approximately	3 ft (1
10. Imperata cylindrica	2	no	NL	m) in height.		
11. Woodwardia virginica	2	no	OBL	<b>Woody vine</b> - All woody vines, rega	rdless of height.	
12.				]		
1	97	= Total Cove	er			
Woody Vine Stratum (Plot size:	_)					
Ampelopsis arborea	2	yes	FAC			
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes _	∕No	<del></del>
	2	= Total Cove	er			
Remarks: (If observed, list morpho	•					
Percent cover estimates based on	meandering s	urvey of the b	roader cor	mmunity.		

unty/soil: Polk- Eaton			Campling Daint
OIL CONTRACTOR OF THE CONTRACT		£	Sampling Point:
ofile Description: (Describe to the depth needed		tirm the absence of indicator	S.)
pth Matrix	Redox Features	Loc <sup>2</sup> Texture	Demodra
ches) Color (moist) % Color (n	noist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture	Remarks
5 10 YR 2/1			black mucky fine sand
29 10 YR 7/1			light gray fine sand
-33 N 5/0			gray sandy clay loam
-80 N 5/0			gray sandy clay
pe: C=Concentration, D=Depletion, RM=Reduced	Mattin CS-Command to Control Com	Cosina 21 apptions DI -D	ore Lining, M=Matrix.
rdric Soil Indicators:	Matrix, CS-Covered or Coated Sand	Grants. Location. FE-F	Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface	(CD) (I DD C T II)	1 cm Muck (a9) (LRR O)
<del></del>	Thin Dark Surface (S9)		2 cm Muck (A10) (LRR S)
_Histic Epidon (A2)			
_Black Histic (A3)	Loamy Mucky Mineral (F		Reduced Vertic (F18) (outside MLRA 150A, B
_Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F	2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
_Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
_Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6	•	(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (	. ,	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	)	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11)	(MI DA 151)	· -
_ , , ,			
Thick Dark Surface (A12)	Iron-Manganese Masse		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
_Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (L	.RR P, T, U)	hydrology must be present, unless disturbed or
_Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (ML	RA 151)	problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (A	ALRA 150A 150B)	
Sandy Cicycu Matrix (3-7) Sandy Redox (S5)	Piedmont Floodplain So		
Stripped Matrix (S6)		y Soils (F20) (MLRA 149A, 153	3C 153D)
<b>-</b> ··· · · ·		y com (1 20) (m2101 140A, 100	35, 1005,
_Dark Surface (S7) (LRR P, S, T, U)			
strictive Layer (If observed):			
Type:	_	l	
Depth (inches):		Hydric Soil Pres	ent? Yes <u>✓ No</u>
emarks:			
•			
•			

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		_Sampling Date: 9/23/09	
Applicant/Owner: Progress Energy Florida, Inc.	State:FL		Sampling Point: 14		
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 20 26S 23E			
Landform (hillslope, terrace, etc.):N/	Α	Local relief (concave, con	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.211435	Long:82.0	39319	Datum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification	: palustrine emergent	
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	n any answers in Remarks)	
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	rithin a Wetland?	Yes No	
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two required)	
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	sely Vegetated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	im Lines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Bur	·	
Drift Deposits (B3)	Presence of Reduced Ire	<del></del>			
Algal Mat or Crust (B4)	Recent Iron Reduction in				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)FAC Neutral Test (D5)			
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No <u></u> ✓				
Saturation Present?	<u> </u>	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)		, , ,	Present?	Yes ✓ No	
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previou	is inspections), if available			
Remarks:					

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	14
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC: 5	(A)
3.			-	Total Number of Dominant	<b>(D)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.	· ——			That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	er	Total % Cover of: Multiply by	:
Sapling Stratum (Plot size:)				OBL species x1=	•
1. Salix spp.	2	yes	FACW	FACW species x2=	
2.				FAC species x3=	_
3.				FACU species x4=	—
4.	. ———			UPL species x5=	—
5.				Column Totals: (A)	— <sub>(B)</sub>
6.					—(5)
7.	•			Prevalance Index = B/A =	
		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:		10101 0011	٠,	✓ Dominance Test is 50%	
Baccharis sp.	_/ 2	yes	FAC	Prevalence Index is ≤3.0¹	
2.		yes	170	Problematic Hydrophytic Vegetation <sup>1</sup> (E	volain)
3.				Problematic Hydrophytic Vegetation (E	хріанті
4.				1	
5.				Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic.	must
6.	. ——			Definitions of Vegetation Strata:	
7.	. ——			Definitions of Vegetation Strata.	
7.		= Total Cove		Tona Miandon de ante accelentia a consedica de consedica de la	
Herb Stratum (Plot size:	۷ .	- Total Cove	<b>31</b>	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 is	n /76
	./ 30	VOC	OBL	cm) or larger in diameter at breast height (DBH).	1. (7.0
Ludwigia spp.     Panicum hemitomon	20	yes	OBL	, , , , , , , , , , , , , , , , , , ,	
	10	yes	FACU	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and les	e than 3
	2	no	FACW	in. (7.6 cm) DBH.	is than 5
<ol> <li>Rhyncospora spp.</li> <li>Cyperus spp.</li> </ol>	2	no	FACW		
	2	no		Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
		no	FAC		
7. Sesbania spp.	2	no	FAC	Herb- All herbaceous (non-woody)plants, includin	
8. Phyla nodiflora	2	no	FACW	herbaceous vines, regardless of size. Includes w plants, except woody vines, less than approximate	
Woodwardia virginica	2	no	OBL	m) in height.	31y 3 It ( I
10.	· ———				
11.				Woody vine- All woody vines, regardless of heigh	и.
12.		<del></del>			
	, 72	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
Vitus rotundifolia	2	yes	FAC		
2.					
3.				1	
4.				Hydrophytic	
5.				Vegetation Present? YesNo_	<del></del>
	2	= Total Cov	er	1	
Remarks: (If observed, list morph	-				
Percent cover estimates based or	a meandering s	survey of the b	proader coi	mmunity.	

County/soil: Polk- Pomona	
SOIL	Sampling

SOIL							Sampling Point:14
	scription: (Describe to the dep	th needed to docu			onfirm the abs	sence of indicators.	)
Depth	Matrix			eatures			
(inches)	Color (moist) %	Color (moist)	<u> </u>	Type <sup>1</sup>	Loc²	Texture	Remarks
0-6	10 YR 3/1						very dark gray fine sand
6-12	10 YR 6/2						light brownish gray sand
12-21	10 YR 7/2						light gray sand
21-26	5 YR 3/3						dark reddish brown loamy fine sand
Typo: C=C	oncentration, D=Depletion, RM=	Peduced Matrix C	S=Covere	nd or Costad Sa	and Graine	21 ocation: DI =Por	e Lining, M=Matrix.
	I Indicators:	Reduced Matrix, C.	3-COVER	ou or Coaled Sa	ind Grains.		Indicators for Problematic Hydric Soils 3:
Histol (			Polyva	alue Below Surfa	ace (S8) (LRR :		1 cm Muck (a9) (LRR O)
	Epidon (A2)	_		ark Surface (S			2 cm Muck (A10) (LRR S)
	Histic (A3)	_		y Mucky Minera	, , , , ,	,	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)	_		y Gleyed Matrix			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)			ted Matrix (F3)	·/		Anomalous Bright Loamy Soils (F20)
	c Bodies (A6) (LRR P, T, U)	_		Dark Surface (	(F6)		(MLRA 153B)
5 cm N	Mucky Mineral (A7) (LRR P,T,U)	_	Deple	ted Dark Surfac	e (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR U)		Redox	Depressions (i	F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	fluck (A9) (LRR P,T)		Marl (	F10) (LRR U)			Other (Explain in Remarks)
	ed Below Dark Surface (A11)	_	Deple	ted Orchric (F1	1) (MLRA 151)		
	Dark Surface (A12)	_	_ ·	langanese Mas	, ,	(O. P.T)	3
	Prairie Redox (A16) (MLRA 150	Δ)		c Surface (F13)	. , ,		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
		^) _		, ,			problematic.
·	Mucky Mineral (S1) (LRR O, S)	_		Orchric (F17) (M			problematic.
	Gleyed Matrix (S4)	-		ced Vertic (F18) nont Floodplain (	•	•	
	Redox (S5) ed Matrix (S6)	_		•		(MLRA 149A, 153C	1530)
	furface (S7) (LRR P, S, T, U)	_		alous Bright Eot	arry 00/15 (1 20)	(1112104 1402), 1000	, 1000)
	Layer (If observed):					<u> </u>	
	Гуре:						
	Depth (inches):		•			Hydric Soil Presen	t? Yes ✓ No .
Remarks:							
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Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date: 9/23/09	
Applicant/Owner: Progress Energy Florida, Inc.	. ,	State:FL		Sampling Point: 15	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 20 26S 23E			
Landform (hillslope, terrace, etc.): N	Ά	Local relief (concave, con	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.21095	4Long: <u>-82.0</u>	39509	Datum: WGS84	
Soil Map Unit Name: Pomona fine sand				: _palustrine emergent	
Are climatic / hydrologic conditions on the site to	pical for this time of year?	Yes✓	_ No	_ (If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		
Are Vegetation, Soil	or Hydrology	_ naturally problematic?	(If needed, explain	any answers in Remarks)	
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ing point locations, t	ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes No	
Wetland Hydrology Present?	Yes No				
Remarks:					
LIVEROL COV					
HYDROLOGY					
Wetland Hydrology Indicators:				tors (minimum of two required)	
Primary Indicators (minimum of one is required;	· · ·		Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves	(B9)		y Vegetated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)  Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15) (LI	•	<del></del>	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor	` '	-	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		-	Crayfish Burrows (C8)	
Drift Deposits (B3)	Presence of Reduced I			turation Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction	• •	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7	<del></del>			
✓ Inundation Visible on Aerial Imagery (B7	)Other (Explain in Rema	irks)	FAC Neutral	Test (D5)	
Field Observations:	Voc. / N	D	1		
Surface Water Present?	Yes_ ✓ No		-		
Water Table Present?	Yes ✓ No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor)	oring well pariel photos provio	us inspections) if qualishing	Present?	Yes No	
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previo	us irispections), ii avaliable			
Remarks:					
				· -	
ļ					

VEGETATION - Use scientific ha	р			<del></del>		10
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshe	et:	
1.			- ·	Number of Dominant Specie		(A)
2.	· <del></del>			That Are OBL, FACW, or F	AC: ≃	(~)
3.				Total Number of Dominant	<u>9</u>	(B)
4.				Species Across All Strata:	2	(0)
5.				Percent of Dominant Specie		(A/B)
6.				That Are OBL, FACW, or FA	AC:	(/ 0.0)
7.				Prevalance Index worksho	et:	
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)				OBL species	x1=	_
1. Salix spp.	2	yes	FACW	FACW species	x2=	_
2.	_			FAC species	x3=	
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.	,			Column Totals:	(A)	(B)
6.				1		_
7.				Prevalance Index = B/A	A =	
	2	= Total Cove	er	Hydrophytic Vegetation In	dicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 5		
Baccharis sp.	2	yes	FAC	Prevalence Index is:		
2.	• ——			<del></del>	nytic Vegetation <sup>1</sup> (Exp	olain)
3.				-	,	
4.	• ———			<sup>1</sup> Indicators of hydric soil and	t wetland hydrology n	must
5.	• ——			be present, unless disturbed		1166
6.	-			Definitions of Vegetation		
7.		· · · · · · · · · · · · · · · · · · ·		1		
i i		= Total Cove	er	Tree- Woody plants, excludin	na woodv vines,	
Herb Stratum (Plot size:			-	approximately 20 ft (6m) or m	•	. (7.6
1. Typha spp.	20	yes	OBL	cm) or larger in diameter at be	-	*
Ludwigia spp.	20	yes	OBL	Sapling- Woody plants, exclu	uding woody vines,	
Myriophyllum brasiliense	20	yes	OBL	approximately 20 ft (6m) or m		than 3
Panicum repens	10	no	FACW	in. (7.6 cm) DBH.	-	
5. Alternanthera philoxeroides	10	no	OBL	Shrub- Woody plants, exclud	ling woody vines,	
6. Azola spp.	2	no	OBL	approximately 3 to 20 ft (1 to		
7. Salvinia minima	2	no	OBL	Herb- All herbaceous (non-w		
8. Polygonum punctatum	2	no	FACW	herbaceous vines, regardless		
Hydrocotyle spp.	2	no	OBL	plants, except woody vines, le		
10. Juncus effusus	2	no	FACW	m) in height.	•	
11. Hyptis alata	2	no	OBL	Woody vine- All woody vines	. regardless of height.	
12. Pontederia cordata	2	no	OBL	1 '	, ,	
	94			1		
Woody Vine Stratum (Plot size:						
Mikania scandens		yes	FACW			
Vitus rotundifolia	2	yes	FAC	1		
Ampelopsis arborea	2	yes	FAC			
Smilax spp.	2	yes	FAC	Hydrophytic		
5.			, 170		Yes <u> </u>	
J.	8	= Total Cove		Tvegetation Fresent:	163110	
4		- IUIUI	ai .			

SOIL	l: Polk- Pomona						Sampling Point:1		
	scription: (Describe	to the dep	oth needed to doc	ument the indicator or	confirm the abs	ence of indicators.	)		
Depth	Matrix			Redox Features					
(inches)	Color (moist)	<u>%</u>	Color (moist)	% Type'	Loc <sup>2</sup>	Texture	Remarks		
0-6	10 YR 3/1						very dark gray fine sand		
6-12	10 YR 6/2	. ——					light brownish gray sand		
12-21	10 YR 7/2						light gray sand		
21-26	5 YR 3/3						dark reddish brown loamy fine sand		
1 <del></del>	2		D-4 4 M-4 C	· · · · · · · · · · · · · · · · · · ·		21	- Nickey Manager		
	il Indicators:	ietion, RM	=Reduced Matrix, C	CS=Covered or Coated	Sand Grains.		e Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:		
Histol				Polyvalue Below Su	rface (S8) (LRR 9		1 cm Muck (a9) (LRR O)		
	Epidon (A2)		-	Thin Dark Surface (			2 cm Muck (A10) (LRR S)		
	Histic (A3)		•	Loamy Mucky Mine		,	Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)		-	Loamy Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ied Layers (A5)		•	Depleted Matrix (F3			Anomalous Bright Loamy Soils (F20)		
	ic Bodies (A6) (LRR F	P, T, U)	•	Redox Dark Surface			(MLRA 153B)		
	Mucky Mineral (A7) (L			Depleted Dark Surf			Red Parent Material (TF2)		
	Presence (A8) (LRR		•	Redox Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)		
	Muck (A9) (LRR P,T)	٠,	•	Marl (F10) (LRR U)			Other (Explain in Remarks)		
	ted Below Dark Surfac	- (044)	-	Depleted Orchric (F					
		æ (ATT)	•			O D T\			
	Dark Surface (A12)			Iron-Manganese Ma		O, P, I)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
	Prairie Redox (A16) (		•	Umbric Surface (F13) (LRR P, T, U)  Delta Orchric (F17) (MLRA 151)			hydrology must be present, unless disturbed or problematic.		
	Mucky Mineral (S1) (I	LKK (), S)			. ,		F2		
	Gleyed Matrix (S4)			Reduced Vertic (F1	, ,	•			
	Redox (S5)		-	Piedmont Floodplain		•	4520)		
	ed Matrix (S6)		•	Anomalous Bright L	oarry Solis (F20)	(MLRA 149A, 153C	, 1930)		
	Surface (S7) (LRR P, : e Layer (If observed)								
	e Layer (ir observed) Type:	1.							
	Depth (inches):	·	<del></del>			Hydric Soil Presen	at? Yes ✓ No .		
Remarks:	Deptit (nicries).					riyunc 300 Fiesen	165 <u>7</u> NO		
Remarks.									
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Project/Site: <u>Levy Nuclear Plant - Transmission</u>	Lines	City/County: Polk		_Sampling Date:	9/23/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point	16		
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 20 26S 23E					
Landform (hillslope, terrace, etc.): N/	Α	Local relief (concave, convex, none): <u>none</u> Slope (%):					
Subregion (LRR or MLRA): LRR U	Lat: <u>28.209133</u>	Long: <u>-82.0</u>	39579	D	atum: WGS84		
Soil Map Unit Name: Pomona fine sand	· · · · · · · · · · · · · · · · · · ·		NWI classification:	palustrine em	ergent		
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	Remarks)		
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstances	normal? Y	esNo		
Are Vegetation, Soil	or Hydrology	_naturally problematic?	(If needed, explain	any answers in	Remarks)		
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations, t	ransects, impo	rtant features	s, etc.		
Hydrophytic Vegetation Present?	Yes No	-					
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	YesN	0		
Wetland Hydrology Present?	Yes No						
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)		
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	getated Concave	Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Par	tterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	nes (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2	)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Buri	rows (C8)			
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vi	sible on Aerial In	nagery (C9)		
Algal Mat or Crust (B4)	Recent fron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	•	Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	FAC Neutral Test (D5)					
Field Observations:							
Surface Water Present?	Yes No		-				
Water Table Present?	Yes No		Wetland	•	j		
Saturation Present?	Yes No	Depth (inches): 0	- Hydrology				
(includes capillary fringe)	· · · · · · · · · · · · · · · · · · ·		Present?	Yes <u>✓</u> N	°		
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previou	us inspections), if available:					
Remarks:							
					l		

Tree Stratum (Plot size: Cover   Species?	VEGETATION - Use scientific nam	nes of plants				npling Point:	16
Number of Dominant Species   That Are OBL, FACW, or FAC: 2 (A)		Absolute %	Dominant		Dominance Test Worksheet:		
That Are OBL, FACW, or FAC: 2 (A)	Tree Stratum (Plot size:)	Cover	Species?	Status			
Total Number of Dominant   2 (B)   Four Number of Dominant   2 (B)   5.						2	(Δ)
Species Across All Strata:	2.				That Are OBL, FACW, or FAC	: 4	(八)
Species Notices in Status   Species Notices in Status	3.				Total Number of Dominant	2	(D)
That Are OBL, FACW, or FAC:   100.00	4.				Species Across All Strata:	₹	(D)
That Are OBL, FACW, or FAC:   1000   (vi.)	5.				Percent of Dominant Species	100.00	/ A / D \
Sapling Stratum (Plot size:	6.					: 100.00	(AVB)
Sapling Stratum (Plot size:	7.				Prevalance Index worksheet	:	
FACW species   X2=		0	= Total Cove	r	Total % Cover of:	Multiply by:	
FAC species   X3=   X4-   X4	Sapling Stratum (Plot size:)				OBL species	x1=	
FAC species   X3=   X4-   X4	1.				FACW species	x2=	
FACU species	2.				1	x3=	_
Section   Sec					<b></b>		_
Column Totals:							_
Prevalance Index = B/A =    Prevalence Index is 50%   Prevalence Index is 50%   Prevalence Index is 53.0°					4 · · · · · · · · · · · · · · · · · · ·	_	— <sub>(B)</sub>
Prevalance Index = B/A =   Hydrophytic Vegetation Indicators:		<del></del>				_ (' ')	—\ <sup>()</sup>
Shrub Stratum (Plot size:)  Shrub Stratum (Plot size:)			-		Prevalance Index = R/A =	:	
Shrub Stratum (Plot size:			= Total Cove	<u></u>			
1.	Shrub Stratum (Plot size:			•			
Problematic Hydrophytic Vegetation (Explain)  Problematic Hydrophytic Vegetation (Explain)  Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:  Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapiltaria graminea 10 no OBL sapinoximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Cyperus spp. 5 no OBL spring-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Cyperus spp. 5 no OBL spring-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Cyperus spp. 5 no OBL spring-Woody plants, excluding woody vines, approximately 30 ft (1 to 6 m) in height.  Herb-All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 to 6 m) in height.  The composition of the provided plants of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 3 ft (1 to 6 m) in height.  The composition of the proximately 2 to 6 ft (1 to 6 m) in height.  The composit						=	
3. 4. 5. 6. 7.			<del></del>		<del></del>		olain)
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					1 Toblematic Hydrophyti	c vegetation (Ex	Jiairi
be present, unless disturbed or problematic.    Definitions of Vegetation Strata:		<del></del>			1) ndigetors of hydric soil and u	otland hydrology r	munt
Definitions of Vegetation Strata:		<del></del>					nust
Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sagittaria graminea 10 no OBL approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sagittaria graminea 10 no OBL approximately 20 ft (6m) or more in height and less than in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height.  Woody Vine Stratum (Plot size: 1)  1. 2. 3. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.							
Herb Stratum (Plot size:) 1. Eleocharis spp. 2. Panicum hemitomon 3. Sagittaria graminea 4. Myriophyllum brasiliense 5. Cyperus spp. 6. Hydrocotyle spp. 7. Eupatorium capillifolium 8. Amphicarpum muhlenbergianu 9. Panicum hemitomon 10. Rhexia spp. 1					beaminous of vegetation of	ata.	
Herb Stratum (Plot size:) 1. Eleocharis spp. 2. Panicum hemitomon 3. Sagittaria graminea 4. Myriophyllum brasiliense 5. Cyperus spp. 6. Hydrocotyle spp. 7. Eupatorium capillifolium 8. Amphicarpum muhlenbergianur 9. Panicum hemitomon 12. no 13. Robert Panicum hemitomon 14. Myriophyllum brasiliense 15. Total Cover  Woody Vine Stratum (Plot size:) 1. Eleocharis spp. 30. yes OBL Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, paproximately 20 ft (6m) or more in height and in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, paproximately 20 ft (6m) or more in height and in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, paproximately 20 f	7.		= Total Cava	<u> </u>	Trans Mandy plants avaluation		
1. Eleocharis spp. 30 yes OBL cm) or larger in diameter at breast height (DBH).  2. Panicum hemitomon 15 yes OBL Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  5. Cyperus spp. 5 no FACW Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  5. Cyperus spp. 5 no OBL Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  7. Eupatorium capillifolium 2 no FACW Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft in height.  8. Amphicarpum muhlenbergianu 2 no FACW plants, except woody vines, less than approximately 3 ft in height.  9. Panicum hemitomon 2 no OBL plants, except woody vines, less than approximately 3 ft in height.  10. Rhexia spp. 2 no FACW m) in height.  11. Euthamia spp. 2 no FACW woody Vine Stratum (Plot size: 1.2 no FACW   Total Cover   Total C	Herh Stratum (Plot size:	U	- Total Cove	1	1		<i>(</i> 7.6
2. Panicum hemitomon 15 yes OBL approximately 20 ft (6m) or more in height and less than 10 no OBL approximately 20 ft (6m) or more in height and less than 11. Euthamia spp. 12. Panicum repens 13. Sagittaria graminea 14. Myriophyllum brasiliense 15. Cyperus spp. 16. Hydrocotyle spp. 17. Eupatorium capillifolium 18. Amphicarpum muhlenbergianur 19. Panicum hemitomon 19. Panicum repens 10. Rhexia spp. 10. Rhexia spp. 11. Euthamia spp. 12. Panicum repens 13. Sagittaria graminea 14. Myriophyllum brasiliense 15. no OBL approximately 20 ft (6m) or more in height and less than 16. In. (7.6 cm) DBH. 17. Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. 18. Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height. 18. Woody Vine- All woody vines, regardless of height. 19. Panicum repens 20. no FACW Woody Vine- All woody vines, regardless of height. 20. Total Cover 21. Hydrophytic 22. Vegetation Present? Yes ✓ No_	·	30	V00	OBL	1	_	(1.0
3. Sagittaria graminea 10 no OBL approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  4. Myriophyllum brasiliense 10 no OBL in. (7.6 cm) DBH.  5. Cyperus spp. 5 no OBL approximately 20 ft (6m) or more in height and less than in. (7.6 cm) DBH.  5. Cyperus spp. 5 no OBL approximately 3 to 20 ft (1 to 6 m) in height.  6. Hydrocotyle spp. 5 no OBL approximately 3 to 20 ft (1 to 6 m) in height.  7. Eupatorium capillifolium 2 no FACU herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height.  7. Eupatorium capillifolium 2 no FACU herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height.  7. Eupatorium hemitomon 2 no FACW herb- All woody vines, less than approximately 3 ft m) in height.  8. Amphicarpum muhlenbergianu 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum muhlenbergianu 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum muhlenbergianu 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum muhlenbergianu 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum muhlenbergianu 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum muhlenbergianu 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum muhlenbergianu 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum muhlenbergianu 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum hemitomon 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum hemitomon 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum hemitomon 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum hemitomon 2 no FACW herb- All woody vines, regardless of height.  8. Amphicarpum hemitomon 2 no FACW herb- All woody vines, regardless of height.  8. Amphi					ł .		
4. Myriophyllum brasiliense 10 no OBL in. (7.6 cm) DBH.  5. Cyperus spp. 5 no FACW Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  7. Eupatorium capillifolium 2 no FACU Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft or in height.  10. Rhexia spp. 2 no FACW plants, except woody vines, less than approximately 3 ft or in height.  11. Euthamia spp. 2 no FACW m) in height.  12. Panicum repens 2 no FACW woody vine- All woody vines, regardless of height.  13. Voody Vine Stratum (Plot size:)  14. 2. 3. 4. 5.							than 2
5. Cyperus spp. 6. Hydrocotyle spp. 7. Eupatorium capillifolium 8. Amphicarpum muhlenbergianur 9. Panicum hemitomon 10. Rhexia spp. 11. Euthamia spp. 12. Panicum repens 23. no FACW 14. Panicum repens 24. Total Cover  Woody Vine Stratum (Plot size:  15. Toy Panicum Present?  16. Hydrocotyle spp. 17. Eupatorium capillifolium 18. Amphicarpum muhlenbergianur 19. Panicum hemitomon 10. Rhexia spp. 11. Euthamia spp. 12. Panicum repens 13. Panicum (Plot size:  14. Panicum Present?  15. No FACW 16. Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height.  10. Woody vine- All woody vines, regardless of height.  11. Euthamia spp. 12. Panicum repens 13. Panicum (Plot size:  14. Pydrophytic  15. Vegetation Present?  16. Hydrophytic Vegetation Present?  17. Eupatorium capillifolium 18. Amphicarpum muhlenbergianur 19. Pacum FACW 19. Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height.  18. Woody vine- All woody vines, regardless of height.  19. Panicum repens 10. Pacum FACW 11. Euthamia spp. 12. Panicum repens 13. Panicum repens 14. Panicum repens 15. Pacum Pacum Present? 16. Pacum Pacu						e in neight and less	uiaii 3
6. Hydrocotyle spp. 5 no OBL approximately 3 to 20 ft (1 to 6 m) in height.  7. Eupatorium capillifolium 2 no FACU Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height.  10. Rhexia spp. 2 no FACW m) in height.  11. Euthamia spp. 2 no FACW m) in height.  12. Panicum repens 2 no FACW woody vines, regardless of height.  13. Every discover woody vines, regardless of height.  14. Every discover woody vines, regardless of height.  15. Every discover woody vines, regardless of height.  16. Hydrophytic vegetation Present? Yes✓ No					<b>4</b> ' '		
7. Eupatorium capillifolium       2       no       FACU       Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft on the plants, except woody vines, less than approximately 3 ft on the plants, except woody vines, less than approximately 3 ft on the plants, except woody vines, less than approximately 3 ft on the plants, except woody vines, less than approximately 3 ft on the plants, except woody vines, less than approximately 3 ft on the plants, except woody vines, less than approximately 3 ft on the plants, except woody vines, less than approximately 3 ft on the plants, except woody vines, regardless of height.         11. Euthamia spp.       2       no       FACW         12. Panicum repens       2       no       FACW         Woody Vine Stratum (Plot size:)       1.	*						
8. Amphicarpum muhlenbergianur 9. Panicum hemitomon 2 no OBL plants, except woody vines, less than approximately 3 ft of the plants of the plants, except woody vines, less than approximately 3 ft of the plants of the plants, except woody vines, less than approximately 3 ft of the plants of the plants, except woody vines, less than approximately 3 ft of the plants, except woody vines, less than approximately 3 ft of the plants, except woody vines, less than approximately 3 ft of the plants, except woody vines, less than approximately 3 ft of the plants, except woody vines, less than approximately 3 ft of the plants, except woody vines, less than approximately 3 ft of the plants, except woody vines, regardless of height.  Woody vine-All woody vines, regardless of height.  **Total Cover**  Woody Vine Stratum (Plot size:  1.					1	, -	
9. Panicum hemitomon 2 no OBL no FACW 10. Rhexia spp. 2 no FACW 11. Euthamia spp. 2 no FAC Woody vine- All woody vines, regardless of height.  12. Panicum repens 2 no FACW Woody Vine- All woody vines, regardless of height.  13. Vine Stratum (Plot size:)  14. 2 Hydrophytic  15. Vegetation Present? Yes ✓ No							
10. Rhexia spp.       2       no       FACW no       FAC FAC FACW FACW       Woody vine- All woody vines, regardless of height.         12. Panicum repens       2       no       FACW FACW FACW         Woody Vine Stratum (Plot size:)       = Total Cover         1.       2.	<u> </u>						
11. Euthamia spp. 2 no FAC  12. Panicum repens 2 no FACW  Woody Vine Stratum (Plot size:)  1. 2. 3. 4. 5. 5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.					1	than approximater	y 3 II (1
12. Panicum repens       2       no       FACW         87       = Total Cover         Woody Vine Stratum (Plot size:)					,		
87	· · · · · · · · · · · · · · · · · · ·				<b>į woody vine</b> - Ali woody vines, re	egardiess of neight.	
Woody Vine Stratum (Plot size:)       1.         1.       2.         2.       3.         4.       Hydrophytic         5.       Vegetation Present?       Yes _✓No	12. Panicum repens						
1.       2.         2.       3.         4.       Hydrophytic         5.       Vegetation Present? Yes ✓ No			= Total Cove	r			
2.	Woody Vine Stratum (Plot size:	_)					
3.							
4. Hydrophytic 5. Vegetation Present? Yes ✓ No							
5. Vegetation Present? Yes <u>V</u> No							
					Hydrophytic		
0 = Total Cover	5.				Vegetation Present? Ye	s <u> </u>	
		0	= Total Cove	r			

Percent cover estimates based on meandering survey of the broader community. Grazed.

County/soil:	Dalk	Domono

SOIL								Sampling Point:16
Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the abs	sence of indicators	.)
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0-6	10 YR 3/1							very dark gray fine sand
6-12	10 YR 6/2							light brownish gray sand
12-21	10 YR 7/2							light gray sand
21-26	5 YR 3/3							dark reddish brown loamy fine sand
		. —				. <del></del>		•
17:	O	D14	Dadward Makes	30-0	ad as Castad	Cand Crains	21 postion, DI - Do	co Lining M. Matrix
	Concentration, D=Dep	letion, RM	=Reduced Matrix, (	55=Cove	ed or Coated	Sand Grains.	Location: PL=Po	re Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histof	• •					ırface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					S9) (LRR S, T, U	•	2 cm Muck (A10) (LRR \$)
Black	Histic (A3)			Loan	ny Mucky Mine	ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	gen Sulfide (A4)			Loan	ny Gleyed Mati	ix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratif	ied Layers (A5)			Deple	eted Matrix (F3	3)		Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR I	P, T, U)		Redo	x Dark Surfac	e (F6)		(MLRA 153B)
F 000	Mucky Mineral (A7) (L	DD D T III		Denla	eted Dark Surf	ace (E7)		Red Parent Material (TF2)
	, , , ,				x Depressions	` '		Very Shallow Dark Surface (TF12) (LRR T, U)
	Presence (A8) (LRR	U)			•	` '		
1 cm	Muck (A9) (LRR P,T)			мап	(F10) (LRR U)			Other (Explain in Remarks)
Deple	ted Below Dark Surfac	ce (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
Thick	Dark Surface (A12)			Iron-	Manganese Ma	asses (F12) (LRF	R O, P,T)	31
1	Prairie Redox (A16) (	MI DA 150	۱۸۱	—— Umb	ric Surface (F1	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
			•		•			hydrology must be present, unless disturbed or problematic.
Sandy	Mucky Mineral (S1) (	LRR O, S)			Orchric (F17)	•		problematic.
Sandy	Gleyed Matrix (S4)					8) (MLRA 150A,		
Sandy	Redox (S5)			Piedr	mont Floodplai	n Soils (F19) (ML	-RA 149A)	
Stripp	ed Matrix (S6)			Anon	nalous Bright L	oamy Soils (F20)	) (MLRA 149A, 153	C, 153D)
Dark	Surface (S7) (LRR P,	S, T, U)						
Restrictiv	e Layer (If observed)	) <b>:</b>						
	Туре:						1	
	Depth (inches):						Hydric Soil Prese	nt? Yes <u> </u>
Remarks:								
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Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County:Sampling Date:9/23/09				
Applicant/Owner: Progress Energy Florida, Inc.	2	State: FL Sampling Point: 17			17	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 20 26S 23E				
Landform (hillslope, terrace, etc.): N	/A	Local relief (concave, con	vex, none): none	Slop	e (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.20676</u> 4	Long: <u>-82.0</u>	39573	Datu	ım: <u>WGS84</u>	
Soil Map Unit Name: Pomona fine sand			NWI classification:	palustrine emerg	ent	
Are climatic / hydrologic conditions on the site to	ypical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in R	emarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		No	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Re	marks)	
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations, t	ransects, impo	rtant features, e	etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland?	Yes No _		
Wetland Hydrology Present?	Yes No	]				
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two	required)	
Primary Indicators (minimum of one is required	check all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave Su	ırface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bun	rows (C8)		
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vi	isible on Aerial Imag	gery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	itard (D3)		
✓ Inundation Visible on Aerial Imagery (B7	)Other (Explain in Rema	rks)	FAC Neutral	Test (D5)		
Field Observations:			1			
Surface Water Present?	Yes No	Depth (inches): 0-12	_			
Water Table Present?	Yes No	_ Depth (inches):0	Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	Yes <u>✓</u> No_		
Describe Recorded Data (stream gauge, monitor	oring well, aerial photos, previo	us inspections), if available	:			
Remarks:						
<u> </u>						
}						

VEGETATION - Use scientific nar	mes of plants			Samplin	g Point:	17
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.	00.0.	орос.оо.	0	Number of Dominant Species		
2.		<del></del>		That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.	· <del>- · · · · · · · · · · · · · · · · · ·</del>			Total Number of Dominant		
4.				Species Across All Strata:	<u>3</u>	(B)
5.				4 '		
6.	· <del></del>			Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
1.		= Total Cove		Total % Cover of:	Multiply by	
Sapling Stratum (Plot size:)	U	- Total Cove	:1	OBL species x1	Multiply by.	
				FACW species x2	•	-
1. 2.				FAC species x3		-
3.	· ——	<del></del>		FACU species x4		-
4.	· <del></del>			UPL species x5		-
5.				· —		- <sub>/B\</sub>
6.	· ————		•••	Column Totals:(A	)	_(B)
7.				Dravelanas Inday - B/A -		
7.		= Total Cove		Prevalance Index = B/A = Hydrophytic Vegetation Indicato		
Shrub Stratum (Plot size:		- Total Cove	<b>:</b> I	✓ Dominance Test is 50%	15.	
	,			Prevalence Index is ≤3.0¹		
1.						.1-:-1
2.			•	Problematic Hydrophytic Ve	egetation (Exp	<sub>i</sub> lain)
3. 4.				1		
<u>4.</u> 5.				Indicators of hydric soil and wetlar		ıust
				be present, unless disturbed or pro		
6.		<del></del>		Definitions of Vegetation Strata:		•
7.		<del></del>		<u> </u>		
Hart Chratery (Distains	, 0	= Total Cove	er	Tree- Woody plants, excluding wood		/7 C
Herb Stratum (Plot size:	,			approximately 20 ft (6m) or more in h	-	(1.0
1. Panicum hemitomon	40	yes	OBL	cm) or larger in diameter at breast he	-	
2. Eleocharis spp.	30	yes	OBL	Sapling- Woody plants, excluding w		
Hydrocotyle spp.	10	no	OBL	approximately 20 ft (6m) or more in h	leight and less	tnan 3
Myriophyllum brasiliense	5	no	OBL	4 ` ′		
5. Bacopa monnieri	5	no	OBL	Shrub- Woody plants, excluding woo	•	
6. Cyperus spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in		
7. Setaria spp.	2	no	FAC	Herb- All herbaceous (non-woody)pl		
8. Euthamia spp.	2	no	FAC	herbaceous vines, regardless of size		
9. Saururus cernuus	2	no	OBL	plants, except woody vines, less thar m) in height.	i approximately	3 π (1
10. Ludwigia peruviana	2	no	OBL	1		
11. Lindernia sp.	2	no	OBL	Woody vine- All woody vines, regard	lless of height.	
12.				-		
	102	= Total Cove	er			
Woody Vine Stratum (Plot size:	)		= 4 0 1 4 1			
Mikania scandens	2	yes	FACW	4		
2.	· <del></del>					
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	<u>√</u> No	<del></del>
	2	= Total Cove	er	<u>L</u>		
Remarks: (If observed, list morph						
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity. Grazed.		

19	SOIL								Sampling Point:1
Color (moist)			to the de	pth needed to do			confirm the al	sence of indicators	s.)
Defect   D							. , , ,		
Section   Sect	(inches)	Color (moist)	<u></u>	Color (moist)	. <u> </u>	l ype'	Loc	Texture	Remarks
Section   Sect	0-6	10 YR 3/1							very dark gray fine sand
12-21   10 YR 7/2   10 YR 7/2   12-26   5 YR 3/3   10 YR 7/2   12-26   5 YR 3/3   10 YR 7/2   12-26   5 YR 3/3   10 YR 7/2   12-26   5 YR 3/3   10 YR 7/2   12-26					· —				: _ : _ :
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.									<u> </u>
Hydric Soil Indicators:  Histol (A1)  Histol Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR O)  Betted Below Surface (S9) (LRR S, T, U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F11) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F13) (LRR O, P, T, U)  Delta Orchric (F17) (MLRA 151)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Mucky Mineral (F1) (LRR O, P, T)  Marl (F10) (LRR U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Loamy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	21-26	5 YR 3/3	_						dark reddish brown loamy fine sand
Hydric Soil Indicators: Histol (A1) Histol (A2) Histol Epidon (A2) Histol Epidon (A2) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Siratified Layers (A5) Depleted Matrix (F2) Siratified Layers (A5) Depleted Matrix (F3) For Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Mucky Mineral (A7) (LRR P, T, U)  Indicators for Problematic Hydric Soils 3: Indicators for Problematic Hydric Soils 4: Indicators for Problematic Hydric Soils 4: Indicators for Problematic Hydric Soils 4: Indicators for Problematic Hydric Soils 4: Indicators for Problematic Hydric Soils 4: Indicators for Problematic Hydric Soils 4: Indicators for Problematic Hydric Soils 4: Indicators for Problematic Hydric Soils 4: Indicators for Problematic Hydric Soils 5: Indicators for Problematic Hydric Soils 5: Indicators for Problematic Hydric Soils 5: Indicators for Problematic Hydric Soils 5: Indicators for Problematic Hydric Soils 6: Indicators for Problematic Hydric Soils 6: Indicators for Problematic Hydric Soils 6: Indicators for Problematic Hydric Soils 6: Indicators for Problematic Hydric Soils 6: Indicators for Problematic Hydric Soils 6					·				
Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Histic Epidon (A2)  Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Peddox Dark Surface (F7) Muck Presence (A8) (LRR P, T, U) Peleted Dark Surface (F7)  Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (outside MLRA 150A, B) Peleted Matrix (F2) Peletmont Floodplain Soils (F19) (LRR P, S, T) Peletmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20) (MLRA 153B)  McR Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Peleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes ✓ No	¹Type: C=	Concentration, D=Depl	etion, RM	=Reduced Matrix,	CS=Cove	ered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
Histic Epidon (A2)  Black Histic (A3)  Black Histic (A3)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Reduced Vertic (F18) (outside MLRA 150A, B)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Delto Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mecky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Bedia Certific (F18) (MLRA 150B)  Delta Orchric (F19) (MLRA 150B)  Piedmont Floodplain Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Popleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Dark Surface (S7) (LRR O, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	Hydric So	oil Indicators:							Indicators for Problematic Hydric Soils 3:
Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Matrix (F3) Stratifide Layers (A5) Organic Bodies (A6) (LRR P, T, U) Sommution of Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S7) Detect Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depleth (Inches):  Loamy Mucky Mineral (F1) (LRR O) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR O, P, T) Piedmont Floodplain Soils (F19) (LRR O, P, T) Piedmont Floodplain Soils (F19) (LRR O, P, T) Piedmont Floodplain Soils (F19) (LRR O, P, T) Piedmont Floodplain Soils (F10) (LRR O, P, T) Piedmont Floodplain Soils (F10) (LRR O, P, T) Piedmont Floodplain Soils (F10) (LRR O, P, T) Piedmont Floodplain Soils (F10) (LRR O, P, T) Piedmont Floodplain Soils (F10) (LRR O, P, T) Piedmont Floodplain Soils (F10) (MLRA 149A, 153C, 153D) Port Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches):  No  Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F10) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C,									
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Andri (F10) (LRR U)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Iron-Manganese Masses (F12) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes _ No									
Stratified Layers (À5)  Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  Sem Mucky Mineral (A7) (LRR P, T, U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Dark Surface (F12) (LRR T, U)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jenicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No	_	, ,						)	
Organic Bodies (A6) (LRR P, T, U)  Sedox Dark Surface (F6)  Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S7)  Depleted Dark Surface (A19)  Redox Depressions (F8)  Depleted Dark Surface (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  John Coast Prairie Redox (A16) (MLRA 150A)  Delta Orchric (F13) (LRR P, T, U)  Mark (F13) (LRR P, T, U)  Mydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A)  Stripped Matrix (S4)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No									
			T 111						
✓ Muck Presence (A8) (LRR U)      Redox Depressions (F8)      Very Shallow Dark Surface (TF12) (LRR T, U)        1 cm Muck (A9) (LRR P,T)      Marl (F10) (LRR U)      Other (Explain in Remarks)        Depleted Below Dark Surface (A11)      Depleted Orchric (F11) (MLRA 151)        Thick Dark Surface (A12)      Iron-Manganese Masses (F12) (LRR O, P,T)      Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.        Sandy Mucky Mineral (S1) (LRR O, S)      Delta Orchric (F17) (MLRA 151)      problematic.        Sandy Gleyed Matrix (S4)      Reduced Vertic (F18) (MLRA 150A, 150B)        Sandy Redox (S5)      Piedmont Floodplain Soils (F19) (MLRA 149A)        Stripped Matrix (S6)      Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)        Dark Surface (S7) (LRR P, S, T, U)      Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		, , ,					. ,		
1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)Other (Explain in Remarks)				)					
Depleted Below Dark Surface (A11)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Coast Prairie Redox (A16) (MLRA 150A)  Umbric Surface (F13) (LRR P, T, U)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Delta Orchric (F17) (MLRA 150A, 150B)  Sendy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No			J)		_	•	. ,		
Thick Dark Surface (A12)	i—		- (0.44)			, ,, ,		<b>N</b>	Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)	_ ·		e (A11)					-	
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sitipped Matrix (S6) Stripped Matrix (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Yes ✓ No	1		MLRA 15	0A)		-			, , , , , , , , , , , , , , , , , , , ,
Sandy Gleyed Matrix (S4)					Delt	a Orchric (F17)	(MLRA 151)		
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	Sand	y Gleyed Matrix (S4)			Red	uced Vertic (F1	8) (MLRA 150A	, 150B)	
	Sand	y Redox (S5)			Pied	lmont Floodplai	n Soils (F19) (M	ILRA 149A)	
Restrictive Layer (If observed):    Type:   Depth (inches):   Hydric Soil Present? Yes ✓ No	Stripp	oed Matrix (S6)			Ano	malous Bright L	oamy Soils (F2	0) (MLRA 149A, 153	C, 153D)
Type:            Depth (inches):            Hydric Soil Present? Yes									
Depth (inches): Hydric Soil Present? Yes No	Restrictiv								
Remarks:								Hydric Soil Prese	ent? Yes <u>✓</u> No
	Remarks:								
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	i								

Project/Site: Levy Nuclear Plant - Transmission	Lines		City/County: Polk Sampling Date: 9/23/0			e: 9/23/09	
Applicant/Owner: Progress Energy Florida, Inc.			State: FL Sampling Point: 18			nt: 18	
Investigator(s): Mike Arrants, Erin Heinen			Section, Township, Range: 20 26S 23E				
Landform (hillslope, terrace, etc.):N/	Α		Local relief (concave, conv	ex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U			Long: <u>-82.0</u>	39775		Datum: WGS84	
Soil Map Unit Name: Wauchula fine sand				NWI classification	: _palustrine e	mergent	
Are climatic / hydrologic conditions on the site ty	pical for this time	e of year?	Yes <u></u> ✓	. No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology		significantly disturbed?	Are circumstances		Yes <u></u> √_No	
			naturally problematic?	(If needed, explain	any answers i	n Remarks)	
SUMMARY OF FINDINGS - Attach sit				ansects, impo	rtant featur	es, etc.	
Hydrophytic Vegetation Present?		lo		-			
Hydric Soil Present?	lo	is the Sampled Area w	ithin a Wetland?	Yes	No		
Wetland Hydrology Present?	Yes_ ✓ N	lo					
Remarks:					,		
				-			
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indicat	ors (minimum o	of two required)	
Primary Indicators (minimum of one is required;				Surface Soil Cracks (B6)			
Surface Water (A1)		ained Leaves (	39)		_	ve Surface (B8)	
High Water Table (A2)	Aquatic Fa	, ,		Drainage Pa			
Saturation (A3)	Marl Depo	osits (B15) (LR	R U)	Moss Trim Li			
Water Marks (B1)	Hydrogen	Sulfide Odor (	C1)	Dry-Season	Water Table (C	(2)	
Sediment Deposits (B2)	Oxidized F	Rhizospheres o	on Living Roots (C3)				
Drift Deposits (B3)	Presence	of Reduced Iro				Imagery (C9)	
Algal Mat or Crust (B4)			in Tilled Soils (C6)Geomorphic Position (D2)				
Iron Deposits (B5)	-	k Surface (C7)		Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Exp	plain in Remar	ks)	FAC Neutral	Test (D5)		
Field Observations:							
Surface Water Present?			Depth (inches): 0-12	1			
Water Table Present?			Depth (inches): 0	Wetland			
Saturation Present?	YesN	lo	Depth (inches): 0	Hydrology			
(includes capillary fringe)				Present?	Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monito	ring well, aerial p	ohotos, previou	is inspections), if available:				
Remarks:							
			,				

VEGETATION - Use scientific nar	nes of plants				Sampling Point:	18
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spe	ecies	(4)
2.				That Are OBL, FACW, or	FAC: 2	(A)
3.				Total Number of Dominar	nt _	
4.	· · · · · · · · · · · · · · · · · · ·			Species Across All Strata	<u>2</u>	(B)
5.				Percent of Dominant Spe	cies	
6.				That Are OBL, FACW, or		(A/B)
7.				Prevalance Index works		
	0	= Total Cove		Total % Cover of:	Multiply by	<i>r</i> :
Sapling Stratum (Plot size:)				OBL species	x1=	_
1.				FACW species	x2=	
2.				FAC species	x3=	
3.				FACU species	x4=	
4.				UPL species	x5=	<del></del>
5.				Column Totals:	(A)	— <sub>(B)</sub>
6.				-		(
7.				Prevalance index =	R/A =	
··		= Total Cove		Hydrophytic Vegetation		
Shrub Stratum (Plot size:	J	1014.001		✓ Dominance Test is		
1.	,			Prevalence Index		
2.					pphytic Vegetation <sup>1</sup> (E	Evolain\
3.				1 Toblematic Hydro	phytic vegetation (t	-Apiaiii)
4.				11		
5.				<sup>1</sup> Indicators of hydric soil a be present, unless distur		y must
6.				Definitions of Vegetation		
7.			-	Deminations of Vegetatio	ii otrata.	
1.		= Total Cove		Tree Meady plants avalu	ding woody vinos	
Herb Stratum (Plot size: )		- Total Cove	71	Tree- Woody plants, exclu approximately 20 ft (6m) or		in (7.6
Eleocharis spp.	60	V08	OBL	cm) or larger in diameter a		111. (7.0
Thalia geniculata	30	yes	OBL	4		
Euthamia spp.	2	yes	FAC	Sapling- Woody plants, ex approximately 20 ft (6m) or		ce than 3
Eumanna spp.     Eupatorium capillifolium	2	no	FACU	in. (7.6 cm) DBH.	more in neight and le	33 tilali 3
Setaria spp.	2	no	FAC	4	ludina woody vinos	
6. Sesbania spp.	2	no	FAC	Shrub- Woody plants, exc approximately 3 to 20 ft (1	•	
		no	OBL	<b>-</b>		
	2 2	no	NL	Herb- All herbaceous (non		
Elephantopus elatus     9.		no	INL	herbaceous vines, regardle plants, except woody vines		
10.				m) in height.	s, iess tilali appioxillia	iely 5 it (1
11.				4	on rogardland of boid	hŧ
	·			Woody vine- All woody vir	ies, regardiess of neig	HE.
12.	102	= Total Cave		4		
Manda Vina Chatana (District	102	= Total Cove	<b>:</b> F			
Woody Vine Stratum (Plot size:	)					
1.				4		
2.						
3.				<b>.</b>		
4.				Hydrophytic	V / **	
5.		_ T-1-! O-		Vegetation Present?	Yes <u>√</u> No	
Daniel de la la la la la la la la la la la la la	0	= Total Cove	er	<u> </u>		
Remarks: (If observed, list morph- Percent cover estimates based or			rnader co	mmunity Grazed		ė.

County/soil:	Polk-	Wauchula	

SOIL								Sampling Point:18
Profile De	scription: (Describe	to the dep	th needed to doc	ument the	e indicator or	confirm the ab	sence of indicators	1)
		to the dep	in necucu to acc			commin are ab	Series of indicators	··)
Depth	Matrix				Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc2	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-10	10 YR 5/1							
								gray fine sand
10-18	10 YR 6/1							gray fine sand
18-21	10 YR 2/2							very dark brown fine sand
		- —						
								<del></del>
		. ——						
Type: C=0	Concentration, D=Dep	letion RM	Reduced Matrix (	:S=Cover	ed or Coated S	and Grains	2 ocation: PI =Pc	re Lining, M=Matrix.
	il Indicators:	1000011, 11011	Troduced Water,	30 0010	od or obdica o	and Oramo.	EGGGGGTI. I E I G	Indicators for Problematic Hydric Soils 3:
Histol				Polyv	alue Below Sur	face (\$8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin (	Dark Surface (S	89) (LRR S, T, I	J)	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			l oam	v Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)							
					y Gleyed Matri:			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				ted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR F	², T, U)		Redo:	x Dark Surface	(F6)		(MLRA 153B)
5 000	Muchy Mineral (A7) //	DD D T I II		Denle	ted Dark Surfa	ce (F7)		Red Parent Material (TF2)
	Mucky Mineral (A7) (L							<del></del>
_✓_Muck	Presence (A8) (LRR	U)		Redo:	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1	Must (AO) /I DD D T)			Marl (	F10) (LRR U)			Other (Explain in Remarks)
—'``	Muck (A9) (LRR P,T)				. 10/ (EIXI O)			Other (Explain in Nemarks)
Deple	ted Below Dark Surfac	ce (A11)		Deple	ted Orchric (F1	11) (MLRA 151)	)	
		,						
— I FIICK	Dark Surface (A12)			IION-N	nanganese wa	sses (F12) (LRI	(O, P, I)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 150	Α)	Umbr	ic Surface (F13	3) (LRR P, T, U)	)	hydrology must be present, unless disturbed or
			•					
Sandy	Mucky Mineral (S1) (I	LRR O, S)		Delta	Orchric (F17) (	MLRA 151)		problematic.
Sandy	Gleyed Matrix (S4)			Redu	ced Vertic (F18	) (MLRA 150A,	150R)	
					•	, <b>.</b>		
	Redox (S5)					Soils (F19) (MI	,	
Stripp	ed Matrix (S6)			Anom	alous Bright Lo	amy Soils (F20	) (MLRA 149A, 153	C, 153D)
Dork 6	Curfoco (C7) (LDD D.)	C T III						
	Surface (S7) (LRR P,							
Restrictive	e Layer (If observed)	):					i	
	Туре:						İ	
	Depth (inches):						Hydric Soil Prese	nt? Yes ✓ No .
<del></del>	Deptit (inches).						Injune Son Frese	111 165 V NO ,
Remarks:								
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Project/Site: Levy Nuclear Plant - Transmiss	ion Lines	City/County: Polk Sampling Date: 9/23/09				
Applicant/Owner: Progress Energy Florida	Inc.	State: FL Sampling Point: 19				
Investigator(s): Mike Arrants, Erin Heir	en	Section, Township, Range: 20 26S 23E				
Landform (hillslope, terrace, etc.):	N/A	Local relief (concave, cor	vex, none): none Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: 28.20022	22 Long: <u>-82.</u>	039519 Datum: WGS84			
Soil Map Unit Name: Wauchula fine sand			NWI classification: <u>palustrine emergent</u>			
Are climatic / hydrologic conditions on the si	te typical for this time of year?	Yes	_ No (If no, explain in Remarks)			
Are Vegetation, Soil	or Hydrology		Are circumstances normal? Yes ✓ No			
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain any answers in Remarks)			
<b>SUMMARY OF FINDINGS - Attach</b>	site map showing samp	ling point locations, t	ransects, important features, etc.			
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland? YesNo			
Wetland Hydrology Present?	Yes No					
HADDOLOGA						
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is requi	rad: chack all that apply)		Surface Soil Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves	: (R9)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)	, (53)	Drainage Patterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (L	RR III	Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odo	•	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizosphere		Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced		Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction	, ,	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	, ,	Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery		<del></del> · · · · ·				
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-18				
	•					
Water Table Present?	162 NO	Deput (menes)	<u>.</u>			
Water Table Present? Saturation Present?	Yes✓ No Yes✓ No		Wetland			
	Yes✓ No		Wetland Hydrology Present? Yes <u>√</u> No			

	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	<u>2</u>	(A)
2.				That Are OBL, FACW, or FAC:	<del></del>	` '
3.				Total Number of Dominant	<u>2</u>	(B)
4.				Species Across All Strata:	=	(-)
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	100.00	(,,,,
7.				Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)				OBL species>	x1=	_
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	-
4.				UPL species	x5=	-
5.					(A)	(B)
6.				<del></del> `	` ' <u></u>	- ` ′
7.	-			Prevalance Index = B/A =	•	
		= Total Cove	<u></u>	Hydrophytic Vegetation Indicat	tors:	
Shrub Stratum (Plot size:	-		•	✓ Dominance Test is 50%		
1.	-/			Prevalence Index is ≤3.0¹		
2.				Problematic Hydrophytic \		lain)
3.		<del></del>		1 Toblematic Trydrophytic V	vegetation (Exp	iaii i
4.	. —			Indicators of hydric soil and wat	land hudralagu m	
5.				<sup>1</sup> Indicators of hydric soil and wetl be present, unless disturbed or p		iust
6.				Definitions of Vegetation Strata		
7.				Definitions of Vegetation Strate	a.	
1.				<u> </u>		
Harb Ctratum (Diet sine)		= Total Cove	ſ	Tree- Woody plants, excluding woo		(7.0
Herb Stratum (Plot size:			0.01	approximately 20 ft (6m) or more in cm) or larger in diameter at breast		(7.6
Eleocharis spp.	50	yes	OBL	•		
Pontederia cordata	20	yes	OBL	Sapling- Woody plants, excluding		
3. Thalia geniculata	5	no	OBL	approximately 20 ft (6m) or more in	n neight and less t	inan 3
4. Elephantopus elatus	2	no	NL	in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding w		
6.				approximately 3 to 20 ft (1 to 6 m) i	in neignt.	
7.				Herb- All herbaceous (non-woody)		
8.				herbaceous vines, regardless of siz		
9.				plants, except woody vines, less the	an approximately	3 ft (1
10.				m) in height.	•	
11.				Woody vine- All woody vines, rega	ardless of height.	
12.				]		
	77	= Total Cove	r			
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	√ No	
	0	= Total Cove	:r			
Remarks: (If observed, list morpho	ological adapta					
Percent cover estimates based or	-		roader cor	mmunity.		
		<b>,</b>				

SOIL					<del></del>				Sampl	ing Point: 19
	escription: (Describe t	o the dep	th needed to doc			confirm the abs	ence of indicators.)			
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Kedox %	Features Type <sup>1</sup>	Loc²	Texture		Remarks	
(HICHES)	Color (moist)		Color (moist)		Турс		Texture	-	Kemarks	
0-7	10 YR 2/1							black fine sand		
7-10	10 YR 5/1							gray fine sand		
10-18	10 YR 6/1							gray fine sand		
18-21	10 YR 2/2							very dark brown	n fine sand	
,								-		
	Concentration, D=Depl	etion, RM=	=Reduced Matrix, (	CS=Cove	ered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore	<u> </u>		1
	oil Indicators:			Б.1		-f (00) (I DD (			oblematic Hydric	Soils":
Histol						rface (S8) (LRR		1 cm Muck (a 2 cm Muck (A		
	: Epidon (A2) : Histic (A3)					S9) (LRR S, T, U ral (F1) (LRR O)	_			MLRA 150A, B)
	ogen Sulfide (A4)				my Gleyed Matr		-		odplain Soils (F19	
	fied Layers (A5)				leted Matrix (F3		-		right Loamy Soils	
	nic Bodies (A6) (LRR P	. T. U)			ox Dark Surfac		-	(MLRA 1538		(120)
	Mucky Mineral (A7) (LF			— Den	leted Dark Surf	ace (F7)		Red Parent M	•	
	Presence (A8) (LRR I				lox Depressions		-		Dark Surface (TF	(12) (I DD T II)
		,,			•		-		•	12) (ERR 1, 0)
1 cm	Muck (A9) (LRR P,T)				l (F10) (LRR U)		-	Other (Explain	in Remarks)	
Deple	eted Below Dark Surfac	e (A11)		Dep	leted Orchric (F	11) (MLRA 151)				
Thick	Dark Surface (A12)			Iron-	-Manganese Ma	asses (F12) (LRR	O, P,T) 3	Indicators of hydr	ophytic vegetation	n and wetland
Coas	t Prairie Redox (A16) (	MLRA 150	(A)	Umb	bric Surface (F1	3) (LRR P, T, U)			present, unless	
	y Mucky Mineral (S1) (L			Delt	a Orchric (F17)	(MLRA 151)		roblematic.	<b>,</b>	
	y Gleyed Matrix (S4)	-RR O, 3)				8) (MLRA 150A,	150B)			
	y Redox (S5)					n Soils (F19) (ML				
	ped Matrix (S6)				•		(MLRA 149A, 153C,	153D)		
	Surface (S7) (LRR P, S					, ()	(	,		
	ve Layer (If observed):						<del> </del>			
Nesti ictiv	Type:	•								
	Depth (inches):						Hydric Soil Present	? Yes	✓ No	_
Remarks:					• •		in yang com recome			<del></del> '

Project/Site: Levy Nuclear Plant - Transm	ssion Lines	City/County: Polk	Sampling Date: 9/24/09			
Applicant/Owner: Progress Energy Florid	la, Inc.	State:FL	Sampling Point: 20A/20B			
Investigator(s): Mike Arrants, Erin He	einen	Section, Township, Range: 29 26S 23E				
Landform (hillslope, terrace, etc.):	N/A	Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR	U Lat: <u>28.19979</u>	3Long: <u>-82.0</u>	039637 Datum: <u>WGS84</u>			
Soil Map Unit Name: Bradenton fine san	d		NWI classification: palustrine emergent			
Are climatic / hydrologic conditions on the	site typical for this time of year?	Yes <u>√</u>	_ No (If no, explain in Remarks)			
Are Vegetation, Soil	, or Hydrology	_significantly disturbed?	Are circumstances normal? Yes_ ✓ No			
Are Vegetation, Soil	, or Hydrology	_ naturally problematic?	(If needed, explain any answers in Remarks)			
<b>SUMMARY OF FINDINGS - Attac</b>	h site map showing sampl	ling point locations, t	ransects, important features, etc.			
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland? Yes✓No			
Wetland Hydrology Present?	Yes No					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is reg	uired: check all that apply)		Surface Soil Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (L	RR U)	Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced	÷ , ,	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction	• ′	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7	, ,	Shallow Aquitard (D3)			
<u> </u>	y (B7)Other (Explain in Rema	•	FAC Neutral Test (D5)			
Field Observations:	, , ,	<u> </u>				
Surface Water Present?	Yes✓ No	Depth (inches): 12-36				
Water Table Present?	Yes ✓ No		]			
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)			Hydrology Present? Yes ✓ No			
Describe Recorded Data (stream gauge,	nonitoring well, aerial photos, previo	ous inspections), if available				
Tarana araa araa (araa araa garaga)	g, marrier pricates ( preside	, , , , , , , , , , , , , , , , , , ,				
Remarks:						
•						
		,				

<b>VEGETATION</b> - Use scientific nan	nes of plants			Sampling Point:	20A/20B
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size: )	Cover	Species?	Status		
1.		•		Number of Dominant Species	_
2.				That Are OBL, FACW, or FAC:	<u>6</u> (A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	<u>7</u> (B)
5.				<b>†</b> '	
6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>85.71</u> (A/B)
7.				Prevalance Index worksheet:	
		= Total Cove			ıltiply by:
Sapling Stratum (Plot size:)	0	- Total Cove	51	OBL species x1=	ILIDIY DY.
Taxodium distichum	2	yes	OBL	FACW species x2=	<del></del>
Acer rubrum	2	yes	OBL	FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	<del></del>
5.				<del></del>	
				Column Totals:(A)	(B)
6.		· · · · · · · · · · · · · · · · · · ·		Bravelouse Index - B/A -	
7.	4	- Total Caus		Prevalance Index = B/A =	<u>-</u>
Charle Ctuature (Diet sine)	•	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:)				Dominance Test is 50%	
1.				Prevalence Index is ≤3.0¹	. 1
2.				Problematic Hydrophytic Vegeta	ition' (Explain)
3.				<u>.</u>	
4.				Indicators of hydric soil and wetland hy	
5.				be present, unless disturbed or problem	natic.
6.				Definitions of Vegetation Strata:	
7.					
	0	= Total Cove	er	Tree- Woody plants, excluding woody vin	es,
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in heigh	·
Thalia geniculata	30	yes	OBL	cm) or larger in diameter at breast height	(DBH).
2. Eleocharis spp.	20	yes	OBL	Sapling- Woody plants, excluding woody	vines,
Pontederia cordata	20	yes	OBL	approximately 20 ft (6m) or more in heigh	t and less than 3
4. Urochloa mutica	20	yes	NL	in. (7.6 cm) DBH.	
5. Rhexia spp.	2	no	FACW	Shrub- Woody plants, excluding woody v	ines,
6. Elephantopus elatus	2	no	NL	approximately 3 to 20 ft (1 to 6 m) in heig	ht.
7. Phyla nodiflora	2	no	FACW	Herb- All herbaceous (non-woody)plants,	includina
8. Imperata cylindrica	2	no	NL	herbaceous vines, regardless of size. Inc	
9. Phyllanthus urinaria		no	FAC	plants, except woody vines, less than app	•
10. Hyptis alata	2	no	OBL	m) in height.	
11. Saururus cernuus	2	no	OBL	Woody vine- All woody vines, regardless	of height.
12. Ludwigia peruviana		no	OBL		J
	106	= Total Cove		1	
Woody Vine Stratum (Plot size:	)				
1. Smilax spp.	/ 	yes	FAC		
Ipomoea sp.	$\frac{2}{2}$		FACU	1	
3.		yes	1700		
4.				1.6.4	
			<del></del>	Hydrophytic	No
5.				Vegetation Present? Yes <u>√</u>	No
	4	= Total Cove	er		
Remarks: (If observed, list morpho	-				
Percent cover estimates based on	meandering s	survey of the b	proader cor	mmunity.	

County/soil:	Polk-	Bradenton

	needed to document the indicator or co	infirm the absence of indicators	i.)
pth Matrix	Redox Features		
ches) Color (moist) %	Color (moist) % Type¹	Loc <sup>2</sup> Texture	Remarks
10 YR 2/1			black fine sand
10 YR 4/2			dark grayish brown fine sand
16 10 YR 4/1			dark gray sandy loam
22 10 YR 5/1			gray sandy clay loam
pe: C=Concentration, D=Depletion, RM=R	Reduced Matrix, CS=Covered or Coated San	nd Grains. <sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
dric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
_Histol (A1)	Polyvalue Below Surface	ce (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)	Thin Dark Surface (S9)	) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (	(F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	•	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F	<sup>-</sup> 6)	(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface	e (F7)	Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)	Redox Depressions (F8	8)	Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
_Depleted Below Dark Surface (A11)	Depleted Orchric (F11)	) (MLRA 151)	
_Thick Dark Surface (A12)	Iron-Manganese Masse	es (F12) (LRR O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	)Umbric Surface (F13) (	(LRR P, T, U)	hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (M	LRA 151)	problematic.
_Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (	MLRA 150A, 150B)	
_Sandy Redox (S5)		oils (F19) (MLRA 149A)	
Stripped Matrix (S6)		my Soils (F20) (MLRA 149A, 153	C, 153D)
_Dark Surface (S7) (LRR P, S, T, U)			
strictive Layer (If observed):			
Type:			
Depth (inches):	<u> </u>	Hydric Soil Prese	nt? Yes <u></u> ✓ No
			and the control of th
marks:			
marks:			
marks:			
такs:			
marks:			
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manks:			

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		_ Sampling Date: 9/24/09	
Applicant/Owner: Progress Energy Florida, Inc.	State: FL	Sampling Point:_	21A/21B		
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 29 26S 23E			
Landform (hillslope, terrace, etc.):N/.	Α	Local relief (concave, conv	vex, none): none	Slo	pe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.198561	Long:82.0	39682	Da	tum; WGS84
Soil Map Unit Name: _Eaton mucky fine sand, d	epressional		_NWI classification:	palustrine eme	gent
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		sNo
	or Hydrology		(If needed, explain	any answers in R	emarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, tr	ansects, impoi	rtant features,	etc.
Hydrophytic Vegetation Present?	YesNo		_		
Hydric Soil Present?	is the Sampled Area w	ithin a Wetland?	YesNo		
Wetland Hydrology Present?	]				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of to	vo required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	Γrim Lines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	rows (C8)	
Drift Deposits (B3)	Presence of Reduced Ir	ron (C4)	Saturation Vi	isible on Aerial Ima	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqui	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-36	_		
Water Table Present?	Yes No	Depth (inches): 0			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previou	us inspections), if available:			
Remarks:					

VEGETATION - Use scientific na	ames of plants			Sampling Point:	21	A/21B
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species	-	(4)
2.				That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.				Total Number of Dominant	-	(5)
4.				Species Across All Strata:	<u>5</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cov	 er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)	•			OBL species x1=		
Taxodium distichum	2	yes	OBL	FACW speciesx2=_		_
Acer rubrum	2	yes	OBL	FAC speciesx3=_		_
3.				FACU speciesx4=		
4.				UPL species x5=		_
5.				Column Totals: (A)		(B)
6.				1		_
7.				Prevalance Index = B/A =		
		= Total Cov	er	Hydrophytic Vegetation Indicators	:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Vege	etation <sup>1</sup> (Exp	olain)
3.	-					·
4.				<sup>1</sup> Indicators of hydric soil and wetland	l hvdrology m	nust
5.				be present, unless disturbed or prob		
6.				Definitions of Vegetation Strata:		
7.				1		
	0	= Total Cov	er	Tree- Woody plants, excluding woody		
Herb Stratum (Plot size:	_)			approximately 20 ft (6m) or more in hei		(7.6
Hyptis alata	20	yes	OBL	cm) or larger in diameter at breast heig	jht (DBH).	
Imperata cylindrica	20	yes	NL	Sapling- Woody plants, excluding woo	ody vines,	
3. Eleocharis spp.	15	yes	OBL	approximately 20 ft (6m) or more in hei	ight and less	than 3
4. Cyperus spp.	10	no	FACW	in. (7.6 cm) DBH.		
5. Pontederia cordata	10	no	OBL	Shrub- Woody plants, excluding wood	y vines,	
6. Zizaniopsis miliacea	10	no	OBL	approximately 3 to 20 ft (1 to 6 m) in he	∍ight. 、	
7. Thalia geniculata	5	no	OBL	Herb- All herbaceous (non-woody)plan	its, including	
8. Myriophyllum brasiliense	5	no	OBL	herbaceous vines, regardless of size.	Includes woo	dy
9. Bacopa spp.	2	no	OBL	plants, except woody vines, less than a	approximately	/ 3 ft (1
10. Elephantopus elatus	2	no	NL	m) in height.		
11. Ludwigia peruviana	2	no	OBL	Woody vine- All woody vines, regardle	ess of height.	
12. Saururus cernuus	2	no	OBL	]		
	103	= Total Cov	er	1		
Woody Vine Stratum (Plot size:	)					
Ampelopsis arborea		yes	FAC			
2.				1		
3.	<del></del>					
4.				Hydrophytic		
5.				Vegetation Present? Yes✓	No	
		= Total Cov	er	1 5		
Remarks: (If observed, list morph			<del> </del>			
Percent cover estimates based of	- '		oroader cor	mmunity.		

e Description: (Describe to the Matrix	aupai nouded to de	Redox Features					
s) Color (moist) %	Color (moist)	% Type¹	Loc²	Texture	Remarks		
10 YR 2/1					black mucky fine sand		
10 YR 7/1					light gray fine sand		
N 5/0					gray sandy clay loam		
N 5/0	_				gray sandy clay		
			<del></del> -				
: C=Concentration, D=Depletion, c Soil Indicators:	RM=Reduced Matrix,	CS=Covered or Coated	Sand Grains. <sup>2</sup> Lo	ocation: PL=Pore	Lining, M=Matrix. Idicators for Problematic Hydric Soils 3:		
istol (A1)		Dohavaluo Bolow C	urface (S8) (LRR S, T,		1 cm Muck (a9) (LRR O)		
listic Epidon (A2)				· _	1 cm Muck (a5) (ERR 0) 2 cm Muck (A10) (ERR S)		
lack Histic (A3)		Loamy Mucky Min	(S9) (LRR S, T, U)	_	2 cm Muck (A10) (ERR 5) Reduced Vertic (F18) (outside MLRA 150A, B		
lack Histic (A3) lydrogen Sulfide (A4)		Loamy Gleved Ma		_	Piedmont Floodplain Soils (F19) (LRR P, S, T)		
tratified Layers (A5)		Depleted Matrix (F		_	_ , ,, ,, ,,		
rratified Layers (A5) Prganic Bodies (A6) (LRR P, T, U	١	Redox Dark Surfa		_	Anomalous Bright Loamy Soils (F20)		
		· <del></del>			(MLRA 153B)		
cm Mucky Mineral (A7) (LRR P,	Γ,U)	Depleted Dark Su		_	Red Parent Material (TF2)		
fluck Presence (A8) (LRR U)		Redox Depression	ıs (F8)	_	Very Shailow Dark Surface (TF12) (LRR T, U)		
cm Muck (A9) (LRR P,T)		Marl (F10) (LRR L	J)	_	Other (Explain in Remarks)		
epleted Below Dark Surface (A11	n.	Depleted Orchric (	F11) (MLRA 151)				
hick Dark Surface (A12)	,,		lasses (F12) (LRR O, I	РΤ\ .			
	4504)				<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
oast Prairie Redox (A16) (MLRA	150A)	Umbric Surface (F13) (LRR P, T, U)			hydrology must be present, unless disturbed or		
andy Mucky Mineral (S1) (LRR O	), S)	Delta Orchric (F17	) (MLRA 151)	p	roblematic.		
andy Gleyed Matrix (S4)		Reduced Vertic (F	18) (MLRA 150A, 150E	3)			
andy Redox (S5)		Piedmont Floodpla	ain Soils (F19) (MLRA 1	149A)			
tripped Matrix (S6)		Anomalous Bright	Loamy Soils (F20) (ML	RA 149A, 153C,	153D)		
ark Surface (S7) (LRR P, S, T, U	n						
ictive Layer (If observed):	·						
Type:							
Depth (inches):			Hvd	Iric Soil Present	? Yes ✓ No .		
rks:			, ,	•			

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date: 9/24/09	
Applicant/Owner: Progress Energy Florida, Inc.	<b>3</b>	State:FL		Sampling Point: 22A/22B	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range: 29 26S 23E			
Landform (hillslope, terrace, etc.):N	/A	Local relief (concave, con	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: _28.19491	1 Long: -82.0	39720	Datum: WGS84	
Soil Map Unit Name: Wauchula fine sand		•		palustrine emergent	
Are climatic / hydrologic conditions on the site t	vpical for this time of year?	Yes✓		(If no, explain in Remarks)	
, ,	or Hydrology		Are circumstances		
	or Hydrology			any answers in Remarks)	
SUMMARY OF FINDINGS - Attach s			•	•	
Hydrophytic Vegetation Present?	Yes No		anocoto, impo	anti routaroo, oto.	
Hydric Soil Present?	Yes✓No	Is the Sampled Area w	ithin a Wetland?	Yes No	
Wetland Hydrology Present?	Yes_ ✓ No	1			
Remarks:	700 <u> </u>	-			
The state of the s					
		•			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)	
Primary Indicators (minimum of one is required	; check all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Veg	getated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced I		*	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction	• •	Geomorphic	• • • •	
<del></del>		• •	Shallow Aqui		
Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7		FAC Neutral	·	
	)Other (Explain in Rema	iks)	FAC IVEUIIAI	Test (D3)	
Field Observations:	Von / No	Double (inches): 0.04			
Surface Water Present?	Yes✓ No	<del>-</del> '	1		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	YesNo	
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previo	us inspections), if available			
Remarks:					
	•				
L					

VEGETATION - Use scientific na	mes of plants			Sampling Point: _	2:	2A/22B
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.		·		Number of Dominant Species That Are OBL, FACW, or FAC:	<u>6</u>	(A)
3.				Total Number of Dominant		
4.		<del></del>		Species Across All Strata:	<u>6</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:	<b></b>	
• •		= Total Cove			fultiply by:	
Sapling Stratum (Plot size:)	ŭ	rotal bove	•	OBL species x1=	ididpiy by.	
1.				FACW species x2=		<u> </u>
2.				FAC species x3=		_
3.				FACU species x4=		
4.				UPL species x5=		
5.		·		Column Totals: (A)		— <sub>(B)</sub>
6.				——(A)—		—(B)
7.	-			Prevalance Index = B/A =		
1.		= Total Cove		Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	-	- Total Cove	1	✓ Dominance Test is 50%		
•	<del>-</del> ,	1100	EAC			
Baccharis sp.     Canhalanthus assidentalis	2	yes	FAC	Prevalence Index is ≤3.01	tation 1 /Fv	احتجاجا
Cephalanthus occidentalis		yes	OBL	Problematic Hydrophytic Vege	tation (Ex	piain)
3.				1,		
4.			-	<sup>1</sup> Indicators of hydric soil and wetland		must
5. 6.				be present, unless disturbed or proble Definitions of Vegetation Strata:	ematic.	
				Definitions of Vegetation Strata:		
7.		- T-4-1 O		<u> </u>		
Horb Stratum (Blot aire)	4	= Total Cove	r	Tree- Woody plants, excluding woody v		/7.C
Herb Stratum (Plot size:	_)		0.01	approximately 20 ft (6m) or more in heig cm) or larger in diameter at breast heigh		0.1) .
1. Hyptis alata		yes	OBL	4		
Eleocharis spp.		yes	OBL	Sapling- Woody plants, excluding wood	•	
3. Panicum hemitomon	15	yes	OBL	approximately 20 ft (6m) or more in heigh	int and less	than 3
Sagittaria graminea	10	no	OBL	in. (7.6 cm) DBH.		
5. Juncus spp.	10	no	OBL	Shrub- Woody plants, excluding woody		
6. Cyperus spp.		no	FACW	approximately 3 to 20 ft (1 to 6 m) in he	_	
7. Panicum repens	_ 10	no	FACW	Herb- All herbaceous (non-woody)plant		
8. Setaria spp.	2	no	FAC	herbaceous vines, regardless of size. In		•
9. Rhexia spp.	2	no	FACW	plants, except woody vines, less than applying height.	oproximatei	y o it (i
10. Scleria spp.	2	no	FACW	4 <i>′</i>		
11. Rhyncospora spp.	2	no	FACW	Woody vine- All woody vines, regardles	ss of neight	.*
12. Polygonum punctatum	2	no	FACW	4		
	105	= Total Cove	r			
Woody Vine Stratum (Plot size:_	)					
Mikania scandens	2	yes	FACW	1		
2.						
3.				1		
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	<del></del>
	2	= Total Cove	r			
Remarks: (If observed, list morph	•					
Percent cover estimates based o	n meandering s	survey of the b	roader cor	mmunity.		

	scription: (Describe	to the dep	th needed to doc			confirm the ab	sence of indicato	rs.)
Depth inches)	Matrix Color (moist)	%	Color (moist)	Redox I	Features Type <sup>1</sup>	Loc²	Texture	Remarks
nches)	Color (moist)		Color (moist)		туре		rexitie	Remarks
-7	10 YR 2/1							black fine sand
-10	10 YR 5/1				<del></del>			gray fine sand
0-18	10 YR 6/1				<del> </del>			gray fine sand
8-21	10 YR 2/2							very dark brown fine sand
Type: C=	Concentration, D=Dept	etion, RM=	Reduced Matrix, C	S=Covere	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=F	Pore Lining, M=Matrix.
ydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	(A1)		٠.	Polyva	alue Below Sur	face (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
	Epidon (A2)		-	Thin E	Oark Surface (S	59) <b>(LRR S, T,</b> l	J)	2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B
	gen Sulfide (A4)				y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		-		ted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P				Dark Surface	` '		(MLRA 153B)
	Mucky Mineral (A7) (LI		-		ted Dark Surfa	` '		Red Parent Material (TF2)
✓ Muck	Presence (A8) (LRR I	J)		Redox	Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl (	F10) (LRR U)			Other (Explain in Remarks)
Depte	ted Below Dark Surfac	e (A11)		Deple	ted Orchric (F	11) (MLRA 151)		
Thick	Dark Surface (A12)			Iron-N	langanese Ma	sses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	MLRA 150	A) .	Umbri	ic Surface (F13	3) (LRR P, T, U)	)	hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (I	RR O, S)	_	Delta	Orchric (F17) (	(MLRA 151)		problematic.
Sandy	Gleyed Matrix (S4)			Reduc	ced Vertic (F18	B) (MLRA 150A,	150B)	
	Redox (S5)			Piedm	nont Floodplain	Soils (F19) (ML	RA 149A)	
Stripp	ed Matrix (S6)		-	Anom	alous Bright Lo	oamy Soils (F20	) (MLRA 149A, 15	3C, 153D)
Dark	Surface (S7) (LRR P, S	S, T, U)						
Restrictiv	e Layer (If observed):							
	Туре:							
	Depth (inches):						Hydric Soil Pres	ent? Yes <u> </u>

Project/Site: Levy Nuclear Plant - Transmission	City/County: Polk Sampling Date:			9/24/09		
Applicant/Owner: Progress Energy Florida, Inc.	State: FL Sampling Point: 23A/23B			23A/23B		
Investigator(s): Mike Arrants, Erin Heinen	Section, Township, Range: 29 26S 23E					
Landform (hillslope, terrace, etc.):N/	/A	Local relief (concave, con	vex, none): <u>none</u>	Slo	pe (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.19386/	2 Long: <u>-82.0</u>	39645	Dat	tum: <u>WGS84</u>	
Soil Map Unit Name: Wauchula fine sand			NWI classification	n: <u>palustrine emer</u>	gent	
Are climatic / hydrologic conditions on the site ty	ypical for this time of year?	Yes✓	_ No	 _ (If no, explain in F	Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		sNo	
	or Hydrology		(If needed, explair	n any answers in R	emarks)	
SUMMARY OF FINDINGS - Attach si			•	-	•	
Hydrophytic Vegetation Present?	Yes_ ✓ No	]				
Hydric Soil Present?	Is the Sampled Area within a Wetland? YesNoNo					
Wetland Hydrology Present?	Yes✓ No					
Remarks:		1	**************************************			
					!	
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of tw	vo required)	
Primary Indicators (minimum of one is required;	check all that apply)	Surface Soil Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves	<del></del>				
High Water Table (A2)	Aquatic Fauna (B13)	()	Drainage Pa	-		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RI AA	<del></del>			
		-	Dry-Season Water Table (C2)			
<u> </u>	Water Marks (B1)Hydrogen Sulfide Odor (					
Sediment Deposits (B2)	on Living Roots (C3)	Crayfish Bur		. (00)		
Drift Deposits (B3)	Presence of Reduced In		· <del></del>	isible on Aerial Ima	igery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i		· · · · · · · · · · · · · · · · · · ·			
fron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	, ,		
✓ Inundation Visible on Aerial Imagery (B7)	)Other (Explain in Rema	ırks)	FAC Neutral	l Test (D5)		
Field Observations:						
Surface Water Present?	Yes No		4			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	Yes <u></u>		
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previo	ous inspections), if available	:			
Remarks:						
· ·						
	•					

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	23A/23B
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.	COVCI	opcoics:	Olalas	Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	<u>8</u> (A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	<u>9</u> (B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	<u>88.89</u> (A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove			ply by:
Sapling Stratum (Plot size:)	· ·	. 0.0.	-	OBL species x1=	<u>~.,.~,.</u>
1.				FACW species x2=	
2.			-	FAC species x3=	
3.				FACU species x4=	
4.			-	UPL species x5=	-
5.				Column Totals: (A)	(B)
6.				(,,,	
7.				Prevalance Index = B/A =	
		= Total Cove	 er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1. Baccharis sp.	2	ves	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
2.	·			Problematic Hydrophytic Vegetation	on <sup>1</sup> (Explain)
3.				, , , , ,	( ( ,
4.			-	<sup>1</sup> Indicators of hydric soil and wetland hyd	rology must
5.			•	be present, unless disturbed or problema	
6.				Definitions of Vegetation Strata:	
7.				1	
	2	= Total Cove	er	Tree- Woody plants, excluding woody vines	3,
Herb Stratum (Plot size:	)			approximately 20 ft (6m) or more in height a	
1. Hyptis alata	30	yes	OBL	cm) or larger in diameter at breast height (D	)BH).
2. Bacopa spp.	15	yes	OBL	Sapling- Woody plants, excluding woody vi	ines,
3. Juncus spp.	10	yes	OBL	approximately 20 ft (6m) or more in height a	and less than 3
4. Eleocharis spp.	10	yes	OBL	in. (7.6 cm) DBH.	
<ol><li>Cyperus spp.</li></ol>	10	yes	FACW	Shrub- Woody plants, excluding woody vine	es,
6. Setaria spp.	5	no	FAC	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Panicum hemitomon	5	no	OBL	Herb- All herbaceous (non-woody)plants, in	cluding
8. Ludwigia spp.	2	no	OBL	herbaceous vines, regardless of size. Inclu	des woody
9. Sesbania spp.	2	no	FAC	plants, except woody vines, less than appro	ximately 3 ft (1
10. Myriophyllum brasiliense	2	no	OBL	m) in height.	
11. Saururus cernuus	2	no	OBL	Woody vine- All woody vines, regardless of	f height.
12. Sagittaria lancifolia	2	no	OBL	]	
	95	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
Mikania scandens	2	yes	FACW		
2. Ipomoea sp.	2	yes	FACU		
3. Ampelopsis arborea	2	yes	FAC		
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u>	_No
	6	= Total Cove	er		
Remarks: (If observed, list morph	-			na ma umiku	

-	: Polk- Wauchula							0		
SOIL								Sampling Point: 23A/23		
	scription: (Describe	to the dep	oth needed to doc			confirm the abso	ence of indicators.)			
epth	Matrix			Redox F						
inches)	Color (moist)	%	Color (moist)	<u> </u>	Type <sup>1</sup>	Locz	Texture	Remarks		
-	40 VD 0/4							Nach fine and		
⊦7 '-10	10 YR 2/1 10 YR 5/1							black fine sand gray fine sand		
0-18	10 YR 6/1							gray fine sand		
							<del>.</del>	<u> </u>		
18-21	10 YR 2/2							very dark brown fine sand		
				=						
	Concentration, D=Depl	etion, RM:	=Reduced Matrix, (	CS=Covere	d or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	<u> </u>		
	il Indicators:							ndicators for Problematic Hydric Soils 3:		
Histol	. ,					face (S8) (LRR S		1 cm Muck (a9) (LRR O)		
	Epidon (A2)				•	9) (LRR S, T, U)	) _	2 cm Muck (A10) (LRR S)		
Black	Histic (A3)			Loamy	Mucky Minera	al (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)		
Hydro	gen Sulfide (A4)			Loamy	Gleyed Matrix	(F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)		
Stratif	ed Layers (A5)			Deplet	ed Matrix (F3)			Anomalous Bright Loamy Soils (F20)		
Organ	ic Bodies (A6) (LRR F	P, T, U)		Redox	Dark Surface	(F6)	-	(MLRA 153B)		
5 cm l	Mucky Mineral (A7) (Li	RRPTIN		Deplet	ed Dark Surfa	ce (F7)		Red Parent Material (TF2)		
	Presence (A8) (LRR I				Depressions	,	_	Very Shallow Dark Surface (TF12) (LRR T, U)		
	Muck (A9) (LRR P,T)	٠,			10) (LRR U)	(, -)	-	Other (Explain in Remarks)		
		- (844)		`		1) (MLRA 151)	-			
	ed Below Dark Surfac	e (A11)			•					
Thick	Dark Surface (A12)				-	sses (F12) (LRR	O, P,T) 3	ndicators of hydrophytic vegetation and wetland		
Coast	Prairie Redox (A16) (	MLRA 150	A)					hydrology must be present, unless disturbed or		
Sandy	Mucky Mineral (S1) (I	RR O SI		Delta (	Orchric (F17) (	MLRA 151)	F	problematic.		
	Gleved Matrix (S4)	0, 0,			, ,,	) (MLRA 150A, 1	150R)			
	Redox (S5)					Soils (F19) (MLF				
	ed Matrix (S6)						(MLRA 149A, 153C,	153D\		
	, ,				ilous Brigat Ed	iailly Solis (F20)	(WILION 143A, 133C,	1330/		
	Surface (S7) (LRR P,									
	e Layer (If observed)	:								
	Туре:									
Remarks:	Depth (inches):						Hydric Soil Present	1? Yes <u>√</u> No,		
								·		

Mike Arrants, Erin Heinen   Section, Township, Range: 29 26S 23E	Project/Site: Levy Nuclear Plant - Transmission Lines			City/County: Polk		Sampling Date:_	9/24/09	
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): Subregion (LRR or MLRA) LRR U Lat _28.192067	Applicant/Owner: Progress Energy Florida, Inc.			State: FL Sampling Point: 24			24	
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): Subregion (LRR or MLRA) LRR U Lat _28.192067	Investigator(s): Mike Arrants, Erin Heinen		Section	Section, Township, Range: 29 26S 23E				
Subregion (LRR or MLRA): LRR U Lat: 28.192067 Long: -82.039586 No Datum:WGS84 Sol Map Unit Name:Water	Landform (hillslope, terrace, etc.):N//	4				Slo	pe (%):	
Soil Map Unit Name:Water			28.192067	Long: -82.0	39586	Da	tum: WGS84	
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soll or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soll or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present? Yes No Hydrology Present? Yes No Wetland Hydrology Present? Yes No Hydrology Indicators:  No Hydrology Indicators:  Wetland Hydrology Indicators:  Premark Indicators (minimum of non is required, check all that apply)  Surface Water (A1)						lacustrine limne	etic	
Are Vegetation Sol or Hydrology significantly disturbed? Are circumstances normal? Yes No naturally problematic? (If needed, explain any answers in Remarks)  StMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophylic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No Wetland Hydrology Present?  Wetland Hydrology Present? Is the Sampled Area within a Wetland? Yes No No No No No No No No No No No No No	•	oical for this time of	vear?	Yes _ ✓				
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No Wetland Hydrology Present?  Wetand Hydrology Present? No No No No No No No No No No No No No	• -		-					
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present?  Yes					(If needed, explain	anv answers in R	emarks)	
Hydrophytic Vegetation Present?  Yes No Yes No  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Valer (A1)  Hydrosopy Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Agal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Surface Water Present?  Yes No Depth (inches)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					•	•	•	
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology indicators:  Wetland Hydrology indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B2)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inon Deposits (B5)  Cherr (Explain in Remarks)  Surface Water Present?  Yes No Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  No	Hydrophytic Vegetation Present?			,	· ·	,		
Wetland Hydrology Present?  Wetland Hydrology indicators:  Wetland Hydrology indicators:  Wetland Hydrology indicators:  Water All   Surface Soil Cracks (B6)  — Surface Soil Cracks (B6)  — Surface Water (A1) — Water-Stained Leaves (B9) — Sparsely Vegetated Concave Surface (B8) — High Water Table (A2) — Aquatic Fauna (B13) — Drainage Patterns (B10) — Water Marks (B1) — Hydrogen Sulfide Odor (C1) — Dry-Season Water Table (C2) — Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Drift Deposits (B3) — Presence of Reduced Iron (C4) — Algal Mat or Crust (B4) — Recent Iron Reduction in Tilled Soils (C6) — Geomorphic Position (D2) — Iron Deposits (B5) — Thin Muck Surface (C7) — Shallow Aquitard (D3) — FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:				Is the Sampled Area within a Wetland? Yes No				
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Agualic Fauna (B1)  Algal Mat or Crust (B4)  Freeent Iron Recent Iron Reduction in Tilled Soils (C6)  Inon Deposits (B5)  Inudation Visible on Aerial Imagery (B7)  Surface Water Present?  Yes No Depth (inches): 0  Wetland Hydrology  Present?  Yes No Depth (inches): 0  Wetland Hydrology  Present?  Yes No Depth (inches): 0  Wetland Hydrology  Present?  Yes No Depth (inches): 0  Wetland Hydrology  Present?  Yes No Depth (inches): 0  Wetland Hydrology  Present?  Yes No Depth (inches): 0  Bescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:	Wetland Hydrology Present?	Yes✓No						
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Dother (Explain in Remarks)  Surface Water Present?  Yes _ No _ Depth (inches): _ 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Doy-Season Water Table (C2)  Crayfish Burrows (C8)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation (Sible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present? Yes _ No _ Depth (inches): _ 0  Wetland  Hydrology  Present? Yes _ No _ Depth (inches): _ 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Remarks:		<del></del>					
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Aguatic Fauna (B15)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Ino Deposits (B5)  Thin Muck Surface (C7)  Ino Deposits (B5)  Thin Muck Surface (C7)  Surface Water Present?  Water Present?  Wetland  Wetland  Wetland  Hydrology Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Drift Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:								
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Aguatic Fauna (B15)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Ino Deposits (B5)  Thin Muck Surface (C7)  Ino Deposits (B5)  Thin Muck Surface (C7)  Surface Water Present?  Water Present?  Wetland  Wetland  Wetland  Hydrology Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Drift Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:								
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Dother (Explain in Remarks)  Surface Water Present?  Yes _ No _ Depth (inches): _ 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Doy-Season Water Table (C2)  Crayfish Burrows (C8)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation (Sible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present? Yes _ No _ Depth (inches): _ 0  Wetland  Hydrology  Present? Yes _ No _ Depth (inches): _ 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Dother (Explain in Remarks)  Surface Water Present?  Yes _ No _ Depth (inches): _ 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Doy-Season Water Table (C2)  Crayfish Burrows (C8)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation (Sible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present? Yes _ No _ Depth (inches): _ 0  Wetland  Hydrology  Present? Yes _ No _ Depth (inches): _ 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Algal Mat or Crust (B4)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Water Table Present?  Yes No Depth (inches): 0  Wetland Hydrology Present?  Yes No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
✓ Surface Water (A1)	' '						vo required)	
High Water Table (A2)Aquatic Fauna (B13)								
✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)	· ·		, ,				Surface (B8)	
Water Marks (B1)	· '							
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Inon Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)FAC Neutral Test (D5)FAC Neutral Test (D5)	` ′				. ,			
Drift Deposits (B3)	· ' '							
Algal Mat or Crust (B4)	· · · ·	·	·	· · · · · · · · · · · · · · · · · · ·				
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)	<del></del>		` '				igery (C9)	
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Algal Mat or Crust (B4)			· · · · · · · · · · · · · · · · · · ·				
Field Observations:  Surface Water Present?	· · · ·		• •			- , ,		
Surface Water Present?  Yes / No Depth (inches):120	3-7(-7	Other (Explai	n in Remarks)		FAC Neutral	Test (D5)		
Wetland  Yes No Depth (inches):0 Wetland Hydrology Present? Yes No Depth (inches):0 Wetland Hydrology Present? Yes No  Cincludes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:		V /	<b>.</b>					
Saturation Present?  Yes No Depth (inches):0 Hydrology Present? Yes No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:								
(includes capillary fringe)  Present?  Yes No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:					Wetland			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:		Yes✓ No _	Depth (	inches):0	Hydrology			
Remarks:		ring well geriel abou	los provious incho	etions) if available	<u> </u>	Yes <u>✓ No</u>		
	Describe Recorded Data (Stream gauge, monitor	ing well, aeriai prior	tos, previous mspe	Luoris), ii avallable	•			
	Remarks:							

VEGETATION - Use scientific na	mes of plants			Sampling Point:	24
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		·	•	Number of Dominant Species	443
2.	<del></del>			That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
4.	•			Species Across All Strata:	(B)
5.	-	-		Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.	•			Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:)	· ·			OBL species x1=	
1. Salix spp.	2	yes	FACW	FACW species x2=	_
2.				FAC species x3=	_
3.				FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	— (B)
<u>5.</u> 6.	<del></del>			(A)(A)	— (D)
7.	-			Prevalance Index = B/A =	
1.		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:		= Total Cove	<b>51</b>	✓ Dominance Test is 50%	
•	_)			Prevalence Index is ≤3.0¹	
<u>1.</u> 2.			<u>:</u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	nlain)
3.	<del></del>			Problematic hydrophytic vegetation (Ex	Jiairi)
<u>3.</u> 4.				11	
<b>5</b> .	<del></del>			Indicators of hydric soil and wetland hydrology r	nust
6.				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:	
7.	<del></del>			Definitions of vegetation Strata.	
1.				<b>_</b>	
Herb Stratum (Plot size:	_)	= Total Cove	∌ī	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in.	. (7.6
1. Alternanthera philoxeroides	30	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Panicum hemitomon	10	no	OBL	Sapling- Woody plants, excluding woody vines,	
3. Panicum repens	5	no	FACW	approximately 20 ft (6m) or more in height and less	than 3
4. Setaria spp.		no	FAC	in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.	-			Herb- All herbaceous (non-woody)plants, including	
8.	-		C	herbaceous vines, regardless of size. Includes woo	
9.				plants, except woody vines, less than approximately	
10.	-			m) in height.	
11.	- ——			Woody vine- All woody vines, regardless of height.	
12.	-			, , , , , , , , , , , , , , , , , , , ,	
12.	47	= Total Cove		1	
Woody Vine Stratum (Plot size:	1	10101 0010	•1		
Mikania scandens	/	yes	FACW		
2.		yes	TACVV		
3.		<del></del>			
4.	-			Hydrophytic	
5.				Hydrophytic Vegetation Present? Yes ✓ No	
J.		= Total Cove		Vegetation Present? Yes <u>√</u> No_	<del></del>
Remarks: (If observed, list morph			-	L	
Percent cover estimates based o	-		roader co	mmunity	
		-u, v u v u i i i i i i i	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	more market.	

County/soil: Polk- V	Vater		
SOIL			Sampling Point:
Profile Description	n: (Describe to the o	depth needed to document the indicator or confirm the absence of indicators.)	
Donth	Motory	Paday Fasturas	

1	scription: (Describe t	o the depth needed t			confirm the ab	sence of indicators	.)
Depth	Matrix Calar (maint)	0/ 0-1/		Features	Loc²	Taudiusa	Domodro
(inches)	Color (moist)	% Color (mo	ist) <u>%</u>	Type <sup>1</sup>	Loc	Texture	Remarks
1							
<del>                                     </del>							
			<u> </u>			**	
Type: C=C	oncentration, D=Deple	etion, RM=Reduced M	atrix, CS=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Poi	re Lining, M=Matrix.
	I Indicators:						Indicators for Problematic Hydric Soils 3:
Histol (					rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)				S9) (LRR S, T, I		2 cm Muck (A10) (LRR S)
	Histic (A3)				ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	en Sulfide (A4)			y Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)	T 11)		eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
	c Bodies (A6) (LRR P	•		x Dark Surface			(MLRA 153B)
_	łucky Mineral (A7) (LF			eted Dark Surfa			Red Parent Material (TF2)
_✓_Muck I	Presence (A8) (LRR L	1)	Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm N	fuck (A9) (LRR P,T)		Marl (	(F10) (LRR U)			Other (Explain in Remarks)
Deplete	ed Below Dark Surface	e (A11)	Deple	eted Orchric (F	11) (MLRA 151)	)	
	Dark Surface (A12)	,		-	sses (F12) (LRI		3
	Prairie Redox (A16) (M	41 DA 150A)		-	3) (LRR P, T, U	•	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	. , ,	•		•		,	problematic.
-	Mucky Mineral (S1) (L	RR O, S)		Orchric (F17)	•		problematic.
	Gleyed Matrix (S4)			•	8) (MLRA 150A		
	Redox (S5)				Soils (F19) (MI		3 450D
_ ' ' '	ed Matrix (S6)		Anom	naious Bright L	oamy Soils (F20	) (MLRA 149A, 1530	o, 163D)
	urface (S7) (LRR P, S	, T, U)					
1	Layer (If observed):					1	•
	Гуре:						
	Depth (inches):					Hydric Soil Presei	nt? Yes <u>√</u> No
Remarks:							
					•		
1							
1							
1							
1							
Ī							

Project/Site: Levy Nuclear Plant - Transmis	sion Lines	City/County: Polk		_ Sampling Date	:9/24/09
Applicant/Owner: Progress Energy Florida	State: FI	<del>-</del>	Sampling Point	c <u>25A/25B</u>	
Investigator(s): Mike Arrants, Erin Hei	nen	Section, Township, Rang	e: 29 26S 23E		
Landform (hillslope, terrace, etc.):	N/A	Local relief (concave, cor	nvex, none): <u>none</u>	s	lope (%):
Subregion (LRR or MLRA): LRR L	Lat: <u>28,19016</u>	58 Long: <u>-82.</u>	039745		Datum: WGS84
Soil Map Unit Name: Eaton mucky fine sai	nd, depressional		NWI classification	n: <u>N/A</u>	
Are climatic / hydrologic conditions on the s	ite typical for this time of year?	Yes <u></u> ✓	No	_ (If no, explain i	n Remarks)
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstance	s normal? Y	′es <u> </u>
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explai	n any answers in	Remarks)
<b>SUMMARY OF FINDINGS - Attack</b>	site map showing samp	ling point locations, t	transects, impo	rtant feature	s, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes <u> </u>	Is the Sampled Area	within a Wetland?	Yes <u>√</u> N	lo
Wetland Hydrology Present?	Yes✓ No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of	two required)
Primary Indicators (minimum of one is requ	ired; check all that apply)		Surface Soi	l Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	s (B9)		Vegetated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	. ,		atterns (B10)	, ,
✓ Saturation (A3)	Marl Deposits (B15) (L	RR U)		ı Lines (B16)	
Water Marks (B1)	<del>-</del> · · · · · · · · · · · · · · · · · · ·			Water Table (C2	2)
Sediment Deposits (B2)	· ·	s on Living Roots (C3)	<del></del> -	urrows (C8)	
Drift Deposits (B3)	Presence of Reduced	• , ,	•	/isible on Aerial II	magery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	` ,		Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C	· · · · · · · · · · · · · · · · · · ·			
✓ Inundation Visible on Aerial Imagery			FAC Neutra	, ,	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-12			
Water Table Present?	Yes ✓ No		7		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)			- Hydrology Present?	Yes ✓ N	No
Describe Recorded Data (stream gauge, m	onitoring well aerial photos previ	ous inspections) if available		1631	<u> </u>
,	onnormig tron, dones priotos, proti				
Remarks:					
•					

VEGETATION - Use scientific nan	nes of plants			Sampling Point: _	25A	/25B
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	2	<b>(A)</b>
2.				That Are OBL, FACW, or FAC:	<u>3</u> (	(A)
3.				Total Number of Dominant		<b>(D)</b>
4.				Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove			ultiply by:	
Sapling Stratum (Plot size:)	ŭ	70101 0070	•	OBL species x1=	<u> </u>	
11.				FACW species x2=		
2.				FAC species x3=		
3.				FACU species x4=		
4.		***************************************				
5.				UPL speciesx5=		(D)
				Column Totals:(A)		(B)
6. 7.				B		
7.				Prevalance Index = B/A =		
Charle Charters (Blat sings		= Total Cove	er Er	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:)				✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Vegeta	ation' (Expla	ıin)
3.				<b>.</b>		
4.				<sup>1</sup> Indicators of hydric soil and wetland h		st
5.				be present, unless disturbed or probler	matic.	
6.				Definitions of Vegetation Strata:		
7.						
	0	= Total Cove	er	Tree- Woody plants, excluding woody vir		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in heigh		'.6
1. Bacopa spp.	20	yes	OBL	cm) or larger in diameter at breast height	: (DBH).	
2. Juncus spp.	20	yes	OBL	Sapling- Woody plants, excluding woody	y vines,	
Saururus cernuus	10	no	OBL	approximately 20 ft (6m) or more in heigh	nt and less tha	an 3
4. Ludwigia linearis	5	no	OBL	in. (7.6 cm) DBH.		
5. Ludwigia peruviana	5	no	OBL	Shrub- Woody plants, excluding woody v	vines,	
6. Cyperus spp.	5	no	FACW	approximately 3 to 20 ft (1 to 6 m) in heig	jht.	
7. Setaria spp.	2	no	FAC	Herb- All herbaceous (non-woody)plants	. includina	
8. Myriophyllum brasiliense	2	no	OBL	herbaceous vines, regardless of size. Inc		y
9.				plants, except woody vines, less than app		
10.				m) in height.		
11.			· ·	Woody vine- All woody vines, regardless	s of height.	
12.					J	
	69	= Total Cove				
Woody Vine Stratum (Plot size:	)	rotal Gove	•			
Mikania scandens	/ 	yes	FACW			
2.		yes	TACVV			
3.						
				Litridua mbrodia		
<u>4.</u> 5.				Hydrophytic	No	
J.		= Total Cove		Vegetation Present? Yes✓_	140	<del>-</del>
Remarks: (If observed, list morpho		= Total Cove	FI			
Percent cover estimates based on			roader cor	nmunity		

SOIL								Sampling Point: 25A/25		
	scription: (Describe t	to the dep	oth needed to do			onfirm the ab	sence of indicators.	)		
Depth	Matrix				Features	<del></del>				
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc	Texture	Remarks		
0-6	10 YR 2/1							black mucky fine sand		
5-29	10 YR 7/1							light gray fine sand		
29-33	N 5/0							gray sandy clay loam		
33-80	N 5/0							gray sandy clay		
Type: C=0	Concentration, D=Depl	etion, RM	=Reduced Matrix,	CS=Cover	ed or Coated S	and Grains.	2Location: PL=Por	e Lining, M=Matrix.		
Hydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:		
Histol	(A1)			Poly	alue Below Sun	face (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)		
Histic	Epidon (A2)			Thin	Dark Surface (S	9) (LRR S, T, I	J)	2 cm Muck (A10) (LRR S)		
Black	Histic (A3)			Loan	ny Mucky Minera	l (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)		
Hydro	gen Sulfide (A4)			Loan	y Gleyed Matrix	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ied Layers (A5)				eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)		
Organ	ic Bodies (A6) (LRR P	, T, U)		Redo	x Dark Surface	(F6)		(MLRA 153B)		
5 cm l	Mucky Mineral (A7) (LF	RR P,T,U)	)	Deple	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)		
✓ Muck	Presence (A8) (LRR I	J)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)		
	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)		
						4) (80) DA 454)				
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)		Depleted Orchric (F11) (MLRA 151)								
			Iron-Manganese Masses (F12) (LRR O, P,T)				Indicators of hydrophytic vegetation and wetland			
Coast	Prairie Redox (A16) (I	MLRA 150	DA)				)	hydrology must be present, unless disturbed or		
Sandy	Mucky Mineral (S1) (L	.RR O. S	1	Delta	Orchric (F17) (	MLRA 151)		problematic.		
	Gleyed Matrix (S4)			Redu	ced Vertic (F18	) (MLRA 150A	150B)			
	Redox (S5)				nont Floodplain	, ,	•			
	ed Matrix (S6)			Anon	nalous Bright Lo	amy Soils (F20	) (MLRA 149A, 153C	, 153D)		
	Surface (S7) (LRR P, S	2 T III			•	,		•		
	e Layer (if observed):						1			
	Type:									
	Depth (inches):			,			Hydric Soil Preser	it? Yes ✓ No .		
Remarks:	Bepar (mones).						Triyana com r recon			
Acmarks.										
								'		
								,		
								,		
								,		
								,		
								,		

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date: 9/24/09
Applicant/Owner: Progress Energy Florida, Inc.	State: FL		Sampling Point: 26	
Investigator(s): Mike Arrants, Erin Heinen	Section, Township, Range: 29 26S 23E			
Landform (hillslope, terrace, etc.): N/	Α	Local relief (concave, con-	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.189691	Long: <u>-82.0</u>	39753	Datum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification:	: palustrine emergent
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Yes/_No
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes No			· · · · · · · · · · · · · · · · · · ·
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes No			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)		Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)
Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	ines (B16)
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	rows (C8)	
Drift Deposits (B3)	Presence of Reduced In	ron (C4)Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)Geomorphic Position (D2)		Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		itard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No	Depth (inches): 0-12		
Water Table Present?	Yes No	Depth (inches):0	Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	
(includes capillary fringe)			Present?	Yes No
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previou	us inspections), if available:	:	
Remarks:				
		,		
ь		, ·		
		,		

VEGETATION - Use scientific nan	nes of plants				Sampling Point:	26
T 01 / /D1 /	Absolute %	Dominant	Indicator	Dominance Test Works	heet:	
Tree Stratum (Plot size:)	Cover	Species?	Status	Number of Deminent Co.		
1.				Number of Dominant Spe That Are OBL, FACW, or	.,	(A)
2.				•		
3.				Total Number of Domina	7	(B)
4.				Species Across All Strata	1.	
5.				Percent of Dominant Spe		) (A/B)
6.				That Are OBL, FACW, or	FAC:	
7.				Prevalance Index works		
	0	= Total Cove	r	Total % Cover of:	Multiply b	<u>Y:</u>
Sapling Stratum (Plot size:)				OBL species	x1=	
1.				FACW species	x2=	
2.				FAC species	x3=	
3.				FACU species	x4=	
4.				UPL species	x5=	
5.				Column Totals:	(A)	(B)
6.				*		
7.				Prevalance Index =	B/A =	
	0	= Total Cove	r	Hydrophytic Vegetation	Indicators:	
Shrub Stratum (Plot size:)				✓ Dominance Test i	s 50%	
1.				Prevalence Index	is ≤3.0 <sup>1</sup>	
2.				Problematic Hydro	ophytic Vegetation <sup>1</sup> (I	Explain)
3.				<del></del>	. , , , ,	• •
4.				<sup>1</sup> Indicators of hydric soil a	and wetland hydrolog	ıv must
5.				be present, unless distur		,,
6.				Definitions of Vegetation		
7.				1		
	0	= Total Cove		Tree- Woody plants, exclu	iding woody vines	
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) o		in. (7.6
Panicum hemitomon	40	yes	OBL	cm) or larger in diameter a		
Alternanthera philoxeroides	20	yes	OBL	  Sapling- Woody plants, ex	cluding woody vines	
Diodia virginiana	10	no	FACW	approximately 20 ft (6m) o		ess than 3
4. Juncus effusus	10	no	FACW	in. (7.6 cm) DBH.	J	
5. Setaria spp.	2	no	FAC	Shrub- Woody plants, exc	duding woody vines	
6. Ludwigia linearis		no	OBL	approximately 3 to 20 ft (1		
7. Phyla nodiflora		no	FACW	Herb- All herbaceous (nor		ina .
Muhlenbergia capillaris	2	no	FACU	herbaceous vines, regard		
Cyperus surinamensis		no	FACW	plants, except woody vines		
10.			TAOV	m) in height.		, (.
11.				Woody vine- All woody vii	nes renardless of heir	nht
12.	<del></del>			11000, 1110 7 111 11000, 111	nes, regardiese of neig	,
12.	90	= Total Cove		-		
Woody Vine Stratum (Plot size:		- Total Cove	,1			
1	/					
2.				4		
3.						
4.	<del></del>			Hydrophytic	Voc / No	
5.		= Total Carra		Vegetation Present?	Yes <u>√</u> No	<del></del>
Daniel (If sharmed list as a list	0	= Total Cove	<u> </u>			
Remarks: (If observed, list morpho Percent cover estimates based on	-		rnader co	mmunity		

County/soil:	Polk-	Pomona
SOIL		

epth Matrix	ded to document the indicator or co Redox Features	nfirm the absence of indicator	s.)
·	or (moist) % Type'	Loc <sup>2</sup> Texture	Remarks
5 10 YR 3/1			very dark gray fine sand
12 10 YR 6/2			light brownish gray sand
-21 10 YR 7/2			light gray sand
-26 5 YR 3/3			dark reddish brown loamy fine sand
ype: C=Concentration, D=Depletion, RM=Reduc	ed Matrix. CS=Covered or Coated San	d Grains. <sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
dric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
_Histol (A1)	Polyvalue Below Surface	ce (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9)	(LRR S, T, U)	2 cm Muck (A10) (LRR S)
_Black Histic (A3)	Loamy Mucky Mineral	(F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (	F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	•	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F	<sup>6</sup> )	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface	(F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F	,	Very Shallow Dark Surface (TF12) (LRR T, U)
	· · · · · · · · · · · · · · · · · · ·	~,	
_1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11)	(MLRA 151)	
Thick Dark Surface (A12)	Iron-Manganese Masse	es (F12) (LRR O, P,T)	3h-P-t
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (	LRR P. T. U)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
· · · · · · · · · · · · · · · · · · ·		· · · ·	problematic.
_Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (M		problematic.
_Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (		
Sandy Redox (S5)		oils (F19) <b>(MLRA 149A)</b>	
_Stripped Matrix (S6)	Anomalous Bright Loar	ny Soils (F20) <b>(MLRA 149A, 15</b> 3	C, 153D)
Dark Surface (S7) (LRR P, S, T, U)			
strictive Layer (If observed):			
Strictive Layer (ii Observed).			
		Hydric Soil Prese	ent? Yes ✓ No
Type: Depth (inches):			
Туре:	<del></del>	, ,	
Type: Depth (inches):		12	
Type: Depth (inches):		,,,	
Type: Depth (inches):			

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		_Sampling Da	ate: 9/24/09
Applicant/Owner: Progress Energy Florida, Inc.	State: FL		Sampling Po	oint:27	
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range	e: 29 26S 23E		
Landform (hillslope, terrace, etc.):N	'A	Local relief (concave, con	vex, none): none		_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: _28.188829	9 Long: <u>-82.0</u>	39739		Datum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification	: <u>N/A</u>	
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes✓	_ No	(If no, explai	n in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		
	or Hydrology		(If needed, explain	any answers	in Remarks)
SUMMARY OF FINDINGS - Attach si		- · · ·		•	· ·
Hydrophytic Vegetation Present?	Yes No	]			
Hydric Soil Present?	Is the Sampled Area v	vithin a Wetland?	Yes✓	_No	
Wetland Hydrology Present?					
Remarks:	Yes✓ No	<u> </u>			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum	of two required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Conc	ave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table	C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced t	ron (C4)Saturation Visible on Aerial Imagery			I Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	<del></del>			
Iron Deposits (B5)	Thin Muck Surface (C7	· · · · · · · · · · · · · · · · · · ·			
Inundation Visible on Aerial Imagery (B7	<del></del>	· · · · · · · · · · · · · · · · · · ·			
Field Observations:	/	,			
Surface Water Present?	YesNo✓	Denth (inches):			
Water Table Present?	Yes No		-		
			Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>√</u>	_No
Describe Recorded Data (stream gauge, monitor	oring well, aerial photos, previo	ous inspections), if available	<b>:</b> :		
Remarks:					
	•				

VEGETATION - Use scientific names of plants		Sampling Point:	27
Absolute %	Dominant	Indicator Dominance Test Worksheet:	

	Absolute %	Dominant		Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	<u>2</u>	(A)
2.				That Are OBL, FACW, or FAC:	_	V /
3.				Total Number of Dominant	<u>2</u>	(B)
4.				Species Across All Strata:	=	(-,
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	100.00	(,,,
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)				OBL speciesx1	=	I
1				FACW speciesx2	=	_
2.				FAC speciesx3	=	_
3.				FACU speciesx4	=	_
4.				UPL species x5	=	_
5.				Column Totals: (A)		- (В)
6.				<del></del>	,	-` '
7.				Prevalance Index = B/A =		I
		= Total Cove	<sup>7</sup> L	Hydrophytic Vegetation Indicator	rs:	
Shrub Stratum (Plot size:)			•	✓ Dominance Test is 50%		1
1	,			Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Ve	egetation <sup>1</sup> (Exc	lain)
3.				r Toblematio i iyaropiiyao 10	geranon (	llaii i j
4.				-	- University of	4
5.				Indicators of hydric soil and wetlar		านระ
6.				be present, unless disturbed or pro Definitions of Vegetation Strata:		
7.				Definitions of vegetation Strate.		
1.		Tatal Cove		4		
Llank Otration (Plateize:	Ò	= Total Cove	ा	Tree- Woody plants, excluding wood		/7 C
Herb Stratum (Plot size:)			ODI	approximately 20 ft (6m) or more in h cm) or larger in diameter at breast he		۵.۱)
Hydrocotyle spp.     Cyporus suripemensis	40	yes	OBL	<b>-</b> 1 .		
Cyperus surinamensis     Phyrehappers colorets	30	yes	FACW	Sapling- Woody plants, excluding wo		
3. Rhynchospora colorata	10	no	OBL	approximately 20 ft (6m) or more in h	eight and less	than o
4. Alternanthera philoxeroides	10	no	OBL	in. (7.6 cm) DBH.		
5. Phyla nodiflora	22	no	FACW	Shrub- Woody plants, excluding woo		
6. Commelina spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in I	_	
7.				Herb- All herbaceous (non-woody)pla		
8.				herbaceous vines, regardless of size		
9.				plants, except woody vines, less than	approximately	/ 3 ft (1
10.				m) in height.		
11.				<b>Woody vine</b> - All woody vines, regard	lless of height.	
12.				1		
	94	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.		-		Hydrophytic		
5.				Vegetation Present? Yes	√ No	
J.		= Total Cove	·	Vegetation Fresent:	<u>^</u> '	<del></del>
Remarks: (If observed, list morpho			<u> </u>	<u> </u>		
Percent cover estimates based on		•	roader cor	mmunity.		

SOIL	il: Polk- Pomona							Sampling Point:
	scription: (Describe	to the de	oth needed to doc	ument the i	ndicator or	confirm the abs	ence of indicators.)	
epth	Matrix			Redox Fe				
nches)	Color (moist)		Color (moist)	<u> </u>	Type <sup>1</sup>	Loc²	Texture	Remarks
6	10 YR 3/1							very dark gray fine sand
12	10 YR 6/2							light brownish gray sand
-21	10 YR 7/2							light gray sand
-26	5 YR 3/3							dark reddish brown loamy fine sand
	· <del></del>							
	Concentration, D=Depl	etion, RM	=Reduced Matrix, (	CS=Covered	or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	
	oil Indicators:			Datasat	DI 0	-f (00) (1 DD f		ndicators for Problematic Hydric Soils 3:
Histol	· ·					rface (S8) (LRR S		1 cm Muck (a9) (LRR O)
	Epidon (A2)					89) <b>(LRR S, T, U</b> )	) _	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loamy	Mucky Miner	al (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	gen Sulfide (A4)			Loamy	Gleyed Matri	x (F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				ed Matrix (F3		-	Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR F	P, T, U)			Dark Surface		=	(MLRA 153B)
	M	 DD D T I !!	,	—— Denlete	ed Dark Surfa	nce (F7)		Red Parent Material (TF2)
	Mucky Mineral (A7) (LI Presence (A8) (LRR I				Depressions		-	Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	υ,			10) (LRR U)	(1 0)	· ·	Other (Explain in Remarks)
	ted Below Dark Surface	ο (Δ11)				11) (MLRA 151)	-	
		æ (A11)				sses (F12) (LRR	Λ D T)	
	Dark Surface (A12)				-			Indicators of hydrophytic vegetation and wetland
	Prairie Redox (A16) (		•	_	•	3) (LRR P, T, U)		nydrology must be present, unless disturbed or
	y Mucky Mineral (\$1) (I	LRR O, S	)			(MLRA 151)		problematic.
	y Gleyed Matrix (S4)					B) (MLRA 150A, 1		
Sandy	y Redox (S5)			Piedmo	ınt Floodplair	n Soils (F19) <b>(MLI</b>	RA 149A)	
Stлірр	ed Matrix (S6)			Anoma	ious Bright L	oamy Soils (F20)	(MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P,							
estrictiv	e Layer (If observed)	:						
	Type:		<u>-</u>					
	Depth (inches):						Hydric Soil Present	!? Yes <u>√</u> No
emarks:				,				
					•			

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk	Sampling	Date: 9/24/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	Sampling	Point: 28
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range	e: 29 26S 23E	
Landform (hillslope, terrace, etc.): N/.	Á	Local relief (concave, con	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.187385	5Long: <u>-82.0</u>	39519	Datum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification:palustrin	ie emergent
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No (If no, exp	lain in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances normal?	Yes <u> </u>
Are Vegetation, Soil	or Hydrology	_naturally problematic?	(If needed, explain any answe	ers in Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, important feat	tures, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland? Yes	No
Wetland Hydrology Present?	Yes No			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:	•	· · · · · · · · · · · · · · · · · · ·	Secondary Indicators (minimu	um of two required)
Primary Indicators (minimum of one is required;	chack all that apply)		Surface Soil Cracks (B6	
✓ Surface Water (A1)	Water-Stained Leaves (	'Do\	Sparsely Vegetated Cor	·
High Water Table (A2)	Aquatic Fauna (B13)	,69)		
<b>─</b> • • • •		20.40	Drainage Patterns (B10)	)
Saturation (A3)	Marl Deposits (B15) (LR	,	Moss Trim Lines (B16)	- (00)
Water Marks (B1)	Hydrogen Sulfide Odor		Dry-Season Water Table	e (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burrows (C8)	-i-l.l (OO)
Drift Deposits (B3)	Presence of Reduced In	` '	Saturation Visible on Ae	
Algal Mat or Crust (B4)	Recent Iron Reduction in	• •	Geomorphic Position (D	(2)
Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)		Shallow Aquitard (D3)	
✓ Inundation Visible on Aerial Imagery (B7) Field Observations:	Other (Explain in Remai	iks)	FAC Neutral Test (D5)	
Surface Water Present?	Yes No	Denth (inches): 0.12		
Water Table Present?	Yes No		1	
Saturation Present?	Yes No		Wetland	
	NO	Depth (inches): 0	Hydrology	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previou	us inspections) if available	Present? Yes <u>✓</u>	No
	<b>g</b>	,,,,		
Damarka			,	
Remarks:				
•				
				•

VEGETATION - Use scientific na	ames of plants			Samplir	ng Point:	28
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1,				Number of Dominant Species	1	/A\
2.				That Are OBL, FACW, or FAC:	1	(A)
3.				Total Number of Dominant	4	(D)
4.		-		Species Across All Strata:	<u>1</u>	(B)
5.				Percent of Dominant Species	100.00	(A (D)
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)				OBL species x	1=	
1.				FACW species x2	2=	_
2.				FAC species x	3=	_
3.				FACU species x4	4=	_
4.					5=	
5.	_	-		Column Totals: (A	4)	(B)
6.				1 ——·		`_
7.			<del></del>	Prevalance Index = B/A =		
		= Total Cove	er	Hydrophytic Vegetation Indicate	ors:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0 <sup>1</sup>		
2.	<u> </u>			Problematic Hydrophytic V	egetation <sup>1</sup> (Exp	olain)
3.						
4.	_			Indicators of hydric soil and wetla	ind hydrology n	nust
5.				be present, unless disturbed or pr		
6.				Definitions of Vegetation Strata	:	
7.				1		
Herb Stratum (Plot size:	0	= Total Cove	er	Tree- Woody plants, excluding wood approximately 20 ft (6m) or more in		(7.6
1. Juncus spp.		yes	OBL	cm) or larger in diameter at breast h		(
Spartina bakeri	15	no	FACW	Sapling- Woody plants, excluding w		
3. Ludwigia linearis	10	no	OBL	approximately 20 ft (6m) or more in		than 3
Panicum hemitomon	10	no	OBL	in. (7.6 cm) DBH.		
5. Bacopa spp.		no	OBL	Shrub- Woody plants, excluding wo	ody vines.	
Myriophyllum brasiliense	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in	•	
7. Cyperus spp.	2	no	FACW	Herb- All herbaceous (non-woody)p	lants including	
Ludwigia peruviana		no	OBL	herbaceous vines, regardless of size		ody
9. Lindernia sp.		no	OBL	plants, except woody vines, less tha		
10.				m) in height.		
11.				Woody vine- All woody vines, regar	dless of height.	
12.				1	_	
	105	= Total Cove	er			
Woody Vine Stratum (Plot size:_						
1.						
2.				1		
3.				·		
4.				Hydrophytic		
5.	<del></del>	<del></del>		Vegetation Present? Yes _	✓No	
		= Total Cove	er	1		
Remarks: (If observed, list morp	hological adapta	ations below).				
Parcent cover actimates based	an maandaring (	suprov of the b	roader on	mmunity		

County/soil:	Dalle	Damasa

SUIL								Sampling Point
Profile De	scription: (Describe	to the dep	th needed to do	ument th	e indicator or	confirm the abs	sence of indicators.	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type¹	Loc²	Texture	Remarks
()			Ooloi (Illoiot)				TOXIGIO	Tromano
0-6	10 YR 3/1							very dark gray fine sand
6-12	10 YR 6/2							light brownish gray sand
12-21	10 YR 7/2							light gray sand
21-26	5 YR 3/3							dark reddish brown loamy fine sand
								······································
Transi Car	Concentration, D=Depl	otion Did-	Dadward Matrix	CC-C	ad as Castad C	Carina	<sup>2</sup> Location: PL=Pore	- Lining Adababas
		elion, Rivi-	Reduced Matrix,	CO=Cover	ed or Coaled S	sano Grains.		
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	. ,					rface (S8) (LRR		1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin I	Dark Surface (	S9) (LRR S, T, L	J)	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loam	ny Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hvdro	gen Sulfide (A4)				y Gleyed Matri		•	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P	. T. U)			x Dark Surface		•	(MLRA 153B)
								·
	Mucky Mineral (A7) (LI				eted Dark Surfa	. ,	,	Red Parent Material (TF2)
Muck	Presence (A8) (LRR I	J)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
							•	- Color (Explain III Colored)
Deple	ted Below Dark Surfac	e (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
Thick	Dark Surface (A12)			tron-f	Manganese Ma	sses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MI RA 150	Δ)	Umbi	ric Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
	, ,,		•••		·			problematic.
Sandy	Mucky Mineral (S1) (I	_RR O, S)			Orchric (F17)			problematic.
Sandy	Gleyed Matrix (S4)			Redu	ced Vertic (F18	B) (MLRA 150A,	150B)	
Sandy	Redox (S5)			Piedr	nont Floodplair	Soils (F19) (ML	.RA 149A)	
Stripp	ed Matrix (S6)			Anon	nalous Bright L	oamy Soils (F20)	(MLRA 149A, 153C	, 153D)
	, ,					(	, ,,,	,,
	Surface (S7) (LRR P, S	· · ·						
Restrictiv	e Layer (If observed)	:						
Į.	Туре:						·	
1	Depth (inches):						Hydric Soil Presen	t? Yes ✓ No .
Remarks:	• • • • • • • • • • • • • • • • • • • •						<u>'</u>	
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Applicant/Owner:   Progress Energy Florida_Inc.   State:   FL   Sampling Point   29	Section   Township   Range   29 285 23E	Project/Site: Levy Nuclear Plant - Transmis	ssion Lines	City/County: Polk	Samplin	g Date: 9/24/09
Local relief (concave, convex, none): none	Landform (hillslope, terrace, etc.):   N/A	Applicant/Owner: Progress Energy Florida	a, Inc.	State:FI	Samplin	g Point: 29
Subregion (LRR or MLRA): LRR U Lat 28.187191 Long: 42.039801 Datum: WGS84  Soil Map Unit Name: Pomona fine sand  Are Cimatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Present?  Yes And Phydrology Are Circumstances normal? Yes No Are Circumstances normal? Yes No Are Circumstances normal? Yes No Are Circumstances normal? Yes No Are Circumstances normal? Yes No Are Circumstances normal? Yes No No Hydrology Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9)  Surface Water (A1) Water-Stained Leaves (B9)  Surface Water (A1) Aguatic Fauna (B13)  Aguatic Fauna (B13)  Aguatic Fauna (B13)  Water Marks (B1) Hydrology Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)  Dry-Season Water Table (C2)  Adal Mat or Crust (B4) Recent from Reduction in Tilled Soils (C6)  Iron Deposits (B3) Presence Reduced Iron (C4)  Iron Deposits (B3) Thin Muck Surface (C7)  Iron Deposits (B3) Thin Muck Surface (C7)  Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Subregion (LRR or MLRA): LRR U Lat: 28.187191 Long: 49.2039801 Datum: WGS84  Soil Map Unit Name: Pomona fine sand  Are directive for MLRA): Mode of MLRA in the site typical for this time of year?  Are Vegetation. Soil or Hydrology significantly disturbed? Are circumstances norma? Yes _ No _ (If no, explain in Remarks)  Are Vegetation. Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydrosphytic Vegetation Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Surface Vater (A1)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Presence of Reduced Iron (C4)  Sediment Deposits (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Inundation Visible on Aerial Imagery (B7)  Dirth Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes _ No _ Depth (inches): _ Water Table Present?  Yes _ No _ Depth (inches): _ Water Table Present?  Yes _ No _ Depth (inches): _ Water Table Present?  Yes _ No _ Depth (inches): _ Water Table Present?  Yes _ No _ Depth (inches): _ Water Table Present?  Yes _ No _ Depth (inches): _ Water Table Present?  Yes _ No _ Depth (inches): _ Water Table Present?  Yes _ No _ Depth (inches): _ Water Table Present?  Yes _ No _ Depth (inches): _ Wetland Hydrology Present?  Yes _ No _ Depth (inches): _ Wetland Hydrology Present?  Yes _ No _ Depth (inches): _ Wetland Hydrology Present?  Yes _ No _ Depth (inches): _ Wetland Hydrology Present?  Yes _ No _ Depth (inches): _ Wetland Hydrology Pr	Investigator(s): Mike Arrants, Erin He	inen	Section, Township, Rang	e; <u>29 26\$ 23E</u>	
Soil Map Unit Name: Pomena fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No Wetland Hydrology Present?  Wetland Hydrology Indicators:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)  Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6)  High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfde Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation (Dy-Season Water Table (C2)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Irundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Soil Map Unit Name: Pomona fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are elimatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology	Landform (hilfslope, terrace, etc.):	N/A	Local relief (concave, cor	ivex, none): <u>none</u>	Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If neded, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No Is the Sampled Area within a Wetland? Yes No No Is the Sampled Area within a Wetland? Yes No No Is the Sampled Area within a Wetland? Yes Is No Is the Sampled Area within a Wetland? Yes Is No Is the Sampled Area within a Wetland? Yes Is No Is the Sampled Area within a Wetl	Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If neded, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Secondary Indicators: Hydrology Present? Yes No Secondary Indicators: Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13)  Water Marks (B1) Mar Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Dy-Season Water Table (C2) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Field Observations:  Surface Water Present? Yes No Depth (inches): Water Present? Yes No Depth (inches): Wetland Hydrology Indicators: Ves V No Depth (inches): Wetland Hydrology Indicators (minimum of two required)  Wetland Hydrology Indicators (minimum of two required)  Wetland Hydrology Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Wetland Hydrology Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Wetland Hydrology Indicators (minimum of two required)  Wetland H	Subregion (LRR or MLRA): LRR	U Lat: 28.18719	91 Long: <u>-82.</u>	039801	Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No No No No No No No No No No No No	Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No North Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No Wetland Hydrology Present? Yes No Secondary Indicators (minimum of two required)  Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)  Water Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tiling Coils (C6) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches): Use Sultration Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Soil Map Unit Name: Pomona fine sand			NWI classification: N/A	
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No No No No No No No No No No No No	Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No North Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No Wetland Hydrology Present? Yes No Secondary Indicators (minimum of two required)  Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)  Water Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tiling Coils (C6) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches): Use Sultration Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes No Depth (inches): Use Present? Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Are climatic / hydrologic conditions on the	site typical for this time of year?	Yes <u></u> ✓	No (If no, e)	kplain in Remarks)
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No No No No No No No No No No No No	Are Vegetation	• •	• • • • • • • • • • • • • • • • • • • •			
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No	SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Hydroc Soil Present? Wetland Hydrology Present? Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6) Surface Water (A1) Sutraction (A3) Mari Deposits (B15) (LRR U) Moss Trim Lines (B16) Sutraction (A3) Mari Deposits (B15) (LRR U) Moss Trim Lines (B16) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Trift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitlard (D3) Inundation Visible on Aerial Imagery (B7) Inundation Visible on Aerial Imagery (B7) Sutrace Water Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No					
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Algal Mat or Crust (B4) Algal Mat or Crust (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Surface Water (P3) Algal Mat or Crust (B4) Field Observations: Surface Water (P4)  Ves No Depth (inches):  Wetland Hydrology  Is the Sampled Area within a Wetland? Yes No  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)  Surface Vater Passent (P4)  No	Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Orift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Surface Water Present? Yes					
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  HYDROLOGY  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Iron Deposits (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algall Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Saturation (Pesent?  Yes No O Depth (inches):  Saturation Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No O Depth (inches):  Wetland Hydrology Present?  Yes No O Depth (inches):  Wetland Hydrology Present?  Yes No O Depth (inches):  Wetland Hydrology Present?  Yes No O Depth (inches):  Wetland Hydrology Present?  Yes No O Depth (inches):  Wetland Hydrology Present?  Yes No O No O Depth (inches):  Wetland Hydrology Present?  Yes No O No O Depth (inches):  Wetland Hydrology Present?  Yes No O No O Depth (inches):  Wetland Hydrology Present?  Yes No O No O Depth (inches):  Wetland Hydrology Present?  Yes No O No O No O No O No O No O No O No					
Wetland Hydrology Present?    Present	Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B5) (LRR U)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Hydrology  Present?  Yes No Persent?  Yes Yes No Persent?  Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	<del></del>	Is the Sampled Area	within a Wetland? Yes	/No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B11)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Aguatic Fauna (B13)  Drainage Patterns (B10)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Saturation Present?  Yes No Depth (inches):  Wetland  Wetland  Hydrology  Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No Present?  Yes No Pepth (inches):  Wetland  Hydrology  Present?  Yes No Pepten (inches):  Wetland  Hydrology  Present?  Yes No Pepten (inches):  Wetland	, i		<b>†</b>		
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Water Marks (Water Present?  Yes  No  Depth (inches):  Water Marks (Water Marks (Minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Spurface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland Hydrology	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required: check all that apply)  Surface Water (A1)			<u> </u>		
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):         Saturation Present?       Depth (inches):       Depth (inches): <th>Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)        </th> <th></th> <th></th> <th></th> <th></th> <th></th>	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):         Saturation Present?       Depth (inches):       Depth (inches): <th>Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)        </th> <th></th> <th></th> <th></th> <th></th> <th></th>	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):         Saturation Present?       Depth (inches):       Depth (inches): <th>Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)        </th> <th></th> <th></th> <th></th> <th></th> <th></th>	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):         Saturation Present?       Depth (inches):       Depth (inches): <th>Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)        </th> <th></th> <th></th> <th></th> <th></th> <th></th>	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):         Saturation Present?       Depth (inches):       Depth (inches): <td>Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)        </td> <td></td> <td></td> <td></td> <td></td> <td></td>	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes       No       Depth (inches):         Water Table Present?       Yes       No       Depth (inches):         Saturation Present?       Depth (inches):       Depth (inches): <td>Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)        </td> <td>HYDROLOGY</td> <td></td> <td></td> <td></td> <td></td>	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)	HYDROLOGY				
Primary Indicators (minimum of one is required; check all that apply)	Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Yes Depth (inches):  Wetland  Hydrology  Present? Yes No No Menual Imagery  Yes No Menual Imagery  Yes No Menual Imagery  Yes No Menual Inches):  No Metland  Hydrology  Present? Yes No Menual Imagery  Yes Yes No Menual Imagery  Yes Yes Yes No Menual Imagery  Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes				Secondary Indicators (minir	num of two required)
Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Marl Deposits (B8)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology	Surface Water (A1)Water-Stained Leaves (B9)Sparsely Vegetated Concave Surface (B8)Sparsely		uired; check all that apply)			
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)	High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?			s (B9)		•
✓ Saturation (A3)	✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)   Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)   _ Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)   _ Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)   _ Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)   _ Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)   _ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)    Field Observations:  Surface Water Present?  YesNo✓Depth (inches):	` '		(,		
Water Marks (B1)	Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	` ` ` ·		RR III		·
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Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)Shallow Aquitard (D3)FAC Neutral Test (D5)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)Shallow Aquitard (D3)FAC Neutral Test (D5)	Drift Deposits (B3)	· · ·			<i>'</i>	
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D5)Shallow Aquitard (D3)Shallow	Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) FAC Neutral Test (D5)	<u> </u>		- ,		
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Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNo/_Depth (inches): Water Table Present? YesNo/Depth (inches): Saturation Present? Yes/NoDepth (inches): Hydrology	Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNo✓_Depth (inches): Water Table Present? YesNoDepth (inches): Saturation Present? Yes✓_NoDepth (inches): (includes capillary fringe)  Wetland Hydrology Present? Yes _✓_No		<del></del>			
Field Observations:           Surface Water Present?         Yes No	Field Observations:  Surface Water Present?  YesNo	<del></del>		•		
Surface Water Present?         Yes No	Surface Water Present?       Yes No		(B7)Other (Explain in Kent	aiks)	FAC Neutral Test (D5)	<u> </u>
Water Table Present?         Yes No Depth (inches):	Water Table Present? Yes No Depth (inches): Wetland Saturation Present? Yes No Depth (inches):_ 0 Hydrology (includes capillary fringe) Present? Yes No		v No /	<b>5</b>		
Saturation Present? Yes No Depth (inches): Wetland Hydrology	Saturation Present? Yes _ / No Depth (inches): _ 0				-	
Saturation Present? Tes No Depth (inches): Hydrology	Saturation Present? Tes NoDepth (inches):0					
(includes capillary fringe) Present? Yes <a href="#">Yes</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a> <a href="#">No</a>						

VEGETATION - Use scientific nan	nes of plants			Sampling Point:	29
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.	<del></del>			That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove	<u></u>	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:)			•	OBL species x1=	
1.				FACW species x2=	_
2.				FAC species x3=	_
3.				FACU species x4=	_
4.				UPL species x5=	
5.				Column Totals: (A)	— <sub>(B)</sub>
6.					— (°,
7.	. ——	<del></del>		Prevalance Index = B/A =	
		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:)	•	- Total Cove	•	✓ Dominance Test is 50%	
	,			Prevalence Index is ≤3.0 <sup>1</sup>	
<u>1.</u> <u>2.</u>				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	(منمات
3.				Problematic mydrophytic vegetation (Ex	.piairi)
				1	
<u>4.</u> 5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology	must
5. 6.				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:	
				Definitions of vegetation strata.	
7.		- T-tal Caus		<u> </u>	
Harb Charling (Diet size:	0	= Total Cove	r	Tree- Woody plants, excluding woody vines,	/7.6
Herb Stratum (Plot size:)	,			approximately 20 ft (6m) or more in height and 3 in cm) or larger in diameter at breast height (DBH).	i. (7.6
1. Hydrocotyle spp.	50	yes	OBL	4	
Eupatorium capillifolium	2	no	FACU	Sapling- Woody plants, excluding woody vines,	
Woodwardia virginica	2	no	OBL	approximately 20 ft (6m) or more in height and less	s tnan s
4.	, <del></del>			in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wo	
9.				plants, except woody vines, less than approximate	ly 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height	[_
12.					
	54	= Total Cove	r		
Woody Vine Stratum (Plot size:	)			İ	
1					
2.				1	
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	
	0	= Total Cove	r	1 - 3	
Remarks: (If observed, list morpho	ological adapta				
Percent cover estimates based on	-		roader cor	mmunity	

epth mches) Color (moist) % Color (moist) % Type¹ Loc²  6 10 YR 3/1  10 YR 6/2  221 10 YR 7/2  1-26 5 YR 3/3  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Warris (A1) Polyvalue Below Surface (S8) (LRR S. T. U)  Histic Epidon (A2) Thin Dark Surface (S9) (LRR S. T. U)  Black Histic (A3) Loarny Mucky Mineral (F1) (LRR O)  Hydrogen Suffde (A4) Loarny Mucky Mineral (F1) (LRR O)  To Muck (A9) (LRR P, T, U) Pepleted Dark Surface (F6)  To Muck (A9) (LRR P, T) Pepleted Dark Surface (F8)  1 cm Muck (A9) (LRR P, T) Pepleted Dark Surface (F8)  1 cm Muck (A9) (LRR P, T) Pepleted Dark Surface (F8)  Marl (F10) (LRR U) Pepleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12) Umbric Surface (F13) (LRR P, T, U)  Sandy Mucky Mineral (S1) (LRR O, S) Peleton Thiodoptain Soils (F19) (MLRA 150A, Piedmort Floodptain Soils (F19) (MLRA 150A)  Sandy Redox (S5) LRR P, S, T, U)  estrictive Layer (If observed):  Type: Depth (inches):  emarks:	o, P,T)	Remarks  very dark gray fine sand light brownish gray sand light gray sand dark reddish brown loamy fine sand  e Lining, M=Matrix.  Lindicators for Problematic Hydric Soils 3: 1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland
66 10 YR 3/1 12 10 YR 6/2 2-21 10 YR 7/2 1-26 5 YR 3/3  Sype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ydric Soil Indicators: Histol (A1) Polyvalue Below Surface (S8) (LRR; Unit of the property o	<sup>2</sup> Location: PL=Pore	very dark gray fine sand light brownish gray sand light gray sand dark reddish brown loamy fine sand  e Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :  1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)
10 YR 6/2 -21 10 YR 7/2 -26 5 YR 3/3   Appe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Apper C=Concentration, D=Depletion, RM=Reduced Matrix, CS9 (LRR S, T, U)  Black Histic (A3)	o, P,T)	light brownish gray sand light gray sand dark reddish brown loamy fine sand  e Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: 1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)
21 10 YR 7/2 26 5 YR 3/3  pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  dric Soil Indicators:	o, P,T)	light gray sand dark reddish brown loamy fine sand  e Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :     1 cm Muck (a9) (LRR O)     2 cm Muck (A10) (LRR S)     Reduced Vertic (F18) (outside MLRA 150A, B     Piedmont Floodplain Soils (F19) (LRR P, S, T)     Anomalous Bright Loamy Soils (F20)     (MLRA 153B)     Red Parent Material (TF2)     Very Shallow Dark Surface (TF12) (LRR T, U)     Other (Explain in Remarks)
De: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Iric Soil Indicators: Histo (A1) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P,T,U) Depleted Dark Surface (F6) Loamy Mucky Mineral (A7) (LRR P,T,U) Marl (F10) (LRR U) Depleted Dark Surface (F7) Redox Dark Surface (F8) Loamy Mucky Mineral (F1) (LRR P,T) Depleted Dark Surface (F8) Loamy Mucky Mineral (F1) (LRR P,T) Depleted Dark Surface (F8) Loamy Mucky Mineral (F10) (LRR U) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Loamy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F18) (MLRA 150A, Piedmont Floodplain Soils (F19) (MLRA 150A, Piedmont Floodplain Soils (F19) (MLRA 150A, Piedmont Surface (S7) (LRR P, S, T, U)  Type: Depth (inches):	o, P,T)	e Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)
De: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Iric Soil Indicators:  Histol (A1)	o, P,T)	e Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)
ric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P,T,U) Depleted Below Dark Surface (A11) Thin Dark Surface (S9) (LRR S, T, U Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)  Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sardy Mucky Mineral (S1) (LRR O, S) Sardy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) trictive Layer (If observed): Type: Depth (inches):	o, P,T)	Indicators for Problematic Hydric Soils <sup>3</sup> : 1 cm Muck (a9) (LRR O)2 cm Muck (A10) (LRR S)Reduced Vertic (F18) (outside MLRA 150A, BPiedmont Floodplain Soils (F19) (LRR P, S, T)Anomalous Bright Loamy Soils (F20)(MLRA 153B)Red Parent Material (TF2)Very Shallow Dark Surface (TF12) (LRR T, U)Other (Explain in Remarks)
Iric Soil Indicators:	o, P,T)	Indicators for Problematic Hydric Soils <sup>3</sup> : 1 cm Muck (a9) (LRR O)2 cm Muck (A10) (LRR S)Reduced Vertic (F18) (outside MLRA 150A, BPiedmont Floodplain Soils (F19) (LRR P, S, T)Anomalous Bright Loamy Soils (F20)(MLRA 153B)Red Parent Material (TF2)Very Shallow Dark Surface (TF12) (LRR T, U)Other (Explain in Remarks)
ric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P,T,U) To muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) Thin Dark Surface (S7) Loamy Gleyed Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) trictive Layer (If observed): Type: Depth (inches):	o, P,T)	Indicators for Problematic Hydric Soils <sup>3</sup> : 1 cm Muck (a9) (LRR O)2 cm Muck (A10) (LRR S)Reduced Vertic (F18) (outside MLRA 150A, BPiedmont Floodplain Soils (F19) (LRR P, S, T)Anomalous Bright Loamy Soils (F20)(MLRA 153B)Red Parent Material (TF2)Very Shallow Dark Surface (TF12) (LRR T, U)Other (Explain in Remarks)
ric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P,T,U) To muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) Thin Dark Surface (S7) Loamy Gleyed Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) trictive Layer (If observed): Type: Depth (inches):	o, P,T)	Indicators for Problematic Hydric Soils <sup>3</sup> : 1 cm Muck (a9) (LRR O)2 cm Muck (A10) (LRR S)Reduced Vertic (F18) (outside MLRA 150A, BPiedmont Floodplain Soils (F19) (LRR P, S, T)Anomalous Bright Loamy Soils (F20)(MLRA 153B)Red Parent Material (TF2)Very Shallow Dark Surface (TF12) (LRR T, U)Other (Explain in Remarks)
Histol (A1) Histic Epidon (A2) Black Histic (A3) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O, Variatified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Some Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Dark Surface (S7) (LRR P, T, U)  Popleted Below Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 0, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Dark Surface (S7) (LRR P, T, U)  Popleted Below Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U)  Trictive Layer (If observed): Type: Depth (inches):	o, P,T)	1 cm Muck (a9) (LRR Q) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Aredox Dark Surface (F6)  Stratffied Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratffied Layers (A5) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Stripped Matrix (S4) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches):	O, P,T)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)  5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Redox Depressions (F8)  1 cm Muck (A9) (LRR P,T) Depleted Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F13) (LRR P, T, U) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, Piedmont Floodplain Soils (F19) (MLRA 150A, Piedmont Floodplain Soils (F19) (MLRA 150A) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches):	О, Р,Т)	Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)
Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Some Mucky Mineral (A7) (LRR P,T,U)  Tom Muck (A9) (LRR P,T)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4) Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depleted Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F3) Depleted Dark Surface (F7) Redox Depressions (F8)  Marl (F10) (LRR U) Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR P, T, U) Umbric Surface (F13) (LRR P, T, U) Delta Orchric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, Piedmont Floodplain Soils (F19) (ML Anomalous Bright Loamy Soils (F20) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches):		Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Sometimes (LRR P, T, U) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Lorm Muck Presence (A8) (LRR U) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Orchric (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Derk Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches):		Anomalous Bright Loamy Soils (F20) (MLRA 153B)Red Parent Material (TF2)Very Shallow Dark Surface (TF12) (LRR T, U)Other (Explain in Remarks)
Organic Bodies (A6) (LRR P, T, U)Redox Dark Surface (F6)		(MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)
5 cm Mucky Mineral (A7) (LRR P,T,U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Depleted Orchric (F11) (MLRA 151) Depleted Orchric (F11) (MLRA 151) Depleted Orchric (F13) (LRR P, T, U) Depleted Orchric (F13) (LRR A151) Depleted Orchric (F13) (MLRA 151) Depleted Orchric (F13) (MLRA 151) Depleted Dark Surface (F7) Depleted Dark Surface (F7) Depleted Dark Surface (F7) Depleted Dark Surface (F7) Depleted Dark Surface (F1) Depleted Dark Surface (F7) Depleted Dark Surface (F7) Depleted Dark Surface (F1) Depleted Dark Surface (F7) Depleted Dark Surface (F1) Depleted Dark Su		Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):		Very Shallow Dark Surface (TF12) (LRR T, U)Other (Explain in Remarks)
		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Strictitive Layer (If observed):  Type:  Depth (inches):		
Thick Dark Surface (A12)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Thick Dark Surface (A12)iron-Manganese Masses (F12) (LRR		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, Piedmont Floodplain Soils (F19) (ML)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):		Indicators of hydrophytic vegetation and wetland
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):		
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, Sandy Redox (S5) Piedmont Floodplain Soils (F19) (ML Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20)  Dark Surface (S7) (LRR P, S, T, U)  strictive Layer (If observed): Type: Depth (inches):		hydrology must be present, unless disturbed or
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (ML Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type: Depth (inches):	150B)	problematic.
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) Dark Surface (S7) (LRR P, S, T, U)  strictive Layer (If observed):   Type:  Depth (inches):		
	RA 149A)	
strictive Layer (If observed): Type: Depth (inches):	(MLRA 149A, 153C	, 153D)
strictive Layer (If observed): Type: Depth (inches):		
Depth (inches):		
Depth (inches):		
marks:	Hydric Soil Presen	t? Yes <u>√</u> No
		(73.00 M/N-100)

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk	s	Sampling Date:	9/24/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	30A/30B
Investigator(s): Mike Arrants, Erin Heinen		Section, Township, Range	e: 32 26S 23E/31 26	S 23E	
Landform (hillslope, terrace, etc.):N/	Α	Local relief (concave, con-	vex, none): none	Stop	oe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.184588	Long:82.0	39704	Datu	um: WGS84
Soil Map Unit Name: Eaton mucky fine sand, d	epressional		_NWI classification: _	palustrine emerg	ent
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_No (	If no, explain in R	emarks)
Are Vegetation, Soil,	or Hydrology				✓_No
	or Hydrology		(If needed, explain a	ny answers in Re	emarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>			ransects, importa	ant features,	etc.
Hydrophytic Vegetation Present?	Yes No		•	<u> </u>	
Hydric Soil Present?	YesNo	Is the Sampled Area within a Wetland? Yes ✓ No			
Wetland Hydrology Present?	Yes/ No				
Remarks:			-		
HYDROLOGY		·····			
Wetland Hydrology Indicators:			Secondary Indicators	s (minimum of two	o required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil Cr	racks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veget	tated Concave Si	urface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patte	rns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	RU)	Moss Trim Line	es (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season W	ater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burrov	ws (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Visit	ble on Aerial Imag	gery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic Po	osition (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquita	rd (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral Te	est (D5)	
Field Observations:					
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No	Depth (inches): 0	Wetland		
Saturation Present?	Yes No	Depth (inches):0	Hydrology		
(includes capillary fringe)		•	1.1	′es <u> </u>	
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previou	is inspections), if available:			
Remarks:					
		•			

VEGETATION - Use scientific nar	nes of plants			Sampling Po	int:30	0A/30B
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.		-		Number of Dominant Species	_	
2.				That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.		<del></del>		Total Number of Dominant	_	
4.				Species Across All Strata:	<u>5</u>	(B)
5.		<del></del>		Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.			-	Prevalance Index worksheet:		
7.	0	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)	Ū	- 10(a) 0000	<b>,</b>		1=	
1. Acer rubrum	10	yes	OBL	<u> </u>	2=	_
Pinus palustrus	2	no	FACU	<del></del>	- 3=	_
3.				· · · · · · · · · · · · · · · · · · ·	4=	_
4.					5=	_
5.					A)	— <sub>(В)</sub>
6.				—— (	·/	- <sup>(D)</sup>
7.				Prevalance Index = B/A =		
7.	12	= Total Cove		Hydrophytic Vegetation Indicate	ore:	
Shrub Stratum (Plot size:	-	- Total Cove	<b>71</b>	✓ Dominance Test is 50%	<i>n</i> 3.	
Baccharis sp.			EAC	Prevalence Index is ≤3.0 <sup>1</sup>		
	2 2	yes	FAC FAC	· <del>  ····</del>	ogototion <sup>1</sup> (Evr	oloio\
Myrica cerifera     3.		yes	FAC	Problematic Hydrophytic V	egetation (Exp	nain)
				1		
<b>4</b> . <b>5</b> .	. ———			Indicators of hydric soil and wetla		nust
6.	· ——			be present, unless disturbed or pr Definitions of Vegetation Strata		·
7.				Definitions of Vegetation Strata	•	
1.	4	- Total Cave		<del> </del>		
Herb Stratum (Plot size:)	. 4	= Total Cove	ŧ.	Tree- Woody plants, excluding wood approximately 20 ft (6m) or more in		/7 G
	70		OBL	cm) or larger in diameter at breast h		(7.0
Ludwigia peruviana     Juncus effusus	70	yes	OBL FACW	4		
		no		Sapling- Woody plants, excluding was proximately 20 ft (6m) or more in		than 2
Rhexia spp.      Resistant homitement	2	no	FACW	in. (7.6 cm) DBH.	neight and less	liiaii 3
Panicum hemitomon	2	no	OBL	<b>-</b>		
5. Euthamia spp.	2 2	no	FAC	Shrub- Woody plants, excluding wo approximately 3 to 20 ft (1 to 6 m) in	- ·	
6. Muhlenbergia capillaris		no	FACU	d '''	•	
7. Eupatorium capillifolium	2	no	FACU	Herb- All herbaceous (non-woody)p		
Pontederia cordata	2	no	OBL	herbaceous vines, regardless of size plants, except woody vines, less that		
Sagittaria graminea	2	no	OBL	m) in height.	n approximately	/ 3 IL ( I
10. Azola spp.	2	no	OBL	<u>.</u>		
11. Woodwardia virginica	2	no	OBL	Woody vine- All woody vines, regar	aless of neight.	
12.						
	103	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
Vitus rotundifolia	2	yes	FAC	4		
2.			•			
3.				4		
4.				Hydrophytic		
5.				Vegetation Present? Yes _	No	<u>.</u>
	2	= Total Cove	er			
Remarks: (If observed, list morph	ological adapta	ations below).				
Percent cover estimates based or	n meandering s	survey of the b	roader co	mmunity.		

SOIL								Sampling Point: 30A/3		
		to the dep	oth needed to do			confirm the ab	sence of indicators.	)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	%	Features Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
interiory	Otier (molety	- ~	- Color (molet)	_~_			TOALG	Tomako		
)-6	10 YR 2/1							black mucky fine sand		
5-29	10 YR 7/1							light gray fine sand		
29-33	N 5/0							gray sandy clay loam		
3-80	N 5/0							gray sandy clay		
<u></u>	tti D-D	Indian Dist	Ded and Makin	<u> </u>		2	21 DI D	- I AA AA-A-		
	oncentration, D=Dep I Indicators:	letion, RM	=Reduced Matrix,	US=Cove	red of Coated	sand Grains.	-Location: PL=Por	e Lining, M=Matrix.		
•				Doha	rakia Balaw Cir	rfano (CO) (I DD	1 C T III	Indicators for Problematic Hydric Soils 3:		
Histol (	AT) Epidon (A2)					rface (S8) (LRR		1 cm Muck (a9) (LRR O)		
	Histic (A3)					S9) ( <b>LRR S, T,</b> I ral (F1) (LRR <b>O</b> )	•	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B)		
	ien Sulfide (A4)				ny Gleved Matr		,	Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ed Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)		
	c Bodies (A6) (LRR I	P. T. U)			x Dark Surface			(MLRA 153B)		
5 cm N	fucky Mineral (A7) (L	DD D T III		—— Denle	eted Dark Surfa	ace (E7)		Red Parent Material (TF2)		
	Presence (A8) (LRR				x Depressions	٠,,		Very Shallow Dark Surface (TF12) (LRR T, U)		
		0,			•	• •				
1 cm N	fuck (A9) (LRR P,T)				(F10) (LRR U)			Other (Explain in Remarks)		
Deplete	ed Below Dark Surfac	ce (A11)		Depl	eted Orchric (F	11) (MLRA 151)	)			
Thick [	Dark Surface (A12)					R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland			
Coast I	Prairie Redox (A16) (	MLRA 150	)A)			)	hydrology must be present, unless disturbed or			
	Mucky Mineral (S1) (		•	Delts	Orchric (F17)	(MI RA 151)	and the second s	problematic.		
	Gleyed Matrix (S4)	LKK 0, 3)				8) (MLRA 150A	150P)	•		
	Redox (S5)					n Soils (F19) (MI				
	ed Matrix (S6)				•	٠, , ,	)) (MLRA 149A, 1530	1530)		
	` ,				naious brigin L	oarry Sons (1 20	) (MEION 140A, 100C	, 1000)		
	urface (S7) (LRR P,									
	Layer (If observed)	):								
	Type:									
Remarks:	Depth (inches):						Hydric Soil Preser	t? Yes✓ No		

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk	<del>,</del>	_ Sampling Da	te: 9/28/09
Applicant/Owner: Progress Energy Florida, Inc	<b>3</b> .	State: FL		Sampling Po	nt: 32-33
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	e: <u>32 26S 23E</u>		
Landform (hillslope, terrace, etc.): N	/A	Local relief (concave, cor	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.18162	9Long: <u>-82.</u> 0	39617		Datum: WGS84
Soil Map Unit Name: Eaton mucky fine sand, o			_ NWI classification		mergent
Are climatic / hydrologic conditions on the site t	ypical for this time of year?	Yes	_ No	_ (If no, explair	in Remarks)
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstance	s normal?	Yes✓No
	or Hydrology		(If needed, explai	n any answers	in Remarks)
SUMMARY OF FINDINGS - Attach si			ransects, impo	rtant featur	es, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes/ No	Is the Sampled Area v	vithin a Wetland?	Yes/	No
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum	of two required)
· · ·	chock all that apply)			Cracks (B6)	or two required?
Primary Indicators (minimum of one is required	Water-Stained Leaves	(PO)		` ,	vo Surface (PR)
Surface Water (A1)		(69)		atterns (B10)	ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	DD 11)		, ,	
Saturation (A3)	Marl Deposits (B15) (L	•	Moss Trim I		·
Water Marks (B1)	Hydrogen Sulfide Odor			Water Table (	C2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bu	, ,	
Drift Deposits (B3)	Presence of Reduced I	, ,		/isible on Aeria	Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	, ,		Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	•	Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7	)Other (Explain in Rema	irks)	FAC Neutra	I Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	_			
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes _<	No
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previo	ous inspections), if available	<b>:</b>		
Remarks:					

VEGETATION - Use scientific na	mes of plants	,			Point:	32-33
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>4</u>	(A)
3.				Total Number of Dominant		
4.				Species Across All Strata:	<u>4</u>	(B)
5.	-			Percent of Dominant Species	100.00	/ A / D \
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
Sapling Stratum (Plot size:)	0	= Total Cove	r		Multiply by: x1=	
1.				· · · · · · · · · · · · · · · · · · ·	x2=	
2.	_				x3=	_
3.				. ·	x4=	
4.					x5=	
5.				Column Totals:	(A)	_(B)
6.				1		
7.				Prevalance Index = B/A =		
Olympia (Distriction	0	= Total Cove	r	Hydrophytic Vegetation Indica	tors:	
Shrub Stratum (Plot size:				✓ Dominance Test is 50%	1	
Baccharis halimifolia	2	yes	FAC	Prevalence Index is ≤3.0¹		
2.	<del>-</del>			Problematic Hydrophytic	Vegetation (Exp	olain)
3.	<u> </u>			<b>.</b>		
<b>4</b> . <b>5</b> .				Indicators of hydric soil and wet		nust
6.	-			be present, unless disturbed or properties of Vegetation Strategy		
7.				Definitions of Vegetation Strat	a.	
1.		= Total Cove	<u> </u>	Tree- Woody plants, excluding wo	ody vinos	
Herb Stratum (Plot size:	_	- 10tal 00 <b>v</b> e	•	approximately 20 ft (6m) or more in		(7.6
1. Juncus spp.	-/ 35	yes	OBL	cm) or larger in diameter at breast		(,,,,
Ludwigia peruviana	20	yes	OBL	Sapling- Woody plants, excluding	woody vines,	
3. Eupatorium capillifolium	15	no	FACU	approximately 20 ft (6m) or more in		than 3
Panicum repens	5	no	FACW	in. (7.6 cm) DBH.		
5. Phyla nodiflora	5	no	FACW	Shrub- Woody plants, excluding w	voody vines,	
6. Bacopa spp.	5	no	OBL	approximately 3 to 20 ft (1 to 6 m)	in height.	
7. Panicum hemitomon	2	no	OBL	Herb- All herbaceous (non-woody)	plants, including	
8. Setaria spp.	2	no	FAC	herbaceous vines, regardless of si	ze. Includes woo	ody
<ol><li>Rhyncospora spp.</li></ol>	2	no	FACW	plants, except woody vines, less th	ian approximately	y 3 ft (1
10. Eleocharis spp.	2	no	OBL	m) in height.		
11. Paspalum notatum	2	no	FACU	Woody vine- All woody vines, rega	ardless of height.	
12. Crotalaria sp	2	no	FACU	<u> </u>		
Woody Vine Stratum (Plot size:_	97 )	= Total Cove	r			
Vitus rotundifolia	5	yes	FAC	]		
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	<u>.</u>
	5	= Total Cove	r			

Percent cover estimates based on meandering survey of the broader community. Grazed.

Remarks: (If observed, list morphological adaptations below).

SOIL	il: Polk- Eaton							Sampling Point: 32-33
Profile De	scription: (Describe t	o the dep	th needed to doc	ument the	indicator or c	onfirm the abse	ence of indicators.)	
Depth	Matrix			<del></del>	Features			
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type'	Loc²	Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
29-33	N 5/0			—				gray sandy clay loam
33-80	N 5/0			—				gray sandy clay
								g.u, ouru, our
¹Type: C=	Concentration, D=Deple	etion, RM=	Reduced Matrix, 0	CS=Cover	ed or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric So	il Indicators:						Ir	ndicators for Problematic Hydric Soils <sup>3</sup> :
Histol						ace (S8) <b>(LRR S</b>		1 cm Muck (a9) (LRR O)
	Epidon (A2)			<del></del>	•	9) (LRR S, T, U)	_	2 cm Muck (A10) (LRR S)
_	Histic (A3)				y Mucky Minera			Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				y Gleyed Matrix	(F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				ted Matrix (F3)		_	Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR P	, T, U)			x Dark Surface	. ,		(MLRA 153B)
5 cm	Mucky Mineral (A7) (LF	RR P,T,U)		Deple	ted Dark Surfac	e (F7)	_	Red Parent Material (TF2)
_✓_Muck	Presence (A8) (LRR L	J)		Redo:	x Depressions (	F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl (	F10) (LRR U)		_	Other (Explain in Remarks)
		- (444)			ted Orchric (F1	1) /MI DA 151)	_	
	ted Below Dark Surface	e (A11)			•	, ,	0.5%	
_	Dark Surface (A12)				-	ses (F12) (LRR	O, P, I) 3	ndicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (N	/ILRA 150	A)	Umbr	ic Surface (F13	) (LRR P, T, U)	h	ydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (L	.RR O. S)		Delta	Orchric (F17) (I	MLRA 151)	р	roblematic.
	Gleyed Matrix (S4)			Redu	ced Vertic (F18)	(MLRA 150A, 1	50B)	
	Redox (S5)					Soils (F19) (MLF	•	
	ed Matrix (S6)						MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P, S	T 11				, , , ,		•
	e Layer (If observed):					I		
	Type:					ŀ		
	Depth (inches):					l <sub>1</sub>	Hydric Soil Present	? Yes ·√ No .
Remarks:	Depart (monocy):						nyana con i raccin	

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk	Sampling	Date: 9/29/09		
Applicant/Owner: Progress Energy Florida, Inc.	State: FL	Sampling	Point: 34			
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	Section, Township, Range: 32 26S 23E			
Landform (hillslope, terrace, etc.):N/.	Α	Local relief (concave, con	Local relief (concave, convex, none): none Stope (%			
Subregion (LRR or MLRA): LRR U	Lat: 28.18	:0169 Long: -82.0				
Soil Map Unit Name: Pomona fine sand			NWI classification: N/A	•		
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes _✓	_ No (If no, exp	plain in Remarks)		
• • •	significantly disturbed?	Are circumstances normal?	Yes <u>✓</u> No			
	naturally problematic?	(If needed, explain any answ	ers in Remarks)			
SUMMARY OF FINDINGS - Attach sit			•	•		
Hydrophytic Vegetation Present?	Yes No		,			
Hydric Soil Present?	Yes✓No	Is the Sampled Area w	vithin a Wetland? Yes	No		
Wetland Hydrology Present?	Yes✓ No	•				
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:	· .		Secondary Indicators (minimum	um of two required)		
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil Cracks (B6	3)		
✓ Surface Water (A1)	Water-Stained Lea	ves (B9)	Sparsely Vegetated Cor	ncave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13	• •	Drainage Patterns (B10			
✓ Saturation (A3)	Marl Deposits (B15	•	Moss Trim Lines (B16)	,		
Water Marks (B1)	Hydrogen Sulfide C		Dry-Season Water Tabl	e (C2)		
Sediment Deposits (B2)		eres on Living Roots (C3)	Crayfish Burrows (C8)	0 (02)		
Drift Deposits (B3)	Presence of Reduc	- ,	Saturation Visible on Ae	urial Imagen, (CQ)		
Algal Mat or Crust (B4)		tion in Tilled Soils (C6)	Geomorphic Position (D	,		
Iron Deposits (B5)	Thin Muck Surface	• •	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	<del></del>	• •	FAC Neutral Test (D5)			
Field Observations:	Other (Explain in A	Circuitoj	TAG Neutral Test (B5)			
Surface Water Present?	Yes √ No	Depth (inches): 0-6				
Water Table Present?		Depth (inches):0				
			Wetland			
Saturation Present?	163 <u> </u>	Depth (inches): 0	Hydrology			
(includes capillary fringe)  Describe Recorded Data (stream gauge, monito	ring well serial photos pr	avious inspections) if available	Present? Yes <u>✓</u>	No		
See Treserved Bata (Stream gauge, memo	ing wen, denai photos, pr	evidus irispections), ii avaliable.	•			
Remarks:						

VEGETATION - Use scientific na	mes of plants			Sampling Point:	34
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	!
2.				That Are OBL, FACW, or FAC: $\frac{1}{}$	(A)
3.				Total Number of Dominant	
4.	-			Species Across All Strata:	(B)
5.	-			Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	<u> </u>	Total % Cover of: Multiply by	
Sapling Stratum (Plot size:)	U	- Total Cove	•	OBL species x1=	
· · · · · · · · · · · · · · · · · · ·					
1. 2.				· ————————————————————————————————————	
	- <del> </del>			FAC speciesx3=	
3.	<del></del>			FACU speciesx4=	_
4.				UPL speciesx5=	
5.				Column Totals:(A)	(B)
6.				· ·	
7.				Prevalance Index = B/A =	
		= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (E	xplain)
3.	-				
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				1	
		= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:				approximately 20 ft (6m) or more in height and 3 i	n. (7.6
1. Cyperus spp.	90	yes	FACW	cm) or larger in diameter at breast height (DBH).	
2.				Sapling- Woody plants, excluding woody vines,	
3.	•			approximately 20 ft (6m) or more in height and les	s than 3
4.				in. (7.6 cm) DBH.	
5.	• ——			Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				<b> </b>	_
8.	<del></del>			Herb- All herbaceous (non-woody)plants, includin	•
9				herbaceous vines, regardless of size. Includes we plants, except woody vines, less than approximate	
5				m) in height.	:iy
10. 11.	· ——			<b>l</b> ' -	
				Woody vine- All woody vines, regardless of heigh	t.
12.					į
	90	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4				Hydrophytic	
5.				Vegetation Present? YesNo_	<u>-</u>
	0	= Total Cove	r	<u></u>	
Remarks: (If observed, list morph	ological adapta	ations below).			
Percent cover estimates based of	n meandering s	survey of the b	roader cor	nmunity.	

County/soil:	Dalk	Domona

Profisio Description (Description (Description (Description (Description (Description) (Description) (Description) (Part Matrix (Description) Page 2000 (Incited) 96 Type Loc Teadure Very dark gray fine sand (Ingit Exemiting Description) Page 300 (Incited) 97 (Incited) Page 300 (	SOIL								Sampling Point:34
(inches) Color (moist) % Color (moist) % Type* Loc* Texture Remarks    Color (moist) % Color (moist) % Type* Loc* Texture Remarks   Color (moist) % Type* Loc* Texture Remarks Remarks Remarks	Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the ab	sence of indicators	5.)
Very dark gray fine sand   Light brownish gray sand   Light brownish gray sand   Light brownish gray sand   Light brownish gray sand   Light gray sand sand Gray sand gray sand sand Gray sand gray sand sand Gray sand gray sand sand Gray sand gray sand sand Gray sand gray sand sand Gray sand gray sand sand Gray sand	Depth	Matrix			Redox	Features			
Fight brownish gray sand   light brownish gray sand   light gray sand   light gray sand   light gray sand   light gray sand   light gray sand   light gray sand   dark reddish brown loarny fine sand   dark reddish brown loarny fine sand	(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
Fight brownish gray sand   light brownish gray sand   light gray sand   light gray sand   light gray sand   light gray sand   light gray sand   light gray sand   dark reddish brown loarny fine sand   dark reddish brown loarny fine sand	0-6	10 YR 3/1							very dark gray fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.								-	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thydric Soil Indicators: Histol (A1) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) Thin Dark Surface (S9) (LRR S, T, U) Loarny Mucky Mineral (F1) (LRR O) Striatified Layers (A5) Depleted Matrix (F2) Depleted Dark Surface (F1) Depleted Dark Surface (F7) Redox Depressions (F8) Depleted Dark Surface (F7) Depleted Below Dark Surface (A1) Thick Dark Surface (A1) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (A7) (LRR P, T, U) Depleted Pelox Dark Surface (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (A7) (LRR O, S) Peldmont Floodplain Soils (F2) Marl (F10) (LRR U) Depleted Dark Surface (A11) Thick Dark Surface (A12) Depleted Dark Surface (A12) Depleted Dark Surface (A13) Thick Dark Surface (A16) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (outside MLRA 150A) Dark Surface (S7) (LRR O, S) Piedmont Floodplain Soils (F20) (MLRA 150A) Piedmont Floodplain Soils (F20) (MLRA 150A) Piedmont Floodplain Soils (F20) (MLRA 151) Depleted Dark Surface (A16) Dark Surface (A16) Dark Surface (A17) Popleted Dark Surface (A16) Dark Surface (A16) Dark Surface (A16) Dark Surface (A16) Dark Surface (A16) Dark Surface (A16) Dark Surface (A16) Dark Surface (A17) Depleted Dark Surface (A17) Depleted Dark Surface (A17) Piedmont Floodplain Soils (F20) (MLRA 150A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (									
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Histor Epidon (A2)  Black Histic (A3)  Hydrogen Sulfiade (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  1 cm Muck (A9) (LRR N, T, U)  Histor Epidon (A2)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Endow Dark Surface (A12)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators for Problematic Hydric Soils 1:  1 cm Muck (A9) (LRR S)  Enduced Vertic (F18) (MLRA 151)  Thick Dark Surface (A11)  Depleted Dark Surface (F7)  Endow Dark Surface (A12)  Umbric Surface (F13) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Medox (S5)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes _ ✓ No	21-20	3 11( 3/3				<del></del>	<del></del>		dark reduish brown barry line sand
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Histor Epidon (A2)  Black Histic (A3)  Hydrogen Sulfiade (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  1 cm Muck (A9) (LRR N, T, U)  Histor Epidon (A2)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Endow Dark Surface (A12)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators for Problematic Hydric Soils 1:  1 cm Muck (A9) (LRR S)  Enduced Vertic (F18) (MLRA 151)  Thick Dark Surface (A11)  Depleted Dark Surface (F7)  Endow Dark Surface (A12)  Umbric Surface (F13) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Medox (S5)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes _ ✓ No		-						<del></del>	
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Histor Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  I cm Muck (A9) (LRR D, T)  Depleted Dark Surface (F1) (LRR U)  Depleted Below Dark Surface (A12)  Tom Muck (A9) (LRR D, T)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Peletom or Floodplain Soils (F19) (LRR P, S, U)  I com Muck (A10) (LRR P, S, T)  Anomalous Bright Loamy Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Indicators for Problematic Hydric Soils 3:  1 cm Muck (A9) (LRR S, T, U)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Communication for Problematic Hydric Soil Present?  Yes No									
Histol (A1)	Type: C=	Concentration, D=Dep	etion, RM	Reduced Matrix, 0	CS=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Scr Mucky Mineral (A7) (LRR P,T,U) Redox Dark Surface (F6) Muck Presence (A8) (LRR U) Piedmont Floodplain Soils (F19) (LRR T,U) Redox Depressions (F8) Popleted Dark Surface (F7) Red Parent Material (TF2) ✓ Muck Presence (A8) (LRR U) Popleted Below Dark Surface (A11) Thick Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Phydric Soil Present? Prop: Depth (inches): Hydric Soil Present? Yes _ No	Hydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Black Histic (A3)	Histol	(A1)			Polyv	ralue Below Su	rface (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F2) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Fed Parent Material (TF2)  ✓ Muck Presence (A8) (LRR P, T, U) Pepleted Dark Surface (F7) Red Parent Material (TF2)  ✓ Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Yes _ ✓ No					Thin	Dark Surface (	89) <b>(LRR S, T, l</b>	J)	2 cm Muck (A10) (LRR S)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Pepleted Matrix (F3) Pepleted Matrix (F3) Pepleted Matrix (F3) Pepleted Matrix (F3) Pepleted Matrix (F3) Pepleted Matrix (F3) Pepleted Dark Surface (F6) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Below Dark Surface (TF12) (LRR T, U) Pepleted Below Dark Surface (A11) Pepleted Below Dark Surface (A11) Pepleted Below Dark Surface (A12) Pepleted Orchric (F11) (MLRA 151) Pinck Dark Surface (A12) Pepleted Orchric (F13) (LRR O, P,T) Perudo (LRR O, P,T) Pepleted Orchric (F13) (LRR O, P,T) Pepleted Orchric (F13) (LRR O, P,T) Pepleted Orchric (F13) (LRR O, P,T) Perudo (LRR O, P,T) Pepleted Orchric (F13) (LRR O, P,T) Pepleted Orchric (F13) (LRR O, P,T) Pepleted Orchric (F13) (LRR O, P,T) Pepleted Orchric (F13) (LRR O, P,T) Pepleted Orchric (F13) (LRR O,	Black	Histic (A3)			Loam	ny Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Organic Bodies (A6) (LRR P, T, U)									Piedmont Floodplain Soils (F19) (LRR P, S, T)
									Anomalous Bright Loamy Soils (F20)
✓ Muck Presence (A8) (LRR U)       Redox Depressions (F8)      Very Shallow Dark Surface (TF12) (LRR T, U)         _ 1 cm Muck (A9) (LRR P,T)       Marl (F10) (LRR U)      Other (Explain in Remarks)         _ Depleted Below Dark Surface (A11)      Depleted Orchric (F11) (MLRA 151)         _ Thick Dark Surface (A12)      Iron-Manganese Masses (F12) (LRR O, P,T)       _³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         _ Sandy Mucky Mineral (S1) (LRR O, S)      Delta Orchric (F17) (MLRA 151)       problematic.         _ Sandy Redox (S5)      Reduced Vertic (F18) (MLRA 150A, 150B)         _ Sandy Redox (S5)      Piedmont Floodplain Soils (F19) (MLRA 149A)         _ Stripped Matrix (S6)      Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         _ Dark Surface (S7) (LRR P, S, T, U)	Organ	ic Bodies (A6) (LRR F	P, T, U)		Redo	x Dark Surface	e (F6)		(MLRA 153B)
Muck Presence (A8) (LRR U) Redox Depressions (F8) Other (Explain in Remarks)  Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P,T) Indictors of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 150A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Destrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	5 cm	Mucky Mineral (A7) (L	RR P,T,U)		Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
	_				Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Prestrictive Layer (If observed):  Type:  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jendicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Predmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No			-,		Marl	(F10) (LRR U)			
Thick Dark Surface (A12)  Liron-Manganese Masses (F12) (LRR O, P,T)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No			- (Δ11)					1	
Coast Prairie Redox (A16) (MLRA 150A)			æ (A11)			,			•
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Destrictive Sandy Mucky Mineral (S1) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Problematic: Reduced Vertic (F18) (MLRA 150B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Problematic: Reduced Vertic (F17) (MLRA 151) Problematic: Reduced Vertic (F18) (MLRA 150B)  Hydric Soil Present?  Problematic: Reduced Vertic (F17) (MLRA 151) Problematic: Reduced Vertic (F18) (MLRA 150B)  Hydric Soil Present?  Problematic: Reduced Vertic (F18) (MLRA 150B)  Hydric Soil Present?	_	` ,	MI DA 450	۸١.	_	•	, ,,		
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Selection of Flore of Fl				A)		•		,	, ,
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No			LRR O, S)				•	4500)	problematic.
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):					_	•		•	
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):									A 450D)
Restrictive Layer (If observed):    Type:   Depth (inches):   Hydric Soil Present? Yes✓_ No					Anon	naious Bright L	oamy Soils (F20	) (MLRA 149A, 153	C, 153D)
Type:            Depth (inches):            No									
Depth (inches): Hydric Soil Present? Yes No	Restrictiv	• • •	:						
									V
reinans.	Domarka	Depth (inches):						Invaric Soil Prese	nt/ Yes
	Remarks:								
	ŀ								
	ŀ								
									•

Project/Site: Levy Nuclear Plant - Transmission	ı Lines	City/County: Polk		_Sampling Date:_	9/29/09	
Applicant/Owner: Progress Energy Florida, Inc	C	State:FL		Sampling Point:	35	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 32 26S 23E				
Landform (hillslope, terrace, etc.):N	i/A	Local relief (concave, con-	Local relief (concave, convex, none): none Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: <u>28.17951</u> 4	4 Long: <u>-82.0</u>	)39704	Da	atum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	: _palustrine eme	rgent	
Are climatic / hydrologic conditions on the site t	typical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Ye	esNo	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in F	Remarks)	
SUMMARY OF FINDINGS - Attach s	ite map showing sampli	ing point locations, t	ransects, impor	rtant features	, etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	YesNo	>	
Wetland Hydrology Present?	Yes No	<u>]</u>				
HADBOI OCA	<del></del>					
Wetland Hydrology Indicators:			Secondary Indicate	tors (minimum of t	hwo required)	
Primary Indicators (minimum of one is required	t check all that apply)		Surface Soil		wo required;	
✓ Surface Water (A1)	Water-Stained Leaves (	(RQ)	<del></del>		Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	(09)	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)			
✓ Saturation (A3)	Aquatic Fauria (B13)  Mari Deposits (B15) (LF	ออ เท	Moss Trim Li			
Water Marks (B1)	Hydrogen Sulfide Odor	•		mes (616) Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burr	, ,		
Drift Deposits (B2)	Presence of Reduced Ir					
Algal Mat or Crust (B4)	Recent Iron Reduction i	• •	Saturation Visible on Aerial Imagery (C9)Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7			Shallow Adultard (D3)FAC Neutral Test (D5)			
Field Observations:	)Outer (Explain in Figure	ikaj	17,0,1000	1631 (00)		
Surface Water Present?	Yes No	Denth (inches): 0-12				
Water Table Present?	Yes No		1			
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)	110	_ Depai (mones)	Hydrology Present?	Yes ✓ No	•	
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previo	us inspections), if available				

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling F	Point:	35
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.	00.0.	ороско.	Otatao	Number of Dominant Species		
2.				That Are OBL, FACW, or FAC:	<u>1</u>	(A)
3.				Total Number of Dominant		
4.				Species Across All Strata:	<u>1</u>	(B)
5.				4 '		
6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.	<del></del>	-		Prevalance Index worksheet:		
<i>i</i> .		= Total Cove		i	وريط والمشارو	
Sapling Stratum (Plot size:)	U	- Total Cove	1	Total % Cover of: M OBL species x1=	ultiply by:	
				·		_
1. 2.				· · — — —		_
3.	·	<del></del>	<del> </del>	FAC species x3=		-
				FACU speciesx4=_		_
<b>4</b> . <b>5</b> .				UPL species x5=x5=		- <sub>(D)</sub>
				Column Totals:(A)		_(B)
6.						
7.		<del></del>		Prevalance Index = B/A =		
		= Total Cove	r	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0 <sup>1</sup>	. 1 -	
2.				Problematic Hydrophytic Veget	tation' (Exp	ılain)
3.				<u> </u>		
<b>4</b> . <b>5</b> .				<sup>1</sup> Indicators of hydric soil and wetland h		nust
				be present, unless disturbed or proble	matic.	
6.				Definitions of Vegetation Strata:		
7.						
Herb Stratum (Plot size:)		= Total Cove	r	Tree- Woody plants, excluding woody vi approximately 20 ft (6m) or more in heig		(7.6
1. Cyperus spp.	85	yes	FACW	cm) or larger in diameter at breast heigh		•
Bacopa spp.	10	no	OBL	Sapling- Woody plants, excluding wood		
Eupatorium capillifolium	2	no	FACU	approximately 20 ft (6m) or more in heig		than 3
Ludwigia linearis		no	OBL	in. (7.6 cm) DBH.		
Ludwigia repens		no	OBL	Shrub- Woody plants, excluding woody	vines	
Cuphea carthagenensis	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in heigh		
7. Panicum repens	2	no	FACW		_	
8.			TACVV	Herb- All herbaceous (non-woody)plants herbaceous vines, regardless of size. Ir		dv
9.				plants, except woody vines, less than ap		
10.				m) in height.	p. 0/	0 (.
11.	-			Woody vine- All woody vines, regardles	s of height	
12.		<del></del>		woody vine- All woody vines, regardles	o or ricigitt.	
12.	105	= Total Cove	<u> </u>			
Woody Vine Stratum (Plot size:		- Total Cove				
1.				]		
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes <u>√</u>	No	<u>.</u>
	0	= Total Cove	r	1		
Remarks: (If observed, list morpho Percent cover estimates based or			roader cor	mmunity		

SOIL								Sampling Point:	
	escription: (Describe	to the dep	oth needed to doc			confirm the ab	sence of indicators.	)	
Depth	Matrix				Features	<del></del>			
inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks	
)-6	10 YR 3/1							very dark gray fine sand	
5-12	10 YR 6/2							light brownish gray sand	
2-21	10 YR 7/2							light gray sand	
21-26	5 YR 3/3	_		_				dark reddish brown loamy fine sand	
		_		_					
	Concentration, D=Dept	etion, RM	=Reduced Matrix,	CS=Cove	red or Coated S	and Grains.		e Lining, M=Matrix.	
•	il Indicators:							Indicators for Problematic Hydric Soils 3:	
Histol	, ,				value Below Sur			1 cm Muck (a9) (LRR O)	
	Epidon (A2)				Dark Surface (\$		•	2 cm Muck (A10) (LRR S)	
	Histic (A3)				ny Mucky Miner			Reduced Vertic (F18) (outside MLRA 150A, B)	
	gen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)	
	fied Layers (A5)				leted Matrix (F3)			Anomalous Bright Loamy Soils (F20)	
Orgai	nic Bodies (A6) (LRR P	γ, Τ, υ)			ox Dark Surface			(MLRA 153B)	
5 cm	Mucky Mineral (A7) (LI	RR P,T,U)	)	Dep	leted Dark Surfa	ice (F7)		Red Parent Material (TF2)	
✓ Muck	Presence (A8) (LRR I	J)		Red	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)	
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)	
Deple	ted Below Dark Surfac	e (A11)		Dep	leted Orchric (F	11) (MLRA 151)	)		
Thick	Dark Surface (A12)			lron-	Manganese Ma	sses (F12) (LR	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland	
Coas	Prairie Redox (A16) (I	MLRA 150	DA)	Umbric Surface (F13) (LRR P, T, U)				hydrology must be present, unless disturbed or	
Sand	y Mucky Mineral (S1) (I	LRR O, S)	)	Delt	a Orchric (F17)	(MLRA 151)		problematic.	
Sand	y Gleyed Matrix (S4)			Red	uced Vertic (F18	B) (MLRA 150A,	, 150B)		
Sand	Redox (S5)			Pied	mont Floodplain	Soils (F19) (MI	LRA 149A)		
Stripp	ed Matrix (S6)			Anoi	malous Bright Lo	oamy Soils (F20	) (MLRA 149A, 153C	C, 153D)	
Dark	Surface (S7) (LRR P, S	S, T, U)							
Restrictiv	e Layer (If observed):	:				-			
	Type:						l		
	Depth (inches):					<u>-</u>	Hydric Soil Preser	nt? Yes <u>√</u> No	
Remarks:									
			•						

Project/Site: Levy Nuclear Plant - Transmission	Lines		City/County: Polk		_Sampling Date:_	9/29/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	36		
Investigator(s): Stacy Rizzo, Erin Heinen			Section, Township, Range: 32 26S 23E				
Landform (hillslope, terrace, etc.): N//	Α		Local relief (concave, convex, none): none Slope (%):			ope (%):	
Subregion (LRR or MLRA): LRR U	·····	Lat: <u>28.177232</u>	Long:82.0	39707	Da	tum: WGS84	
Soil Map Unit Name: Eaton mucky fine sand, de	pressional			NWI classification:	palustrine emer	gent	
Are climatic / hydrologic conditions on the site ty	pical for this tim	ne of year?	· Yes	. No	(If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology_		significantly disturbed?	Are circumstances		sNo	
			naturally problematic?	(If needed, explain	any answers in F	Remarks)	
SUMMARY OF FINDINGS - Attach sit				ansects, impor	tant features	, etc.	
Hydrophytic Vegetation Present?		No		•		-	
Hydric Soil Present?	Yes	No	Is the Sampled Area w	ithin a Wetland?	Yes/_No	·	
Wetland Hydrology Present?	Yes	No					
Remarks:							
HYDROLOGY	·						
Wetland Hydrology Indicators:				Secondary Indicate	ors (minimum of t	wo required)	
Primary Indicators (minimum of one is required;	check all that a	pply)		Surface Soil (	Cracks (B6)		
✓ Surface Water (A1)	Water-St	tained Leaves (E	39)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic F	Fauna (B13)		Drainage Patterns (B10)			
✓ Saturation (A3)	Marl Dep	oosits (B15) <b>(LR</b> i	R U)	Moss Trim Li	nes (B16)		
Water Marks (B1)	Hydroge	n Sulfide Odor (	C1)	Dry-Season \	Water Table (C2)		
Sediment Deposits (B2)	Oxidized	Rhizospheres of	n Living Roots (C3)	Living Roots (C3)Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence	e of Reduced Iro	n (C4)	Saturation Vis	Nisible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent li	ron Reduction in	Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muc	ck Surface (C7)	Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (E	xplain in Remarl	(S)	FAC Neutral	Test (D5)		
Field Observations:							
Surface Water Present?	Yes✓	No	Depth (inches): 0-24				
Water Table Present?	Yes	No	Depth (inches): 0	Wetland			
Saturation Present?	Yes	No	Depth (inches): 0	Hydrology			
(includes capillary fringe)				Present?	Yes _ No	·	
Describe Recorded Data (stream gauge, monito	ring well, aerial	photos, previou	s inspections), if available:				
Remarks:			· · · · · · · · · · · · · · · · · · ·				
						İ	

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	36
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC: $\frac{1}{}$	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	(4.15)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.	•			Prevalance Index worksheet:	
		= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:)				OBL species x1=	
1.				FACW species x2=	_
2.	-			FAC species x3=	_
3.				FACU species x4=	_
4.			-	UPL species x5=	_
5.				Column Totals: (A)	— (B)
6.				1	— ` ´
7.				Prevalance Index = B/A =	
		= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:)	1			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (E	xplain)
3.				The second of th	
4.				Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	must
6.				Definitions of Vegetation Strata:	
7.				1	
	0	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:				approximately 20 ft (6m) or more in height and 3 in	า. (7.6
1. Juncus spp.	60	yes	OBL	cm) or larger in diameter at breast height (DBH).	,
Eupatorium capillifolium	15	no	FACU	Sapling- Woody plants, excluding woody vines,	
3. Cyperus spp.	15	no	FACW	approximately 20 ft (6m) or more in height and les	s than 3
Sagittaria lancifolia	5	no	OBL	in. (7.6 cm) DBH.	ļ
5. Diodia virginiana	2	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Euthamia spp.		no	FAC	approximately 3 to 20 ft (1 to 6 m) in height.	•
7. Ludwigia peruviana		no	OBL	Herb- All herbaceous (non-woody)plants, includin	.
8. Solidago spp.		no	FACU	herbaceous vines, regardless of size. Includes we	
9. Rhyncospora spp.	2	no	FACW	plants, except woody vines, less than approximate	
10. Eleocharis spp.	2	no	OBL	m) in height.	
11.				Woody vine- All woody vines, regardless of heigh	ıt.
12.	-			1	
	107	= Total Cove	r	1	
Woody Vine Stratum (Plot size:					
1.	<del></del> ,				ļ
2.				1	
3.					
4.				Hydrophytic	
5.				Vegetation Present? YesNo_	
		= Total Cove	r	1 •	
Remarks: (If observed, list morpho				1	
Percent cover estimates based on	- •		roader coi	mmunity	

(	County/soil:	Polk-	Eaton
9	:OII		

epth	scription: (Describe to Matrix	die depi	iii iieeded to doc		Features	John the abs	serice of indicators	·· /		
ches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc²	Texture	Remarks		
	10 YR 2/1							black mucky fine sand		
9	10 YR 7/1							light gray fine sand		
33	N 5/0							gray sandy clay loam		
30	N 5/0							gray sandy clay		
		· -				<del></del>				
	Concentration, D=Deple	ion, RM=	Reduced Matrix, (	S=Cove	red or Coated S	and Grains.	*Location: PL=Po	re Lining, M=Matrix.		
_Histol	il Indicators:			D-1	b.a DalaCd	(CO) (I DD)	C T III	Indicators for Problematic Hydric Soils 3:		
	Epidon (A2)				value Below Surf			1 cm Muck (a9) (LRR O)		
	Histic (A3)				Dark Surface (S		')	2 cm Muck (A10) (LRR S)		
	gen Sulfide (A4)				my Mucky Minera my Gleyed Matrix			Reduced Vertic (F18) (outside MLRA 150A, B		
	ied Layers (A5)				ny Gleyed Matrix leted Matrix (F3)	( (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ic Bodies (A6) (LRR P.	T III			ox Dark Surface	(F6)		Anomalous Bright Loamy Soils (F20)		
								(MLRA 153B)		
_	Mucky Mineral (A7) (LRI				leted Dark Surfac			Red Parent Material (TF2)		
Muck	Presence (A8) (LRR U)			Red	ox Depressions (	F8)		Very Shallow Dark Surface (TF12) (LRR T, U)		
_1 cm	Muck (A9) (LRR P,T)			Mar	(F10) (LRR U)			Other (Explain in Remarks)		
Deple	ted Below Dark Surface	(A11)		Dер	leted Orchric (F1	1) (MLRA 151)				
Thick	Dark Surface (A12)			lron	-Manganese Mas	ses (F12) (LRR	l O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
Coast	Prairie Redox (A16) (M	LRA 150	<b>A)</b> .	Umbric Surface (F13) (LRR P, T, U)				hydrology must be present, unless disturbed or		
Sandy	Mucky Mineral (S1) (LF	RR O, S)		Delta Orchric (F17) (MLRA 151)				problematic.		
_Sandy	Gleyed Matrix (S4)			Red	uced Vertic (F18)	(MLRA 150A,	150B)			
_Sandy	Redox (S5)			Pied	lmont Floodplain	Soils (F19) (ML	RA 149A)			
_Stripp	ed Matrix (S6)			Ano	malous Bright Lo	amy Soils (F20)	(MLRA 149A, 153	C, 153D)		
Dark :	Surface (S7) (LRR P, S,	T, U)								
strictiv	e Layer (If observed):									
	Туре:									
	Depth (inches):						Hydric Soil Prese	nt? Yes <u>√</u> No		
								•		

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date:9/29/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: 37	7	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 32 26S 23E				
Landform (hillslope, terrace, etc.): N/.	Α	Local relief (concave, con			%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.174423	Long:82.0	39728	Datum:	WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification	: palustrine emergent		
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in Rem	arks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstance		No	
	or Hydrology		(If needed, explain	n any answers in Rema	irks)	
SUMMARY OF FINDINGS - Attach sit			•	•	•	
Hydrophytic Vegetation Present?	YesNo	]				
Hydric Soil Present?	Yes No	Is the Sampled Area w	rithin a Wetland?	Yes✓No		
Wetland Hydrology Present?	YesNo					
Remarks:			······································	· · · · · · · · · · · · · · · · · · ·		
HYDROLOGY		·	Casandar, Indian	tore (minimum of two re		
Wetland Hydrology Indicators:	abaak all that analy)			tors (minimum of two re	<u>quirea)</u>	
Primary Indicators (minimum of one is required;		'DO'	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)			
✓ Surface Water (A1)	Water-Stained Leaves (	(89)		e Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)	20.40	-	` ,		
Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim L	• •		
Water Marks (B1)	Hydrogen Sulfide Odor					
Sediment Deposits (B2)	Oxidized Rhizospheres	- · · · ·			(00)	
Drift Deposits (B3)	Presence of Reduced In	, -		isible on Aerial Imagen	/ (Ca)	
Algal Mat or Crust (B4)	Recent Iron Reduction in			Position (D2)		
Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)		Shallow Aqu			
	Other (Explain in Remar	iks)	FAC Neutral	rest (D5)		
Field Observations:	Vac / Na	Donth (inches): 0.42				
Surface Water Present?	Yes_ ✓ No		1			
Water Table Present?	Yes_ ✓ No		Wetland			
Saturation Present?	Yes No	Depth (inches): U	Hydrology			
(includes capillary fringe)  Describe Recorded Data (stream gauge, monito	vring well parial photos provin	us inspections) if available	Present?	Yes <u>✓ No</u>		
Describe Recorded Data (Stream gauge, monito	ing well, aerial priotos, previot	us inspections), ii available	•			
Remarks:						
Tromarks.						
<u>.</u>						

VEGETATION - Use scientific name	nes of plants			Samplin	g Point:	37
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.		•		Number of Dominant Species	4	(4)
2.				That Are OBL, FACW, or FAC:	<u>1</u>	(A)
3.				Total Number of Dominant	4	<b>(D)</b>
4.				Species Across All Strata:	<u>1</u>	(B)
5.				Percent of Dominant Species	400.00	(A (D)
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
:	0	= Total Cove	er	<u>Total % Cover of:</u>	Multiply by:	
Sapling Stratum (Plot size:)				OBL speciesx1	=	_
1.				FACW speciesx2	=	_
2.				FAC speciesx3	=	_
3.				FACU speciesx4	=	_
4.				UPL speciesx5	=	
5.				Column Totals: (A	)	(B)
6.						<del>_</del>
7.				Prevalance Index = B/A =		
	0	= Total Cove	er	Hydrophytic Vegetation Indicato	rs:	
Shrub Stratum (Plot size:)				✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0 <sup>1</sup>	_	
2.				Problematic Hydrophytic Ve	egetation¹ (Exp	olain)
3.				1.		
4.				<sup>1</sup> Indicators of hydric soil and wetlar		nust
5.				be present, unless disturbed or pro		
6.				Definitions of Vegetation Strata:		
7.						
Hart Charten (Blat size	0	= Total Cove	er	Tree- Woody plants, excluding wood	•	(7.C
Herb Stratum (Plot size:)			E4 0)44	approximately 20 ft (6m) or more in h cm) or larger in diameter at breast he	-	(7.6
Cyperus spp.	80	yes	FACW			
Eupatorium capillifolium	10	no	FACU	Sapling- Woody plants, excluding w		than 2
Juncus effusus	2	no	FACW	approximately 20 ft (6m) or more in h in. (7.6 cm) DBH.	leight and less	man 3
Diodia virginiana     Recens one	2 2	no	FACW OBL	4 ` ′	. du mino o	
<ul><li>5. Bacopa spp.</li><li>6. Panicum repens</li></ul>	2	no	FACW	Shrub- Woody plants, excluding woo approximately 3 to 20 ft (1 to 6 m) in		
7. Panicum hemitomon	$\frac{2}{2}$	no no	OBL	<b>d</b> '''	_	
8. Hydrocotyle spp.	2	no no	OBL	Herb- All herbaceous (non-woody)pl		dv
Polypremum procumbens		no no	FACU	herbaceous vines, regardless of size plants, except woody vines, less than		-
10.			1700	m) in height.	, app. 0,	
11.				Woody vine- All woody vines, regard	tless of height	
12.				Troday tine 7 iii troday tinoo; rogan	incoo or morgina	
12,	104	= Total Cove		1		
Woody Vine Stratum (Plot size:			•			
1.				1		
2.						
3.				l b. das - b. dis		
<u>4.</u> 5.				Hydrophytic	/ No	
		- Total Cove	·	Vegetation Present? Yes	<u>√No</u>	<del></del>

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

OIL rofile De	scription: (Describe	to the de	oth needed to doc	ument th	e indicator or	confirm the ab	sence of indicators	Sampling Point:		
epth	Matrix			Redox	Features					
nches)	Color (moist)	%	Color (moist)	_ %	Type <sup>1</sup>	Loc²	Texture	Remarks		
-6	10 YR 3/1							very dark gray fine sand		
12	10 YR 6/2							light brownish gray sand		
2-21	10 YR 7/2							light gray sand		
1-26	5 YR 3/3							dark reddish brown loamy fine sand		
				_						
ype: C=0	Concentration, D=Depl	letion, RM	=Reduced Matrix,	CS=Cove	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=Por	re Lining, M=Matrix.		
	il Indicators:	·····	<u>-</u>					Indicators for Problematic Hydric Soils 3:		
Histol	(A1)			Polys	alue Below Sur	face (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)		
Histic	Epidon (A2)			Thin	Dark Surface (S	9) (LRR S, T, I	<b>⊔</b> )	2 cm Muck (A10) (LRR S)		
Black	Histic (A3)			Loan	ny Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)		
Hydro	gen Sulfide (A4)			Loan	y Gleyed Matri:	x (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)		
Stratif	ied Layers (A5)			Deple	eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)		
Organ	ic Bodies (A6) (LRR F	P, T, U)		Redo	x Dark Surface	(F6)		(MLRA 153B)		
5 cm 1	Mucky Mineral (A7) (LI	RR P.T.UI	1	Deple	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)		
_	Presence (A8) (LRR I			Redox Depressions (F8)				Very Shallow Dark Surface (TF12) (LRR T, U)		
			Marl (F10) (LRR U)Depleted Orchric (F11) (MLRA 151)				Other (Explain in Remarks)			
				Iron-Manganese Masses (F12) (LRR O, P,T)			R O. P.T)	3		
			Umbric Surface (F13) (LRR P, T, U)				<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or			
			1	Delta Orchric (F17) (MLRA 151)				problematic.		
Sandy	Gleyed Matrix (S4)			Redu	ced Vertic (F18	) (MLRA 150A,	, 150B)			
Sandy	Redox (S5)			Pied	nont Floodplain	Soils (F19) (MI	LRA 149A)			
	ed Matrix (S6)			Anon	nalous Bright Lo	amy Soils (F20	) (MLRA 149A, 1530	C, 153D)		
_	Surface (S7) (LRR P,									
	e Layer (If observed) Type:	:								
	Depth (inches):						Hydric Soil Preser	nt? Yes <u>√</u> No		
emarks:										
	•									

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		_ Sampling Date: 9/29/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	·	Sampling Point: 38		
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 6 27S 23E				
Landform (hillslope, terrace, etc.): N//	Α	Local relief (concave, con	vex, none): none	Slop	pe (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.171395	5Long: <u>-82.</u> (	040031	Dat	um: <u>WGS84</u>	
Soil Map Unit Name: Eaton mucky fine sand , de	epressional		_ NWI classification	: _palustrine emerg	ent	
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in F	Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstance		No	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	n any answers in Re	emarks)	
SUMMARY OF FINDINGS - Attach sit		=	ransects, impo	rtant features,	etc.	
Hydrophytic Vegetation Present?	Yes No	]	· •	·		
Hydric Soil Present?	YesNo	Is the Sampled Area v	vithin a Wetland?	Yes✓No		
Wetland Hydrology Present?	Yes No	]				
Remarks: Disturbed and grazed						
HADBOLOCA						
HYDROLOGY			0			
Wetland Hydrology Indicators:	-b4 -W 4b-4 b-X			tors (minimum of tw	o requirea)	
Primary Indicators (minimum of one is required;		(Da)		Surface Soil Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)		rsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa			
Saturation (A3)	Marl Deposits (B15) (LR	-	Moss Trim L			
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)		
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	isible on Aerial Ima	gery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction is	n Tilled Soils (C6)	Geomorphic	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	itard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-48	4			
Water Table Present?	Yes No	Depth (inches): 0	Wetland			
Saturation Present?	Yes No	Depth (inches): 0				
(includes capillary fringe)			Hydrology Present?	Yes <u>√</u> No		
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previou	us inspections), if available	:	<u></u> -		
Remarks:	4.					
·						
l						

VEGETATION - Use scientific nar	nes of plants			Sar	npling Point:	38
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	•	4.
2.				That Are OBL, FACW, or FAC	<u>2</u>	(A)
3. 4.				Total Number of Dominant	_	
4.				Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC	<u>. 66.67</u>	(A/B)
7.	<del></del>			Prevalance Index worksheet		
	0	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)	J	10101 0010	••	OBL species	x1=	
1.				FACW species		-
2.				FAC species	x3=	-
3				FACU species	x4=	-
3. 4.				UPL species	x4 x5=	-
<u>4.</u>				Column Totals:		- <sub>(D)</sub>
5. 6.				Column Totals.	_(A)	_(B)
7.				Burnels and BM		
7.		T-4-1 0		Prevalance Index = B/A =		
Observe Observer (Distriction	•	= Total Cove	er	Hydrophytic Vegetation Indi		
Shrub Stratum (Plot size:)				✓ Dominance Test is 50%		
<u>[1</u>				Prevalence Index is ≤3		
2.				Problematic Hydrophyti	ic Vegetation' (Exp	lain)
3.				<u> </u>		
4.				<sup>1</sup> Indicators of hydric soil and w		nust
5.				be present, unless disturbed of		
6.				Definitions of Vegetation Str	rata:	
7.						
	0	= Total Cove	er	Tree- Woody plants, excluding v		
Herb Stratum (Plot size:	)			approximately 20 ft (6m) or more		(7.6
Juncus effusus	40	yes	FACW	cm) or larger in diameter at brea	ist height (DBH).	
Cyperus spp.	20	yes	FACW	Sapling- Woody plants, excludio	ng woody vines,	
Eupatorium capillifolium	20	yes	FACU	approximately 20 ft (6m) or more	e in height and less t	than 3
Panicum hemitomon	10	no	OBL	in. (7.6 cm) DBH.		
5. Ludwigia peruviana	2	no	OBL	Shrub- Woody plants, excluding		
6. Rhexia spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 r	n) in height.	
7. Bacopa spp.	2	no	OBL	Herb- All herbaceous (non-wood	dy)plants, including	
8. Scleria spp.	2	no	FACW	herbaceous vines, regardless of	size. Includes woo	dy
9. Saururus cernuus	2	no	OBL	plants, except woody vines, less	than approximately	3 ft (1
10. Hydrocotyle spp.	2	no	OBL	m) in height.		
11.				Woody vine- All woody vines, re	egardless of height.	
12.				1		
	102	= Total Cove		1		
Woody Vine Stratum (Plot size:	)					
l <sub>1</sub> .	,					
2.				1		
3.						
4.				  Hydrophytic		
5.				1	s ✓ No	
		= Total Cove			·110	<del></del>
Remarks: (If observed, list morpho				L		
Percent cover estimates based on	-	-	roader cor	mmunity.		

County/soil: Polk- Eaton	
SOIL	

SOIL								Sampling Point:38
Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the ab-	sence of indicators.)	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type'	Locz	Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1		<del></del>					light gray fine sand
29-33	N 5/0						<del></del>	gray sandy clay loam
33-80	N 5/0	- —						gray sandy clay
	110.0							gray outlay out
				_				
¹Tvpe: C=0	Concentration, D=Dep	letion. RM	Reduced Matrix. C	S=Cove	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix.
Hydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol				Poly	vatue Below Su	rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)		•			S9) (LRR <b>S</b> , T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)		•			al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matri		•	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	gen Sunde (A4) ied Lavers (A5)				eted Matrix (F3		-	
	ic Bodies (A6) (LRR F	P, T, U)			ox Dark Surface		-	Anomatous Bright Loamy Soils (F20) (MLRA 153B)
5 cm !	Mucky Mineral (A7) (L	RR P T III		Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR		•		x Depressions		•	Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	-,			(F10) (LRR U)	· -/		Other (Explain in Remarks)
1	ted Below Dark Surface	ce (A11)				11) (MLRA 151)	•	
	Dark Surface (A12)	,	•		•	sses (F12) (LRF	O D D T	<b>3</b>
_	Prairie Redox (A16) (	MI RA 150	Δ)		-	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (				Orchric (F17)			problematic.
	Gleyed Matrix (S4)	LINK O, 3)	•			B) (MLRA 150A,	150B)	
	Redox (S5)		-			Soils (F19) (ML		
	ed Matrix (S6)					, ,,	) (MLRA 149A, 153C,	. 153D)
1	Surface (S7) (LRR P,	S, T, U)	•		•	, - ,	,,	
Restrictiv	e Layer (If observed)	):					T	
ł	Type:						ļ	
	Depth (inches):						Hydric Soil Presen	t? Yes <u>√</u> No
Remarks:								
1								
	•							
l								

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		_Sampling Date:	9/29/09
Applicant/Owner: Progress Energy Florida, Inc.	·	State: FL		Sampling Point:	39
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: 6 27S 23E		
Landform (hillslope, terrace, etc.): N//	Α	Local relief (concave, con-	vex, none): <u>none</u>	SI	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.166342	Long:82.0	40087	Da	atum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification:	palustrine eme	rgent
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes✓	_ No	,	
Are Vegetation, Soil,	•	significantly disturbed?	Are circumstances		esNo
Are Vegetation, Soil,			(If needed, explain		
SUMMARY OF FINDINGS - Attach sit			•	•	•
Hydrophytic Vegetation Present?	Yes/ No	lig point locations, a	anocow, impo	ant routures	, 010.
Hydric Soil Present?	YesNo	is the Sampled Area w	ithin a Wetland?	Yes ✓ No	0
Wetland Hydrology Present?	YesNo	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Remarks: disturbed and grazed	100100	1			
Tromano. dictarbod and grazos					
HYDROLOGY					
			Secondary Indicate	ara (minimum af t	hvo roquirod\
Wetland Hydrology Indicators:	about all that anniv		-		wo required)
Primary Indicators (minimum of one is required;		.DO)	Surface Soil		C.,,fee, (DO)
✓ Surface Water (A1)	Water-Stained Leaves (	(89)		getated Concave	Suпасе (вв)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Par	` '	
Saturation (A3)	Marl Deposits (B15) (LF	•	Moss Trim Li		
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season	Water Table (C2)	1
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	rows (C8)	
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	Saturation Vi	isible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqui	itard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-6			
Water Table Present?	Yes No	Depth (inches): 0			
Saturation Present?	Yes No		Wetland Hydrology		
(includes capillary fringe)			Present?	Yes _/N	0
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previo	us inspections), if available:			
Remarks:				<del> </del>	
incinarks.					

VEGETATION - Use scientific nar	mes of plants			San	npling Point:	39
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
		орсоюз:	Otatus	Number of Dominant Species		
1. 2.				That Are OBL, FACW, or FAC	<u>. 1</u>	(A)
3.				Total Number of Dominant	•	
				Species Across All Strata:	<u>2</u>	(B)
4.				<b>i</b> '		
5.				Percent of Dominant Species	<u>50.00</u>	(A/B)
6.				That Are OBL, FACW, or FAC		
7.				Prevalance Index worksheet		
O l'i Ott (D'-t -i )	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)				OBL species	x1=	<b>-</b> .
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.	·			UPL species	x5=	_
5. ·				Column Totals:	(A)	_(B)
6.						
7.				Prevalance Index = B/A =	:	
	0	= Total Cove	er	Hydrophytic Vegetation Indi	cators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	, 0	
1.				Prevalence Index is ≤3.	.0 <sup>1</sup>	
2.				Problematic Hydrophyti	ic Vegetation <sup>1</sup> (Exp	olain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and w	etland hydrology m	nust
5.				be present, unless disturbed o		
6.				Definitions of Vegetation Str		
7.			-	1		
	0	= Total Cove	er	Tree- Woody plants, excluding v	woody vines,	
Herb Stratum (Plot size:	)			approximately 20 ft (6m) or more	e in height and 3 in.	(7.6
Paspalum notatum	45	yes	FACU	cm) or larger in diameter at brea	st height (DBH).	
Cyperus spp.	45	yes	FACW	Sapling- Woody plants, excluding	ng woody vines,	
3. Panicum repens	5	no	FACW	approximately 20 ft (6m) or more		than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding	woody vines,	
6.				approximately 3 to 20 ft (1 to 6 n	n) in height.	
7.				Herb- All herbaceous (non-wood	dv)plants including	
8.				herbaceous vines, regardless of		dv
9.		-		plants, except woody vines, less		-
10.	-			m) in height.	,, ,	,
11.	· ——			Woody vine- All woody vines, re	egardless of height	
12.	· ——			1	aguitario de la mongrita	
12.	95	= Total Cove				
Woody Vine Stratum (Plot size:	)					
1.				·		
2.				1		
3.						
4.			_	Hydrophytic	•	
5.	·				s ✓ No	
		= Total Cove	er	3		
Remarks: (If observed, list morph	ological adapta			I		
Percent cover estimates based or	-		roader cor	mmunity		

	Polk- Pomona							Sampling Point:
OIL		·- 4b a don	**		- Indicator or			
	•	to the aep	ith needed to doc			contirm the abs	ence of indicators.)	
epth	Matrix		0.1(		Features	Loc²	T- tour	Domestic
ches)	Color (moist)	<u></u> %	Color (moist)	<u> </u>	Type <sup>1</sup>	Loc	Texture	Remarks
3	10 YR 3/1							very dark gray fine sand
12	10 YR 6/2							
-21	10 YR 7/2							light brownish gray sand
-26	5 YR 3/3		<del></del>					dark reddish brown loamy fine sand
-20	3 TK 3/3							dark reddish brown loanly line sand
<del></del> _	oncentration, D=Depl	otion Dist	-Dadwood Motrix (	C <del>-C</del>	od or Coated C	and Crains	<sup>2</sup> Location: PL=Pore	Linion Matherin
	Indicators:	euon, raw-	-Reduced Mairix, C	JS-Cover	ed of Coaled S	anu Grans.		Indicators for Problematic Hydric Soils 3:
Histol (				Doha	rakua Balasu Cur	face (S8) (LRR S		1 cm Muck (a9) (LRR O)
	Epidon (A2)					. , ,		2 cm Muck (A10) (LRR S)
						59) (LRR S, T, U	" -	
_	listic (A3)					al (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, E
	en Sulfide (A4)				ny Gleyed Matri		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)	T 10			eted Matrix (F3)		-	Anomalous Bright Loamy Soils (F20)
_Organi	c Bodies (A6) (LRR P	', 1, 0)			x Dark Surface			(MLRA 153B)
_5 cm N	lucky Mineral (A7) (LF	RR P,T,U)		Deple	eted Dark Surfa	ice (F7)	-	Red Parent Material (TF2)
Muck f	Presence (A8) (LRR L	J)		Redo	x Depressions	(F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm M	luck (A9) (LRR P,T)			Marl	(F10) (LRR U)		_	Other (Explain in Remarks)
		- (044)				11) (MLRA 151)	_	
	ed Below Dark Surface	e (A11)			•			
_Thick E	Park Surface (A12)			Iron-I	vlanganese Ma	sses (F12) (LRR	(O, P,T) 3	Indicators of hydrophytic vegetation and wetland
_Coast I	Prairie Redox (A16) (#	<b>VILRA 150</b>	A)	Umbr	ric Surface (F13	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (L	DD () S)		Detta	Orchric (F17)	(MI RA 151)	ŗ	problematic.
_ ′	Gleyed Matrix (S4)	-KK O, 3)				B) (MLRA 150A,	150D)	
	Redox (S5)					Soils (F19) (ML		
	d Matrix (S6)						(MLRA 149A, 153C,	1520)
					iaious Brigini Li	Dailiy Solis (F20)	(MLNA 145A, 155C,	, 1930)
	urface (S7) (LRR P, S							
	Layer (If observed):	:						
	Гуре:							
marks:	Depth (inches):						Hydric Soil Present	t? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk		Sampling Date: 9/29/	09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: 40	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: 6 27S 23E/5 27S 2	23E	
Landform (hillslope, terrace, etc.):N/	Α	Local relief (concave, con-	/ex, none): <u>none</u>	Slope (%)	:
Subregion (LRR or MLRA): LRR U	Lat: 28.163080	Long:82.0	39888	Datum:	WGS84
Soil Map Unit Name: Eaton mucky fine sand, de				palustrine emergent	
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	. No	(If no, explain in Remark	(s)
Are Vegetation, Soil,	or Hydrology		Are circumstances		
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks	s)
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing samplir	ng point locations, t	ansects, impor	tant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes/ No	is the Sampled Area w	ithin a Wetland?	Yes No	
Wetland Hydrology Present?	Yes No				
Remarks: disturbed and some grazing					
HYDROLOGY			٦		
Wetland Hydrology Indicators:			Secondary Indicate	ers (minimum of two requ	ired)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil (	Cracks (B6)	i
✓ Surface Water (A1)	Water-Stained Leaves (E	B9)	Sparsely Veg	etated Concave Surface	(B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lin	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season V	Vater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	ows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vis	sible on Aerial Imagery (C	C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic I	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	ard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No				
Water Table Present?	Yes No		Mada a		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes No	_
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previou	s inspections), if available:			
Remarks:					

VEGETATION - Use scientific nar	nes of plants			Sam	pling Point:	40
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
	00401	орсоюз:	Otatus	Number of Dominant Species		
<u>1.</u> 2.				That Are OBL, FACW, or FAC:	<u>3</u>	(A)
				Total Number of Dominant		
3.				Species Across All Strata:	<u>5</u>	(B)
4.				<del>1</del> '		
5.				Percent of Dominant Species	60.00	(A/B)
6.				That Are OBL, FACW, or FAC:		
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)	_		0.01	OBL species	_x1=	_ [
1. Acer rubrum	2	yes	OBL	FACW species	_x2=	_
Liquidambar styraciflua	2	yes	FAC	FAC species	_x3=	_
3.				FACU species	_x4=	_
4.				UPL species	_x5=	_
5.				Column Totals:	_(A)	_(B)
6.				,		
7.				Prevalance Index = B/A =		
	4	= Total Cove	er	Hydrophytic Vegetation Indic		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0	D <sup>1</sup>	
2.				Problematic Hydrophytic	CVegetation1 (Exp	lain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and we	etland hydrology m	nust
5.				be present, unless disturbed or		
6.				<b>Definitions of Vegetation Stra</b>	ata:	
7.				1		
	0	= Total Cove	er	Tree- Woody plants, excluding w	roody vines,	
Herb Stratum (Plot size:	)			approximately 20 ft (6m) or more		(7.6
Eupatorium capillifolium	45	yes	FACU	cm) or larger in diameter at breas	st height (DBH).	
2. Juncus effusus	20	yes	FACW	Sapling- Woody plants, excludin	a woodv vines.	
3. Panicum hemitomon	10	no	OBL	approximately 20 ft (6m) or more		than 3
4. Ludwigia peruviana	10	no	OBL	in. (7.6 cm) DBH.	•	
5. Cyperus spp.	2	no	FACW	Shrub- Woody plants, excluding	woody vines.	
6. Rhexia spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 m	•	
7. Andropogon spp.	2	no	FAC	Herb- All herbaceous (non-wood	v)nlants including	
Woodwardia virginica	2	no	OBL	herbaceous vines, regardless of	• • •	dv
9.				plants, except woody vines, less		
10.				m) in height.		•
11.				Woody vine- All woody vines, re	gardless of height.	
12.				1	<b>J J</b>	
	93	= Total Cove		1		
Woody Vine Stratum (Plot size:	)	10.0, 001.	٠.			
Rubus spp.	/ 	yes	FACU			
2.		yes	1700	1		
3.						
<b>4</b> . <b>5</b> .				Hydrophytic	. / Ma	
J.		= Total Carr		Vegetation Present? Yes	s✓No	<del></del>
Domonico (If shaared link are all	2	= Total Cove	<b>31</b>	<u> </u>		
Remarks: (If observed, list morpho Percent cover estimates based or	-	-	oroader co	mmunitv.		

rofile Decerie	tion. /Doggriba	o the der	th mondad to doe			and the ab	sence of indicators	Sampling Point:
rollie Descrip epth	Matrix	to trie det	our needed to doc		Features	confirm the at	osence of indicators	•)
	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture	Remarks
icites)	Color (Indist)		Color (moist)		Турс		Texture	Remarks
6 10	/R 2/1							black mucky fine sand
29 10	/R 7/1							light gray fine sand
9-33 N 5								gray sandy clay loam
3-80 N 5	/0							gray sandy clay
ype: C=Conce	entration, D=Depl	etion, RM:	Reduced Matrix, C	S=Cove	red or Coated S	Sand Grains.	2Location: PL=Po	re Lining, M=Matrix.
dric Soil Ind	icators:							Indicators for Problematic Hydric Soils 3:
_Histol (A1)				Poly	value Below Su	rface (S8) (LRF	₹ S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epido	n (A2)			Thin	Dark Surface (	S9) (LRR S, T,	U)	2 cm Muck (A10) (LRR S)
Black Histic	, ,			Loan	ny Mucky Miner	al (F1) (LRR O	)	Reduced Vertic (F18) (outside MLRA 150A, B
Hydrogen S				Loamy Gleyed Matrix (F2) Depleted Matrix (F3)				Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified La								Anomalous Bright Loamy Soils (F20)
Organic Bo	dies (A6) (LRR P	, T, U)	,	Redo	ox Dark Surface	e (F6)		(MLRA 153B)
5 cm Mucky	/ Mineral (A7) (LI	RR P,T,U)		Depl	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
Muck Prese	ence (A8) (LRR l	J)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)	
Depleted Below Dark Surface (A11)					11) (BAL DA 451		,	
	=	e (ATT)	•	Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T)				
	Surface (A12)				=			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
Coast Prairi	ie Redox (A16) (I	MLRA 150	)A) .	Umb	ric Surface (F1:	3) <b>(LRR P, T, U</b>	1)	
Sandy Muci	ky Mineral (S1) (L	.RR O, S)		Delta	Orchric (F17)	(MLRA 151)		problematic.
Sandy Gley	ed Matrix (S4)		_	Redu	iced Vertic (F18	B) (MLRA 150A	, 150B)	
Sandy Redo	ox (S5)			Pied	mont Floodplair	Soils (F19) (M	LRA 149A)	
Stripped Ma	trix (S6)			Anor	nalous Bright Le	oamy Soils (F20	O) (MLRA 149A, 1530	C, 153D)
Dark Surfac	e (S7) (LRR P. S	T 111						
	er (If observed):						Υ	
Type:								
• • •	n (inches):						Hydric Soil Prese	nt? Yes ✓ No .
	1 (410100).						Tryane Con Frese	100 - 100 -

Applicant/Owner: Progress Energy Florida, Inc.  Section, Township, Range: 5275 23E/5275 23E  Landform (hilblope, terrace, etc.): N/A  Local relief (concave, convex, none):
Landform (hillslope, terrace, etc.): N/A
Subregion (LRR or MLRA): LRR U
Soil Map Unit Name: Eaton mucky fine sand, depressional Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are Vegetation Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology Present?  Yes No Soil Soil Present?  Westand Hydrology Present?  Wetland Hydrology Indicators:  Remarks: disturbed and some grazing  HYDROLOGY  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Saturation (A3) Mart Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5) This Muck Surface (C7) Shallow Aquitard (D3)  FINE Mater Table Present?  Yes No Depth (inches): 10 Depth (inches): 10 FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches): 0  Wetland Hydrology Hyd
Soil Map Unit Name: Eaton mucky fine sand, depressional Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are Vegetation Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology naturally problemato?  Soil or Hydrology Present?  Yes No Soil Soil Present?  Westand Hydrology Present?  Wetland Hydrology Indicators:  Remarks: disturbed and some grazing  HYDROLOGY  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Saturation (A3) Mart Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5) This Muck Surface (C7) Shallow Aquitard (D3)  FINE Mater Table Present?  Yes No Depth (inches): 10 Depth (inches): 10 FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches): 0  Wetland Hydrology Hyd
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Surface Water (A1) Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) Aquatic Fauna (B13) Drint Lines (B16) Aquatic Fauna (B13) Drift Deposits (B1) Drift Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8) Algal Mat or Crust (B4) Present? Present? Yes No Depth (inches): Oracle Vater Present? Yes No Depth (inches): O Depth (inches): O Hydrology Hydrology (Includes capillary fringe)  Wetland Hydrology Indicators:    Secondary Indicators (minimum of two required)   Water And Hydrology Indicators (minimum of two required)   Water And Hydrology Indicators (minimum of two required)   Surface Soil Cracks (B6)   Sparsely Vegetated Concave Surface (B8)   Sparsely Vegetated Concave Surface (B8)   Drint Lines (B16)   Driving Roots (C3)   Driving Roots (C4)   Driving Roots (C4)   Driving Roots (C4)   Driving Roots (C4)   Driving Roots (C5)   Driving Roots (C4)   Driving Roots (C5)   Driving Roots (C6)   Driving R
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Surface Water (A1) Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) Aquatic Fauna (B13) Drint Lines (B16) Aquatic Fauna (B13) Drift Deposits (B1) Drift Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8) Algal Mat or Crust (B4) Present? Present? Yes No Depth (inches): Oracle Vater Present? Yes No Depth (inches): O Depth (inches): O Hydrology Hydrology (Includes capillary fringe)  Wetland Hydrology Indicators:    Secondary Indicators (minimum of two required)   Water And Hydrology Indicators (minimum of two required)   Water And Hydrology Indicators (minimum of two required)   Surface Soil Cracks (B6)   Sparsely Vegetated Concave Surface (B8)   Sparsely Vegetated Concave Surface (B8)   Drint Lines (B16)   Driving Roots (C3)   Driving Roots (C4)   Driving Roots (C4)   Driving Roots (C4)   Driving Roots (C4)   Driving Roots (C5)   Driving Roots (C4)   Driving Roots (C5)   Driving Roots (C6)   Driving R
### Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.  ###################################
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators  Remarks: disturbed and some grazing  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (86)  Surface Soil Cracks (86)  Surface Soil Cracks (86)  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88) High Water Table (A2) Aquatic Fauna (813) Drainage Patterns (810)  Water Marks (81) Hydrogen Sulfide Odor (C1) Sediment Deposits (82) Drift Deposits (83) Presence of Reduced Iron (C4) Algal Mat or Crust (84) Recent Iron Reduction in Tilled Soils (C6) Inon Deposits (85) Thin Muck Surface (C7) Inon Deposits (B5) Thin Muck Surface (C7) Surface Water Present? Yes ✓ No Depth (inches): 0-12 Water Table Present? Yes ✓ No Depth (inches): 0-12 Water Marks (B1) Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inches): 0-12 Wetland Hydrology Present? Yes ✓ No Depth (inche
Hydric Soil Present?  Wetland Hydrology Present?  Remarks: disturbed and some grazing  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Yes
Wetland Hydrology Present?         HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Mart Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Surface Water Present?       Yes ✓ No Depth (inches): 0 - 12       Wetland Hydrology         Wetland Hydrology (Includes capillary fringe)       Yes ✓ No Depth (inches): 0 - 12       Yes ✓ No Depth (inches): 0 - 12
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inon Marks (B7)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Field Observations:  Surface Water (P1)  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Moss Trim Lines (B16)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  — Yes ✓ No — Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No — Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No — Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No — Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No — Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No — Depth (inches): 0  Wetland
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)      Surface Soil Cracks (B6)      Surface Soil Cracks (B6)         ✓       Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)         —High Water Table (A2)      Aquatic Fauna (B13)
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland Hydrology  Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology  Present? Yes ✓ No Mo Depth (inches): 0  Present? Yes ✓ No Mo Present?
✓ Surface Water (A1)
High Water Table (A2)
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)         Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)         Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)         Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes✓ No Depth (inches):0
Water Marks (B1)
Sediment Deposits (B2)
Drift Deposits (B3)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)Shallow Aquita
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?
Field Observations:           Surface Water Present?         Yes/ No Depth (inches):
Surface Water Present?         Yes_ ✓ No
Water Table Present?         Yes_ ✓ No Depth (inches):         Wetland Hydrology           Saturation Present?         Yes_ ✓ No Depth (inches):         Hydrology Present?         Yes_ ✓ No
Saturation Present? Yes   No Depth (inches): 0 Wetland Hydrology (includes capillary fringe) Yes   No Present? Yes   No Present? Yes   No No Present? Yes   No Present   No Present
Saturation Present? Yes ✓ No Depth (inches):0 Hydrology (includes capillary fringe) Present? Yes ✓ No No
(includes capillary fringe) Present? Yes <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a< td=""></a<>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

<b>VEGETATION</b> - Use scientific names of plants	

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling F	Point:	41
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species	_	
2.				That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.			-	Total Number of Dominant		
4.	· ——			Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.		<del></del>		Prevalance Index worksheet:		
		= Total Cove			lultiply by:	
Sapling Stratum (Plot size:)		- 10tal Cove	1	OBL species x1=	iditiply by.	
Liquidambar styraciflua	2	yes	FAC	FACW species x2=		-
2.		<u>yes</u>	170	FAC species x3=		_
3.			-	FACU species x4=		_
<u>4.</u>		<del> </del>	<del></del>	UPL species x5=		-
<del>4.</del> 5.				-		- <sub>(D)</sub>
6.				Column Totals:(A)		_ (B)
7.				Dravelence Index - D/A -		
7.		= Total Cove		Prevalance Index = B/A = Hydrophytic Vegetation Indicators:		
Charle Ctratum (Dist size)		= Total Cove	·r			
Shrub Stratum (Plot size:	)			Dominance reactions		
1.				Prevalence Index is ≤3.0 <sup>1</sup>	1.—	
2.				Problematic Hydrophytic Vege	tation" (Exp	olain)
3.				1		
4.				<sup>1</sup> Indicators of hydric soil and wetland		nust
5.				be present, unless disturbed or proble	ematic.	
6.				Definitions of Vegetation Strata:		
7.						
		= Total Cove	r	Tree- Woody plants, excluding woody v		
Herb Stratum (Plot size:				approximately 20 ft (6m) or more in heigh		(7.6
1. Juncus effusus	75	yes	FACW	cm) or larger in diameter at breast heigh		
Eupatorium capillifolium	5	no	FACU	Sapling- Woody plants, excluding wood		
Panicum hemitomon	5	no	OBL	approximately 20 ft (6m) or more in heigh	tht and less	than 3
4. Cyperus spp.	2	no	FACW	in. (7.6 cm) DBH.		
<ol><li>Ludwigia peruviana</li></ol>	2	no	OBL	Shrub- Woody plants, excluding woody		
6.				approximately 3 to 20 ft (1 to 6 m) in hei	ght.	
7.				Herb- All herbaceous (non-woody)plant		
8.	-			herbaceous vines, regardless of size. In		
9.				plants, except woody vines, less than ar	proximately	/ 3 ft (1
10.				m) in height.		
11				Woody vine- All woody vines, regardles	s of height.	
12.						
Woody Vine Stratum (Plot size:	89	= Total Cove	r			
Vitus rotundifolia		ves	FAC			
2.				1		
3.						
4.				  Hydrophytic		
<del>5</del> .				Vegetation Present? Yes✓_	No	
	2	= Total Cove	<del></del>	vogetation riesetit: 165		<del></del>
Remarks: (If observed, list morpho			•	L		
Percent cover estimates based or		-	roader cor	mmunity.		

me Description: (Describe to ti	e depth needed to do	cument the indicator or co	nfirm the absence of indica	tors.)
th Matrix		Redox Features		
nes) Color (moist)	% Color (moist)	% Type <sup>1</sup>	Loc <sup>2</sup> Texture	Remarks
10 YR 2/1				black mucky fine sand
10 YR 7/1				light gray fine sand
N 5/0				gray sandy clay loam
80 N 5/0				gray sandy clay
pe: C=Concentration, D=Depletion	RM=Reduced Matrix	CS=Covered or Coated San	d Grains <sup>2</sup> Location: PL	=Pore Lining, M=Matrix.
ric Soil Indicators:	i, itili-itoadoca iliadix,	OC-COVERCE OF COLICE CE	d Ordino. Coodion. 1 c	Indicators for Problematic Hydric Soils 3:
Histol (A1)		Polyvalue Below Surfa	e (S8) (LRR S T III)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)		Thin Dark Surface (S9)		2 cm Muck (A10) (LRR S)
Black Histic (A3)				Reduced Vertic (F18) (outside MLRA 150A, B
		Loamy Mucky Mineral		
Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (	F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)		Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T,	U)	Redox Dark Surface (F	6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR F	P.T.U)	Depleted Dark Surface	(F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	1.1-1	Redox Depressions (F		Very Shallow Dark Surface (TF12) (LRR T, U)
		Nedox Depressions (1	5)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR P,T)			(14) DA 454)	Other (Explain in Nemarks)
Depleted Below Dark Surface (A	11)	Depleted Orchric (F11)	·	
Thick Dark Surface (A12)		Iron-Manganese Mass	es (F12) (LRR O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLR	A 150A)	Umbric Surface (F13)	LRR P, T, U)	hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)		Delta Orchric (F17) (M	I PA 151)	problematic.
	0, 3)	Reduced Vertic (F18)	•	'
Sandy Gleyed Matrix (S4)		. , ,		
Sandy Redox (S5)			oils (F19) (MLRA 149A)	4500 450D)
Stripped Matrix (S6)		Anomalous Bright Loai	ny Soils (F20) (MLRA 149A,	153C, 153D)
Dark Surface (S7) (LRR P, S, T,	U)		<b>-</b>	
trictive Layer (If observed):				
Туре:			l	
Depth (inches): narks:			Hydric Soil P	resent? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission I	City/County: Polk	s	Sampling Date: 9/29/09			
Applicant/Owner: Progress Energy Florida, Inc.	State: FL	s	ampling Point: 42			
Investigator(s): Stacy Rizzo, Erin Heinen	Section, Township, Range	Section, Township, Range: 6 27S 23E/5 27S 23E/7 27S 23E/8 27S 23E				
Landform (hillslope, terrace, etc.): N/A	\	Local relief (concave, con-	Local relief (concave, convex, none): none Slope (%):			
Subregion (LRR or MLRA): LRR U				Datum: WGS84		
Soil Map Unit Name: Eaton mucky fine sand, de			NWI classification: N	 1/A		
Are climatic / hydrologic conditions on the site type				f no, explain in Remarks)		
	-	significantly disturbed?				
		naturally problematic?		ny answers in Remarks)		
SUMMARY OF FINDINGS - Attach sit			•	•		
Hydrophytic Vegetation Present?	Yes ✓ No		, <b>p</b>	,		
Hydric Soil Present?	Yes✓No	Is the Sampled Area w	ithin a Wetland? Y	esNo		
Wetland Hydrology Present?	Yes ✓ No					
Remarks: Disturbed; Portion of wetland looks sp	rayed (dead torpedo g	rass on north end); Some dumping	of plant debris at sout	h end		
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators	s (minimum of two required)		
Primary Indicators (minimum of one is required;	check ail that apply)		Surface Soil Cr	acks (B6)		
✓ Surface Water (A1)	Water-Stained L	eaves (B9)	Sparsely Veget	getated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (	B13)	Drainage Patter	atterns (B10)		
✓ Saturation (A3)	Marl Deposits (E	315) (LRR U)	Moss Trim Line	s (B16)		
Water Marks (B1)	Hydrogen Sulfid	e Odor (C1)	Dry-Season Wa	ater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizos	pheres on Living Roots (C3)	Crayfish Burrow	rrows (C8)		
Drift Deposits (B3)	Presence of Rec	duced Iron (C4)	ron (C4)Saturation Visi			
Algal Mat or Crust (B4)	Recent Iron Red	luction in Tilled Soils (C6)	n Tilled Soils (C6)Geomorphic Posi			
Iron Deposits (B5)	Thin Muck Surfa	ice (C7)	Shallow Aquitar	rd (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain ir	n Remarks)	rks)FAC Neutral T			
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-12		ļ		
Water Table Present?	Yes No	Depth (inches):0	l			
Saturation Present?		Depth (inches):0	Wetland Hydrology			
(includes capillary fringe)				'es <u>√</u> No		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos,	, previous inspections), if available:				
Remarks:						

VEGETATION - Use scientific nan	nes of plants			Sampling Point:	42
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	$\Box$
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	/4\
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<i>"</i> .,
4.		-		Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove	er	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:)				OBL species x1=	
1. Acer rubrum	2	yes	OBL	FACW species x2=	·
Quercus nigra	2	yes	FAC	FAC species x3=	٠
3.			<u> </u>	FACU species x4=	·
4.				UPL species x5=	١
5.				Column Totals: (A)	(B)
6.				( - /	۱ '''
7.				Prevalance Index = B/A =	
	4	= Total Cove	er	Hydrophytic Vegetation Indicators:	$\dashv$
Shrub Stratum (Plot size:)	•		<i>.</i>	✓ Dominance Test is 50%	
Baccharis sp.	40	yes	FAC	Prevalence Index is ≤3.0¹	1
2.			17.0	Problematic Hydrophytic Vegetation <sup>1</sup> (Explanation Hydrophytic Vegetation Problematic Problematic Hydrophytic Problematic Problematic Problematic Problemati	(nici
3.			-	1 Tobicinatio Hydrophytio vogotation (Exp.	an,
4.				Indicators of hydric soil and wetland hydrology m	uet
5.				be present, unless disturbed or problematic.	usi
6.	<del></del>			Definitions of Vegetation Strata:	
7.				Domination of Togotham Caraca.	
	40	= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	, -	- 1010. 00	J1	approximately 20 ft (6m) or more in height and 3 in. (	7.6
1. Panicum repens	20	yes	FACW	cm) or larger in diameter at breast height (DBH).	··•
Paspalum boscianum	20	yes	FACW	Sapling- Woody plants, excluding woody vines,	
Ludwigia peruviana	10	no	OBL	approximately 20 ft (6m) or more in height and less the	han 3
Cyperus spp.	2	no	FACW	in. (7.6 cm) DBH.	
Polypogon monspeliensis	2	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Ludwigia linearis	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Commelina diffusa	2	no	FACW	<b>1</b>	
8. Setaria spp.	2	no	FAC	Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes wood	4.,
9. Hydrocotyle spp.	2	no	OBL	plants, except woody vines, less than approximately	
10. Juncus effusus	2	no	FACW	m) in height.	۱ ` ` `
11. Rhexia spp.	2	no	FACW	Woody vine- All woody vines, regardless of height.	
12.			IACIT	Woody vine- All woody vines, regardless of height.	
12.	66	= Total Cove	or	1	
Woody Vine Stratum (Plot size:	١	- 10tai 00v	31		
	/	1100	EACH		
1. Rubus spp.	5	yes	<u>FACU</u>	-	
2.					
3.	<del></del>		· <del></del>	<b>l</b>	
<b>4</b> . <b>5</b> .				Hydrophytic No. Voc. / No.	
J		- T-4-1 O-		Vegetation Present? YesNo	
Describe (If the second list as a list	5	= Total Cove	31	<u> </u>	
Remarks: (If observed, list morpho Percent cover estimates based on		•	oroader coi	mmunity	
i elcent cover estimates based on	inicanucing s	Juivey of the L	Ji Gadei Coi	minumey.	

County/soil:	Polk-	Eaton
SOIL		

SOIL								Sampling Point:42
Profile De	scription: (Describe	to the dep	th needed to doc	ument the	indicator or	confirm the abs	ence of indicators.	)
Depth		io and dop			-eatures	001111111111111111111111111111111111111	onioo on midioacoron	
	Matrix							
(inches)	Color (moist)	- %	Color (moist)	%	Type'	Loc²	Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
-	110.0							gray outray oray
Transi Car	Concentration, D=Dept	olion DM	Dadward Matrix C	· <del></del>	ad as Captad C	Cond Crains	ZI apption: DI =Dar	a Lining Maddatair
		etion, Rivi=	Reduced Matrix, C	S=Covere	ed or Coated S	sand Grains.		e Lining, M=Matrix.
Hydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Polyva	alue Below Su	rface (S8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)
			•					
	Epidon (A2)		-			S9) <b>(LRR S, T, U</b>	' <del>'</del>	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loam	y Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hvdro	gen Sulfide (A4)			Loam	y Gleyed Matri	ix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		•		ted Matrix (F3			
		T 10						Anomalous Bright Loamy Soils (F20)
IOrgan	ic Bodies (A6) (LRR P	, ı, u)			k Dark Surface	(40)		(MLRA 153B)
5 cm !	Mucky Mineral (A7) (Li	2D P T I I		Denle	ted Dark Surfa	ace (F7)		Red Parent Material (TF2)
			•			, ,		<del></del>
[_✓_Muck	Presence (A8) (LRR t	J)		Redox	c Depressions	(F8)	,	Very Shallow Dark Surface (TF12) (LRR T, U)
1 0 0 1	Muck (A9) (LRR P,T)			Mart (	F10) (LRR U)			Other (Explain in Remarks)
	VIGOR (AS) (EIRIT 1,1)		•				•	
Deplet	ted Below Dark Surfac	e (A11)		Deple	ted Orchric (F	11) (MLRA 151)		
		- ( /		Iron k	langanasa Ma	sses (F12) (LRR	O D TI	
ITIICK	Dark Surface (A12)				ianganese ivia	15565 (F 12) (LKK	(O, P, I)	Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	VILRA 150	A)	Umbr	ic Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
	, , ,		. ,					problematic.
Sandy	Mucky Mineral (S1) (L	.RR (), S)		Delta	Orchric (F17)	(MLRA 151)		problematic.
Sandy	Gleyed Matrix (S4)			Redu	ced Vertic (F1)	B) (MLRA 150A,	150B)	
						Soils (F19) (ML		
	Redox (S5)							
Strippe	ed Matrix (S6)			Anom	alous Bright L	oamy Soils (F20)	(MLRA 149A, 153C	, 153D)
Dorte 6	Surface (S7) (LRR P, S	. T III						
Restrictive	e Layer (If observed):						1	
l	Туре:							
	Depth (inches):						Hydric Soil Presen	t? Yes ✓ No .
	Depth (inches).						riyanc son Fresen	tr res <u> </u>
Remarks:								
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Project/Site: Levy Nuclear Plant - Transmission	City/County: Polk		Sampling Date: 9/30/09		
Applicant/Owner: Progress Energy Florida, In	State: FL		Sampling Point: 43		
Investigator(s): Stacy Rizzo, Erin Heinen	Section, Township, Range: <u>7 27S 23E/8 27S 23E</u>				
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: 28.15265	0 Long: <u>-82.0</u>	139853	Datum: WGS84	
Soil Map Unit Name: Eaton mucky fine sand,				_palustrine emergent	
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil	or Hydrology			s normal? Yes <u> ✓ No</u>	
Are Vegetation, Soil	or Hydrology	_ naturally problematic?	(If needed, explain	any answers in Remarks)	
SUMMARY OF FINDINGS - Attach s	ite map showing sampl	ing point locations, t	ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	rithin a Wetland?	YesNo	
Wetland Hydrology Present?	Yes No	]			
Remarks: Disturbed	·				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two required)	
Primary Indicators (minimum of one is required	d; check all that apply)		Surface Soil		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	· · · · · · · · · · · · · · · · · · ·	getated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	` ,	Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (L	RR U)	Moss Trim L	• •	
Water Marks (B1)	Hydrogen Sulfide Odor	·		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	` '	Crayfish Bur	` ,	
Drift Deposits (B3)	Presence of Reduced I	* * *	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction	• •	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7	, ,	itard (D3)		
✓ Inundation Visible on Aerial Imagery (B		-	Test (D5)		
Field Observations:			T		
Surface Water Present?	Yes✓ No	Depth (inches): 0-12			
Water Table Present?	Yes No		•		
Saturation Present?	Yes✓ No		Wetland		
(includes capillary fringe)	100	_ Bepair (menes)	Hydrology Present?	Yes ✓ No	
Describe Recorded Data (stream gauge, moni	toring well aerial photos previo	ous inspections) if available		165 <u>v N</u> O	
Joseph House Land (Gardan gauge, mem	toring tron, dorial priotos, provid	rae in operatione, in a railable	•		
Remarks:					
,					

FAC

Hydrophytic

Vegetation Present?

Yes <u>√</u>

ves

4 = Total Cover Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

Vitus rotundifolia

SOIL	il: Polk- Eaton							Sampling Point:43		
	escription: (Describe t	o the dep	th needed to doc			onfirm the abse	ence of indicators.)			
Depth	Matrix				eatures	1	<b>-</b> .			
(inches)	Color (moist)		Color (moist)		Type'	Loc	Texture	Remarks		
0-6	10 YR 2/1							black mucky fine sand		
6-29	10 YR 7/1			—				light gray fine sand		
29-33	N 5/0							gray sandy clay loam		
33-80	N 5/0							gray sandy clay		
Type: C=	Concentration, D=Deple	etion, RM=	Reduced Matrix, (	S=Covere	ed or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Pore			
	oil Indicators:							ndicators for Problematic Hydric Soils 3:		
Histol						ace (\$8) (LRR S		1 cm Muck (a9) (LRR O)		
	Epidon (A2)					9) (LRR S, T, U)	_	2 cm Muck (A10) (LRR S)		
_	Histic (A3)					I (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)				y Gleyed Matrix	: (F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	fied Layers (A5) nic Bodies (A6) (LRR P	T 11)			ted Matrix (F3) CDark Surface	(E6)	-	Anomalous Bright Loamy Soils (F20)		
								(MLRA 153B)		
_	Mucky Mineral (A7) (LF				ted Dark Surfac	• •		Red Parent Material (TF2)		
Muck	Presence (A8) (LRR L	J)		Redox	Depressions (	F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm	Muck (A9) (LRR P,T)			Marl (	F10) (LRR U)		_	Other (Explain in Remarks)		
Deple	ted Below Dark Surface	e (A11)		Deple	ted Orchric (F1	1) (MLRA 151)				
_ :	Dark Surface (A12)	,	•	Iron-N	langanese Mas	ses (F12) (LRR	O, P.T) 3.			
_	Prairie Redox (A16) (N	41 DA 150	۸)	Umbric Surface (F13) (LRR P, T, U)				Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
			Α)							
	y Mucky Mineral (S1) (L	.RR O, S)				•	•	Toblematic.		
	y Gleyed Matrix (S4)					) (MLRA 150A, 1				
	y Redox (S5)		,			Soils (F19) (MLF		4500)		
Stripp	ed Matrix (S6)			Anom	alous Bright Lo	amy Soils (F20)	(MLRA 149A, 153C,	153D)		
	Surface (S7) (LRR P, S									
Restrictiv	e Layer (If observed):									
ŀ	Type:									
	Depth (inches):					i	Hydric Soil Present	? Yes <u>√</u> No		
Remarks:										
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Project/Site: Levy Nuclear Plant - Transmission I	City/County: Polk		Sampling Date: 9/30/09		
Applicant/Owner: Progress Energy Florida, Inc.	State: FL		Sampling Point: 44		
Investigator(s): Stacy Rizzo, Erin Heinen	Section, Township, Range	Section, Township, Range: <u>7 27S 23E/8 27S 23E</u>			
Landform (hillslope, terrace, etc.): N/A	<u>,                                     </u>	Local relief (concave, con-	vex, none): <u>none</u>	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.150</u>	911 Long: <u>-82.0</u>	39845	Datum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	N/A	
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes✓	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)	
SUMMARY OF FINDINGS - Attach site	e map showing sam	pling point locations, t	ransects, impor	tant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No	
Wetland Hydrology Present?	Yes No				
Remarks: Disturbed and grazed					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)	
Primary Indicators (minimum of one is required;	theck all that apply)		Surface Soil C	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leave	es (B9)	Sparsely Veg	etated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	)	Drainage Patt	terns (B10)	
✓ Saturation (A3)	Marl Deposits (B15)	(LRR U)	Moss Trim Lin	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Od	dor (C1)	Dry-Season V	Vater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizosphe	res on Living Roots (C3)	on Living Roots (C3)Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduce	ed Iron (C4)	on (C4)Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction	on in Tilled Soils (C6)	Tilled Soils (C6)Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (	C7)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Re	marks)	FAC Neutral 1	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-6			
Water Table Present?	Yes No	Depth (inches):0	L		
Saturation Present?	Yes No	Depth (inches):0	Wetland Hydrology		
(includes capillary fringe)				Yes <u>✓ No</u>	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, pre	vious inspections), if available:			
				·	
Remarks:					
iveniarks.					
Cur i					

VEGETATION - Use scientific nar	nes of plants				Sampling Point:	44
	Absolute %	Dominant	Indicator	Dominance Test Worksh	eet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spec	cies ,	/A\
2.				That Are OBL, FACW, or I	FAC: <sup>1</sup>	(A)
3.				Total Number of Dominant	t	(5)
4.				Species Across All Strata:	· <u>1</u>	(B)
5.				Percent of Dominant Spec	ies	
6.				That Are OBL, FACW, or I		(A/B)
7.				Prevalance Index worksi		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:)				OBL species	x1=	
1.				FACW species —	x2=	_
2.				FAC species	x3=	
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.	-			Column Totals:	(A)	- <sub>(В)</sub>
6.						_(_)
7.				Prevalance Index = B	k/Δ =	
		= Total Cove		Hydrophytic Vegetation		
Shrub Stratum (Plot size:	•	- 10tai 00VC	'	✓ Dominance Test is		
1.	,			Prevalence Index is		
2.				<del> </del>	s ≤3.0 phytic Vegetation¹ (Exp	oloin)
3.	<del></del>	<del></del>		Problematic riyorop	Jilytic vegetation (Exp	nairi)
				1, , , , , , , , ,		
<u>4.</u> 5.		•		Indicators of hydric soil ar		nust
6.	•			be present, unless disturbed Definitions of Vegetation		
7.				Deminions of Vegetation	ı Sırata.	
1.		- Tatal Cava		<u>.</u>		
Horb Stratum (Plat aiza:	١	= Total Cove	r	Tree- Woody plants, exclud		/7.6
Herb Stratum (Plot size:	,		ODI	approximately 20 ft (6m) or cm) or larger in diameter at		(7.6
Panicum hemitomon	90	yes	OBL	1		
2.				Sapling- Woody plants, exc		45 2
3.				approximately 20 ft (6m) or in. (7.6 cm) DBH.	more in neight and less	man 3
4.		<del></del>		1		
5.				Shrub- Woody plants, exclu		
6.				approximately 3 to 20 ft (1 to	· -	
7.				Herb- All herbaceous (non-		
8.				herbaceous vines, regardles		-
9.				plants, except woody vines, m) in height.	less than approximately	/3π(1
10.				1		
11.				Woody vine- All woody vine	es, regardless of height.	
12.						
-	90	= Total Cove	r			
Woody Vine Stratum (Plot size:	)					
1				]		
2.						
3.				]		
4.				Hydrophytic		
5.				Vegetation Present?	YesNo	
	0	= Total Cove	r			
Remarks: (If observed, list morpho	-				•	
Percent cover estimates based or	meandering s	survey of the b	roader cor	mmunity.		

County/soil:	Polk- Po	omona
SOIL		

SOIL			Sampling Point: 44
Profile Description: (Describe to the depth needed to do	ocument the indicator or confirm the abs	ence of indicators.)	
Depth Matrix	Redox Features		
(inches) Color (moist) % Color (moist)	% Type' Loc²	Texture	Remarks
0-6 10 YR 3/1			very dark gray fine sand
6-12 10 YR 6/2			light brownish gray sand
12-21 10 YR 7/2			light gray sand
21-26 5 YR 3/3			dark reddish brown loamy fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix	, CS=Covered or Coated Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric Soil Indicators:			ndicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8) (LRR S		1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S, T, U	_	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)	Depleted Matrix (F3)Redox Dark Surface (F6)	-	Anomalous Bright Loamy Soils (F20)
<del></del>			(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)	-	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)	-	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)		
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR	O, P,T) 3	ndicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	h	ydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)	p	roblematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A,	150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLI		
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20)	(MLRA 149A, 153C,	153D)
Dark Surface (S7) (LRR P, S, T, U)			
Restrictive Layer (If observed):			· · · ·
Туре:			
Depth (inches):		Hydric Soil Present	? Yes <u>√</u> No
Remarks:			
•			
			•
·			

Project/Site: Levy Nuclear Plant - Transmission L	City/County: Polk	_Sampling Date:_	9/30/09		
Applicant/Owner: Progress Energy Florida, Inc.	State:FL		Sampling Point:	45	
Investigator(s): Stacy Rizzo, Erin Heinen	Section, Township, Range: 7 27S 23E/8 27S 23E				
Landform (hillslope, terrace, etc.): N/A	Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: <u>28.148944</u>	Long: <u>-82.0</u>	39890	Da	atum: WGS84
Soil Map Unit Name: Smyrna and Myakka fine sa			_NWI classification		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	- No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		
	or Hydrology		(If needed, explain	any answers in R	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features	s, etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes <u> ✓</u> No	o
Wetland Hydrology Present?	Yes No				
Remarks: Disturbed and grazed					
	·				
HYDROLOGY					
			Cacandani Indicat	ara /minimum of t	···a required)
Wetland Hydrology Indicators:	haali all that anniul		Secondary Indicate		wo required;
Primary Indicators (minimum of one is required; c		Surface Soil Cracks (B6)  B9)Sparsely Vegetated Concave Surface			O:-fana (D8)
✓ Surface Water (A1)	Water-Stained Leaves (I	89)	Spaisery vegetated ofDrainage Patterns (B1		
High Water Table (A2)	Aquatic Fauna (B13)				
Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim L	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres				
Drift Deposits (B3)	Presence of Reduced Iro				agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	. , , , , , , , , , , , , , , , , , , ,			
tron Deposits (B5)	Thin Muck Surface (C7)	<del></del>			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	<u>'ks)</u>	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No				
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches): 0	Hydrology		
(includes capillary fringe)	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	* ** * * ** **************************	Present?	Yes No	o
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			
				·	
Remarks:					

VEGETATION - Use scientific na	mes of plants				Sampling P	oint:	45
	Absolute %	Dominant	Indicator	Dominance Test Worksh	eet:		
Tree Stratum (Plot size:)	Cover	Species?	Status				
1.				Number of Dominant Spec		4	(A)
2.				That Are OBL, FACW, or	FAC:	<u></u>	(/\)
3.				Total Number of Dominan	t	4	(B)
4.				Species Across All Strata:			(D)
5.				Percent of Dominant Spec	cies	100.00	(A/B)
6.				That Are OBL, FACW, or		100.00	(~0)
7.				Prevalance Index worksl	heet:		
	0	= Total Cov	er	Total % Cover of:	M	ultiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=		_
Acer rubrum	5	yes	OBL	FACW species	x2=		
2.				FAC species	x3=		
3.				FACU species	x4=		_
4.				UPL species	x5=		_
5.				Column Totals:	(A)		_(B)
6.							
7.				Prevalance Index = B			
	5	= Total Cov	er	Hydrophytic Vegetation	Indicators:		
Shrub Stratum (Plot size:	)			✓ Dominance Test is	50%		
<ol> <li>Baccharis sp.</li> </ol>	25	yes	FAC	Prevalence Index is	s ≤3.0 <sup>1</sup>		
<ol><li>Cephalanthus occidentalis</li></ol>	2	no	OBL	Problematic Hydro	ohytic Veget	ation¹ (Exp	olain)
3.							
4.				Indicators of hydric soil ar	nd wetland h	ydrology r	nust
5.				be present, unless disturb		matic.	
6.	_			Definitions of Vegetation	n Strata:		
7.							
	27	= Total Cov	er	Tree- Woody plants, exclud	ing woody vi	nes,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or	more in heig	ht and 3 in.	(7.6

4.				UPL species	x5=
5.				Column Totals:	(A) (B)
6.				]	
7.				Prevalance Index =	B/A =
	5	= Total Co	ver	Hydrophytic Vegetation	Indicators:
Shrub Stratum (Plot size:	_)			✓ Dominance Test i	s 50%
Baccharis sp.	25	yes	FAC	Prevalence Index	
Cephalanthus occidentalis	2	no	OBL	Problematic Hydro	ophytic Vegetation <sup>1</sup> (Explain)
3.				_]	
4.					and wetland hydrology must
5.			···	be present, unless distur	
6.			_	Definitions of Vegetation	on Strata:
7					
	27	= Total Co	ver	Tree- Woody plants, exclu	ding woody vines,
Herb Stratum (Plot size:)					r more in height and 3 in. (7.6
Juncus effusus	25	yes	FACW	cm) or larger in diameter a	it breast height (DBH).
Ludwigia peruviana	25	yes	OBL	Sapling- Woody plants, ex	
Eupatorium capillifolium	10	no	FACU		r more in height and less than 3
4. Cyperus spp.	2	no	FACW	in. (7.6 cm) DBH.	
5. Panicum hemitomon	2	no	OBL	Shrub- Woody plants, exc	luding woody vines,
6. Andropogon spp.	2	no	FAC	approximately 3 to 20 ft (1	to 6 m) in height.
7.				Herb- All herbaceous (nor	n-woody)plants, including
8.					ess of size. Includes woody
9.					s, less than approximately 3 ft (1
10.			_	m) in height.	
11.				Woody vine- All woody vir	nes, regardless of height.
12.					
	66	= Total Co	ver		
Woody Vine Stratum (Plot size:	)				
1.					
2.				7	
3.					
4.				Hydrophytic	
5.				Vegetation Present?	Yes <u>✓ No</u>
	0	= Total Co	ver	7	
Remarks: (If observed, list morphol	ogical adapta	tions below)		•	
Percent cover estimates based on	meandering s	urvey of the	broader co	ommunity.	
	_	•		•	

SOIL	ii: Polk-Myakka							Sampling Point:
Profile De: Depth	escription: (Describe t Matrix	to the dep	th needed to doc			confirm the ab	sence of indicators.)	
(inches)	Color (moist)	%	Color (moist)		ox Features Type <sup>1</sup>	Loc²	Texture	Remarks
0-7	10 YR 3/1							very dark gray fine sand
7-25	10 YR 6/1							gray fine sand
25-30	5 YR 5/1						***************************************	black fine sand
							common medium	
30-36	7.5 YR 3/2		10 YR 2/1		-		masses	dark brown fine sand
	,	. —						
	,							
Tyne: C=	Concentration, D=Depl	letion, RM	=Reduced Matrix. (	∩S=Cov	vered or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining M=Matrix
	oil Indicators:	ottori, riiii	Tious and Time.	70 00.	ord or oddie	and Granic.		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histol	(A1)			Poh	lyvalue Below Surf	face (S8) (LRF		1 cm Muck (a9) (LRR O)
	Epidon (A2)				in Dark Surface (S			2 cm Muck (A10) (LRR S)
_	Histic (A3)				amy Mucky Minera		) _	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				amy Gleyed Matrix		_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				pleted Matrix (F3)		_	Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR P				dox Dark Surface			(MLRA 153B)
	Mucky Mineral (A7) (LF		j		pleted Dark Surfac	. ,	-	Red Parent Material (TF2)
	Presence (A8) (LRR L			Rer	dox Depressions (	(F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm f	Muck (A9) (LRR P,T)			Mar	arl (F10) (LRR U)		_	Other (Explain in Remarks)
Deple	ted Below Dark Surfac	ж (A11)		Der	pleted Orchric (F1	11) (MLRA 151	ı)	
	Dark Surface (A12)			lror	n-Manganese Mas	sses (F12) (LR	R O, P,T) 3	311
	Coast Prairie Redox (A16) (MLRA 150A)				nbric Surface (F13		"	Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (L		•		elta Orchric (F17) (I			problematic.
	y Mucky Minerai (S1) (L y Gleyed Matrix (S4)	_KK 0, 0,			duced Vertic (F18)		•	
	y Gleyed Matrix (54) y Redox (S5)				edmont Floodplain		•	
	ed Matrix (S6)		•		•		0) (MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P, S	e T II)		_	J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	uning same ,	// (mar 5	1002,
	e Layer (If observed):						1	
	Type:	•						
	Depth (inches):						Hydric Soil Present	t? Yes ✓ No .
Remarks:							111,411.00	
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		Sampling Date:	9/30/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	46	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: <u>7 27S 23E/8 27S 2</u>	23E		
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: 28,149524	24 Long: <u>-82.039886</u> Datum: <u>WGS8</u>				
Soil Map Unit Name: Smyrna and Myakka fine sa			_NWI classification:	NA		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in R	emarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		No	
	or Hydrology		(If needed, explain	any answers in Re	marks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features,	etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	YesNo	is the Sampled Area w	vithin a Wetland?	YesNo_		
Wetland Hydrology Present?	YesNo					
Remarks: Disturbed, mowed and grazed						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of two	required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil (	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (I	39)	Sparsely Veg	etated Concave Su	ırface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	ss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season V	Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burre	• •		
Drift Deposits (B3)	Presence of Reduced Iro	*	<del></del>	sible on Aerial Imag	gery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic I		,	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)		utral Test (D5)		
Field Observations:		,	1	, , , ,		
Surface Water Present?	Yes No	Denth (inches): 0-6				
	Yes No		1			
Water Table Present?	Yes_ ✓ No		Wetland			
Saturation Present?	162 No	Depth (Inches):u	Hydrology	V / N-		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na wall parial photos, provious	incoortions) if available:	Present?	Yes _/No_		
Describe Recorded Data (stream gauge, monitor)	ng well, aeliai photos, previous	mspections), il available.				
Remarks:	•					
·						
					E. II. E. E. E. E. E. E. E. E. E. E. E. E. E.	

<b>VEGETATION</b> - Use scientific na	mes of plants			Sampling Point:	46
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:  0	(A)
3. 4.				Total Number of Dominant Species Across All Strata:	(B)
5.				Percent of Dominant Species	(A/B)
6.	<del></del>			That Are OBL, FACW, or FAC:	
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:		= Total Cove	er	Total % Cover of: Multiply by: OBL species 2% x1= 0.02	2
1.				FACW species 4% x2= 0.08	<u>-</u>
2.				FAC species x3= (	0
3.				FACU species 92% x4= 3.68	8
4.				UPL species x5= (	0
5.				Column Totals: 98% (A) 3.78	8 (B)
6.	-				<b>-</b> ` ′
7.				Prevalance Index = B/A = 3.86	6
<u> </u>		= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			Dominance Test is 50%	
1.				Prevalence Index is ≤3.0¹	
2.				Problematic Hydrophytic Vegetation¹ (Exp	olain)
3.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology m	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
Herb Stratum (Plot size:)	0	= Total Cove	er	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in.	(7.6
Cynodon dactylon	90	yes	FACU	cm) or larger in diameter at breast height (DBH).	
2. Ludwigia linearis	2	no	OBL	Sapling- Woody plants, excluding woody vines,	
3. Juncus effusus	2	no	FACW	approximately 20 ft (6m) or more in height and less	than 3
4. Cyperus spp.	2	no	FACW	in. (7.6 cm) DBH.	
Eupatorium capillifolium     6.	2	no	FACU	Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.	- ——			herbaceous vines, regardless of size. Includes woo	odv
9	-			plants, except woody vines, less than approximately	
10.				m) in height.	(
11.				Woody vine- All woody vines, regardless of height.	
12.				1	
	98	= Total Cove		1	
   Woody Vine Stratum (Plot size:	)	- Total Oove	<b>,</b> 1		
1					
2.	· ———			1	
3.	<del></del>				
	-			Lhadaa ahada	
<u>4.</u> 5.	-			Hydrophytic	
J		- Total Carra		Vegetation Present? YesNo	<del></del>
Demogles (If sheared Estates	0	= Total Cove	<b>#</b>	<u> </u>	
Remarks: (If observed, list morph		·			
determination based on hydric so			noauer cor	mmunity. Area affected by grazing. Wetland	

County/so	il: Polk-Myak	ka
SOIL		

SOIL	an myanna					Sampling Point: 46
Profile Descri	ption: (Describe to the dep	oth needed to docu	ment the indicator or co	nfirm the abs	sence of indicators.)	
Depth	Matrix		Redox Features			
(inches)	Color (moist) %	Color (moist)		Loc	Texture	Remarks
0-7 10	YR 3/1					very dark gray fine sand
	YR 6/1		<del></del>			gray fine sand
	YR 5/1					black fine sand
					common medium	
30-36 7.5	5 YR 3/2	10 YR 2/1			masses	dark brown fine sand
ļ			<del></del>	<del></del>		
<del> </del>		<del></del>				
Type: C=Cond	centration, D=Depletion, RM	Reduced Matrix. C	S=Covered or Coated Sar	nd Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric Soil In						ndicators for Problematic Hydric Soils 3:
Histol (A1)	)	_	Polyvalue Below Surfa	ce (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epic	lon (A2)	_	Thin Dark Surface (S9)	) (LRR S, T, U	J) _	2 cm Muck (A10) (LRR S)
Black Hist	ic (A3)	_	Loamy Mucky Mineral	(F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	Sulfide (A4)	_	Loamy Gleyed Matrix (	F2)	-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	_ayers (A5)	_	Depleted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
Organic B	odies (A6) (LRR P, T, U)	-	Redox Dark Surface (F	-		(MLRA 153B)
5 cm Mucl	ky Mineral (A7) (LRR P,T,U)	_	Depleted Dark Surface	e (F7)		Red Parent Material (TF2)
✓ Muck Pre	sence (A8) (LRR U)	_	Redox Depressions (F	8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Mucl	k (A9) (LRR P,T)	_	Marl (F10) (LRR U)		-	Other (Explain in Remarks)
Depleted 6	Below Dark Surface (A11)	_	Depleted Orchric (F11)	) (MLRA 151)		
Thick Darl	k Surface (A12)	_	Iron-Manganese Mass	es (F12) (LRR	RO, P,T)	Indicators of hydrophytic vegetation and wetland
Coast Pra	irie Redox (A16) (MLRA 150	DA) _	Umbric Surface (F13)	(LRR P, T, U)		hydrology must be present, unless disturbed or
	cky Mineral (S1) (LRR O, S)	•	Delta Orchric (F17) (M	LRA 151)		problematic.
1	eyed Matrix (S4)	-	Reduced Vertic (F18)		150R)	
Sandy Re	. , ,	=	Piedmont Floodplain S			
Stripped N		-	Anomalous Bright Loai			153D)
	ace (S7) (LRR P, S, T, U)	_			,	·
	yer (If observed):				ī	
Тур						
	oth (inches):				Hydric Soil Present	? Yes <u>√</u> No
Remarks:					•	
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk Sampling Date: 9/			9/30/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FLSampling Point:47/			:47/47A	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 7 27S 23E/8 27S 23E				
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, conv	vex, none): none	s	lope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.145934	34 Long: <u>-82.039837</u> Datum: <u>WG</u>				
Soil Map Unit Name: Basinger mucky fine sand,	depressional		_NWI classification	: <u>NA</u>	<u>.</u>	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	_ (if no, explain it	Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		es <u> ✓</u> No	
	or Hydrology		(If needed, explain	any answers in	Remarks)	
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	ortant feature	es, etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	YesNo	Is the Sampled Area w	vithin a Wetland?	Yes <u>✓</u> N	lo	
Wetland Hydrology Present?	Yes No		•			
Remarks: Disturbed, mowed and grazed						
	· · · · · · · · · · · · · · · · · · ·					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of	two required)	
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Vegetated Concave Surface (B8)		Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	Drainag		ge Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	•		on Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Bur	•	,	
Drift Deposits (B3)	Presence of Reduced In	- · · · · — · · ·			magery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in			Position (D2)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutral	, ,		
Field Observations:		,,,,,,	T	11001 (5-7)		
Surface Water Present?	Yes No	Death (inches): 0-24				
Water Table Present?	Yes No					
Saturation Present?	Yes No		Wetland			
	162 - 140	_ Deptit (inches)	Hydrology Present?	Yan / . A	1_	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ing well aerial photos previous	inspections) if available:	Present	Yes <u>✓                                    </u>	lo	
Describe Necorded Data (Stream gauge, memor	illy well, delial priotos, presiona	півреонопа), п атанавів.				
Remarks:						
· ·						
i						

VEGETATION - Use scientific nat	mes of plants			Sampling Point:	47/47A
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species	(A)
2.				That Are OBL, FACVV, OF FAC.	` ,
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	(-)
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:		= Total Cove	r	Total % Cover of: Multiply by OBL species x1=	<u>:</u>
1.				FACW species x2=	
2.				FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	
5.				Column Totals: (A)	(B)
6.				``	<b>—</b> ` ′
7.				Prevalance Index = B/A =	
		= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	<u> </u>			Prevalence Index is ≤3.0 <sup>1</sup>	
2.			-	Problematic Hydrophytic Vegetation <sup>1</sup> (E	(volain
3.	·			1 Toblematio Trydrophytio Vegetation (2	хрічні
4.	· <del></del>			Indicators of hydric soil and wetland hydrology	, must
<del>5</del> .		<del></del>		be present, unless disturbed or problematic.	must
6.				Definitions of Vegetation Strata:	
7.				diam.	
	0	= Total Cove	<u></u>	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) or more in height and 3 icm) or larger in diameter at breast height (DBH).	n. (7.6
Panicum spp.     Panicum harritamen	50	yes	FACW	•	
Panicum hemitomon	30	yes	OBL	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and les	an than 2
Cyperus spp.      Cyperus spp.	2	no	FACU	in. (7.6 cm) DBH.	55 tilali 3
<ol> <li>Eupatorium capillifolium</li> <li>.</li> </ol>	2	no	FACU	Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, includir	na
8.				herbaceous vines, regardless of size. Includes w	
9.		· · · · · · · · · · · · · · · · · · ·		plants, except woody vines, less than approximat	-
10.				m) in height.	,
11.				Woody vine- All woody vines, regardless of heigh	nt.
12.				·	
	84	= Total Cove			
Woody Vine Stratum (Plot size:	)				
1.	·			1	
2.					
3.				1	
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>   √        </u> No_	<u>-</u>
	0	= Total Cove	r		
Remarks: (If observed, list morph	- :	-	roador cor	mmunity	

SOIL Profile De Depth	1 11 15 11							Sampling Point: 47/4
Denth	ascription: (Describe)	to the dep	th needed to doci	ument the	e indicator or o	onfirm the abs	sence of indicators.)	
	Matrix				Features			
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
								gray o,,
	Concentration, D=Depl	etion, RM=	Reduced Matrix, C	CS=Cover	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	
	oil Indicators:			Doha	-the Balance Curt	/C9\ /I DD		Indicators for Problematic Hydric Soils 3:
Histo			-			face (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)		-		•	9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				y Gleyed Matrix			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ified Layers (A5)		-		ted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
Orga	nic Bodies (A6) (LRR P	', T, U)	=		x Dark Surface			(MLRA 153B)
5 cm	Mucky Mineral (A7) (LI	RR P,T,U)		Deple	ted Dark Surfa	ce (F7)		Red Parent Material (TF2)
	k Presence (A8) (LRR I			Redo	x Depressions (	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	-,	-		F10) (LRR U)		•	Other (Explain in Remarks)
_		(* 14)	-			4\ (MI DA 161\	•	
	eted Below Dark Surfac	:e (А11)	-			1) (MLRA 151)		
Thick	: Dark Surface (A12)			iron-N	Manganese Mas	sses (F12) (LRR	₹O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coas	t Prairie Redox (A16) (I	MLRA 150	A) .	Umbr	ic Surface (F13	) (LRR P, T, U)		hydrology must be present, unless disturbed or
			•		Orchric (F17) (	MI DA 454)		problematic.
	y Mucky Mineral (S1) (L	LKK (), 5)	-					problemate.
	y Gleyed Matrix (S4)		-			) (MLRA 150A,		
	y Redox (S5)					Soils (F19) (ML		
Stripp	oed Matrix (S6)			Anom	nalous Bright Lo	amy Soils (F20)	) (MLRA 149A, 153C	, 153D)
Dark	Surface (S7) (LRR P, \$	S, T, U)						
Restrictiv	ve Layer (If observed)	:						
	Туре:							
ı	Depth (inches):						Hydric Soil Presen	t? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	City/County: Polk Sampling			e: 9/30/09		
Applicant/Owner: Progress Energy Florida, Inc.	State: FL Samplii			nt:49/49A		
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 7 27S 23E				
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, con	vex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U		, , , ,			Datum: WGS84	
Soil Map Unit Name: Basinger mucky fine sand,	depressional		NWI classification:	NA		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ _ No			
• • •	or Hydrology		Are circumstances		YesNo	
	or Hydrology		(If needed, explain		Remarks)	
SUMMARY OF FINDINGS - Attach sit				•	•	
Hydrophytic Vegetation Present?	Yes <u></u> √ No	3				
Hydric Soil Present?	Is the Sampled Area v	vithin a Wetland?	Yes✓	No		
Wetland Hydrology Present?	YesNo				<del> </del>	
Remarks: Disturbed		<u> </u>				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum o	f two required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil (	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (F	B9)	Sparsely Veg	getated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season \	Vater Table (C	2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burn	_Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vis	sible on Aerial	Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic I	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	tard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)		
Field Observations:				•		
Surface Water Present?	Yes No	Depth (inches): 0-24				
Water Table Present?	Yes No	Depth (inches): 0				
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)		•	Present?	Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	·			
Remarks:						
incernarios.						
·						

/EGETATION - Use scientific nar	mes of plants			Sampling Point:	49/49A
Free Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species	(A)
2.				That Are OBL, FACW, or FAC: 4	(~)
3.				Total Number of Dominant	(B)
1.				Species Across All Strata:	(0)
5.				Percent of Dominant Species 100.00	(A/B)
5.				That Are OBL, FACW, or FAC:	, (,,,,,
7.				Prevalance Index worksheet:	
	0	= Total Cove	÷r	Total % Cover of: Multiply by	<u>r:</u>
Sapling Stratum (Plot size:	)			OBL speciesx1=	
Quercus laurifolia	2	yes	FACW	FACW speciesx2=	
2.	T			FAC speciesx3=	
3.	-			FACU speciesx4=	
4.				UPL speciesx5=	
5.				Column Totals: (A)	(B)
5.				]	
7.				Prevalance Index = B/A =	
	2	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
Baccharis sp.	20	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
2. Myrica cerifera	10	no	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (E	Explain)
3.					
4.	,			Indicators of hydric soil and wetland hydrology	y must
5.				be present, unless disturbed or problematic.	
ô.				Definitions of Vegetation Strata:	
7.				]	
	30	= Total Cove	er .	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3	in. (7.6
Pontederia cordata	30	yes	OBL	cm) or larger in diameter at breast height (DBH).	
2. Juncus effusus	20	yes	FACW	Sapling- Woody plants, excluding woody vines,	
3. Eupatorium capillifolium	10	no	FACU	approximately 20 ft (6m) or more in height and le	ss than 3
4. Ludwigia peruviana	5	no	OBL	in. (7.6 cm) DBH.	
5. Panicum hemitomon	2	no	OBL	Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, includir	ng
8.				herbaceous vines, regardless of size. Includes w	voody
9.				plants, except woody vines, less than approximat	ely 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of heig	ht.
12.				]	
	67	= Total Cove	er .	1	
Woody Vine Stratum (Plot size:	)				
1.					
2.				<b></b>	
3.					-
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	
		= Total Cove	er	1 3	
Remarks: (If observed, list morph	ological adapta				
Percent cover estimates based or	•		roader co	mmunity.	

	scription: (Describe	to the dep	oth needed to doci		or confirm the ab	sence of indicators.)	1
Depth	Matrix			Redox Features			
(inches)	Color (moist)	%	Color (moist)	% Type	Loc²	Texture	Remarks
0-6	10 YR 2/1		0				black mucky fine sand
5-29	10 YR 7/1						light gray fine sand
9-33	N 5/0						gray sandy clay loam
3-80	N 5/0						gray sandy clay
		_					
Timoi C=	Concentration, D=Depl	otion DM	-Dodugod Matrix C	S=Covered or Coots	od Cond Croins	<sup>2</sup> Location: PL=Pore	Lining MaMotriy
	il Indicators:	euon, Rivi-	-Reduced Mairix, C	3-Covered of Coale	eu Sanu Grains.		ndicators for Problematic Hydric Soils 3:
Histol				Polyvalue Below	Surface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)		•		ce (S9) (LRR S, T, I		2 cm Muck (A10) (LRR S)
_	Histic (A3)		-		ineral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		•	Loamy Gleyed M	. , , , ,	•	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		-	Depleted Matrix		•	Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P	, T, U)		Redox Dark Surf		-	(MLRA 153B)
	Mucky Mineral (A7) (LI			Depleted Dark S	urface (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR I		•	Redox Depression		•	Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P.T)	٠,	-	Mart (F10) (LRR		•	Other (Explain in Remarks)
			•		•		outer (Explain in Nemarks)
	ted Below Dark Surfac	e (A11)	-		(F11) (MLRA 151)		
Thick	Dark Surface (A12)		-		Masses (F12) (LRF		Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	MLRA 150	A) _	Umbric Surface	(F13) (LRR P, T, U)	•	nydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (I	_RR O, S)		Delta Orchric (F1	17) (MLRA 151)	I	problematic.
Sandy	Gleyed Matrix (S4)		_	Reduced Vertic (	(F18) (MLRA 150A,	, 150B)	
Sandy	Redox (S5)			Piedmont Floodp	olain Soits (F19) (MI	LRA 149A)	
Stripp	ed Matrix (S6)			Anomatous Brigh	nt Loamy Soils (F20	) (MLRA 149A, 153C,	, 153D)
Dark S	Surface (S7) (LRR P,	S, T, U)					
	e Layer (If observed)	:					
	Type:					1	
Remarks:	Depth (inches):		<del></del>			Hydric Soil Presen	t? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Date:_	9/30/09
Applicant/Owner: Progress Energy Florida, Inc.	State:FL		Sampling Point:_	50/50A	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 7 27S 23E			
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, con-	vex, none): none	Slc	pe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28,144268	Long: <u>-82.0</u>	<u>)41681</u>	Da	tum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes✓_	No	(If no, explain in I	Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Ye	sNo
Are Vegetation, Soil,			(If needed, explain	any answers in R	emarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>			ransects, impo	rtant features	, etc.
Hydrophytic Vegetation Present?	YesNo			-	-
Hydric Soil Present?	Is the Sampled Area v	vithin a Wetland?	Yes <u>✓</u> No		
Wetland Hydrology Present?	Yes No	]			
Remarks: Disturbed, grazed and mowed.		3	**************************************		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	o required)
Primary Indicators (minimum of one is required; o	check all that apply)	Surface Soil Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	39)Sparsely Vegetated Concave Surface (		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	isible on Aerial Ima	agery (C9)
Algal Mat or Crust (B4)	l Mat or Crust (B4)Recent Iron Reduction i			Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral Test (D5)		
Field Observations:			T		
Surface Water Present?	Yes No	Depth (inches): 0-8			
Water Table Present?	Yes No	_			
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)		<u>-</u>	Hydrology Present?	Yes ✓ No	•
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	1. 1000	100100	
33.,	,, ,, , ,	,,			
Remarks:					
		-			
	•				

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	50/50A
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species	(Δ)
2.				That Are OBL, FACW, or FAC: $\frac{1}{}$	(A)
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	(170)
7.	-			Prevalance Index worksheet:	
Sapling Stratum (Plot size:	)	= Total Cove	r	Total % Cover of: Multiply by: OBL species x1=	<u>.</u>
1.	<del></del> _			FACW species x2=	
2.			-	FAC species x3=	
3.				FACU species x4=	
4.	-			UPL species x5=	
5.				Column Totals: (A)	(B)
6.			-	`	<del></del> ` ′ i
7.			-	Prevalance Index = B/A =	
	0	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	<b>—</b>		İ	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	xplain)
3.				<u> </u>	• •
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology	must
5.		•		be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				1	
Herb Stratum (Plot size:)	0	= Total Cover	r	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in	n. (7.6
Panicum repens	90	yes	FACW	cm) or larger in diameter at breast height (DBH).	
2. Cyperus spp.	2	no	FACW	Sapling- Woody plants, excluding woody vines,	
Cynodon dactylon	2	no	FACU	approximately 20 ft (6m) or more in height and les	s than 3
4. 5.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	g
8.				herbaceous vines, regardless of size. Includes wo	oody
9.				plants, except woody vines, less than approximate	ely 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of heigh	t.
12.					
	94	= Total Cover	r		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u></u> ✓ No_	<del></del>
	0	= Total Cover	r		
Remarks: (If observed, list morpho Percent cover estimates based on			roader con	mmunity.	

-	ił: Polk- Pomona							a » a
SOIL								Sampling Point:50/50/
	escription: (Describe	to the dep	oth needed to doo			confirm the abs	sence of indicators.)	
Depth	Matrix				x Features			
(inches)	Color (moist)		Color (moist)		Type'	Loc <sup>2</sup>	Texture	Remarks
0-6	10 YR 3/1							very dark gray fine sand
6-12	10 YR 6/2							light brownish gray sand
12-21	10 YR 7/2							light gray sand
21-26	5 YR 3/3							dark reddish brown loamy fine sand
				—	•			
	Concentration, D=Dep oil Indicators:	letion, RM	=Reduced Matrix,	CS=Cov	ered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix. ndicators for Problematic Hydric Soils <sup>3</sup> :
Histol				Dol	arahia Balawi Si	ırface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					(S9) (LRR <b>S</b> , T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				my Gleyed Mat		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				leted Matrix (F3		-	Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR I	P, 1, U)			lox Dark Surfac	. ,		(MLRA 153B)
5 cm	Mucky Mineral (A7) (L	.RR P,T,U)		Dep	oleted Dark Surf	ace (F7)	-	Red Parent Material (TF2)
<u>√</u> Muck	Presence (A8) (LRR	U)		Rec	lox Depressions	s (F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Mar	1 (F10) (LRR U	}	-	Other (Explain in Remarks)
Deple	eted Below Dark Surface	ce (A11)		Dep	oleted Orchric (F	11) (MLRA 151)		
Thick	Dark Surface (A12)			Iron	-Manganese M	asses (F12) (LRF	₹ O, P,T)	Indicators of hydrophytic vegetation and wetland
Coast	t Prairie Redox (A16) (	MLRA 150	DA)	Um	bric Surface (F	13) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sand	y Mucky Mineral (S1) (	LRR O. SI		Del	ta Orchric (F17)	(MLRA 151)		problematic.
	y Gleyed Matrix (S4)			Red	luced Vertic (F1	8) (MLRA 150A,	150B)	
	y Redox (S5)					n Soils (F19) (ML		
	ped Matrix (S6)				•	. , ,	) (MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P,	S, T, U)			-			
Restrictiv	e Layer (if observed	):						
	Type:							
	Depth (inches):						Hydric Soil Present	t? Yes <u>✓</u> No
Remarks:								
1								
								•
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1								
1								
l								
1								

Project/Site: Levy Nuclear Plant - Transmission L	City/County: Polk		_Sampling Date: 9/30/09		
Applicant/Owner: Progress Energy Florida, Inc.	State:FL		Sampling Point: 51		
Investigator(s): Stacy Rizzo, Erin Heinen	Section, Township, Range: 7 27S 23E				
Landform (hillslope, terrace, etc.): N/A	Local relief (concave, conv	Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: 28,143295	Long:82.0	42964	Datum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	NA	
Are climatic / hydrologic conditions on the site type	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		
Are Vegetation, Soil,			(If needed, explain	any answers in Remarks)	
SUMMARY OF FINDINGS - Attach sit			•	•	
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No	
Wetland Hydrology Present?	Yes✓No				
Remarks: Disturbed by railroad tracks and transn	nission line	1			
				, , , , , , , , , , , , , , , , , , , ,	
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	39)Sparsely Vegetated Concave Surface (			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)		
Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	s (C3)Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	n Tilled Soils (C6)Geomorphic Position (D2)				
Iron Deposits (B5)		tard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:	•			•	
Surface Water Present?	Yes No	Depth (inches): 0-24			
Water Table Present?	Yes No				
Saturation Present?	Yes No		Wetland Hydrology		
(includes capillary fringe)			Present?	Yes No	
Describe Recorded Data (stream gauge, monitor	ng well, aerial photos, previous	inspections), if available:	<u> </u>		
Remarks:					
Tresmand.					

VEGETATION - Use scientific na	•			Sampling	Point:	51	
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>5</u>	(A)	
3.	-			Total Number of Dominant			
4.				Species Across All Strata:	<u>6</u>	(B)	
5.				Percent of Dominant Species	02.22	(A (D)	
6.				That Are OBL, FACW, or FAC:	<u>83.33</u>	(A/B)	
7.				Prevalance Index worksheet:			
		= Total Cove	er		Multiply by:		
Sapling Stratum (Plot size:	)			OBL speciesx1=		_	
Quercus nigra	2	yes	FAC	FACW speciesx2=			
Acer rubrum	2	yes	OBL	FAC speciesx3=			
3.				FACU speciesx4=		_	
4.				UPL speciesx5=		_	
5.				Column Totals:(A)		_(B)	
6.							
7.				Prevalance Index = B/A =			
Observe Observes (Distriction	4	= Total Cover		Hydrophytic Vegetation Indicators:			
Shrub Stratum (Plot size:	)			Dominance Test is 50%			
1.				Prevalence Index is ≤3.0 <sup>1</sup>	1		
2. 3.				Problematic Hydrophytic Veg	etation (Exp	olain)	
4.				1			
5.				<sup>1</sup> Indicators of hydric soil and wetland		nust	
6.				be present, unless disturbed or prob Definitions of Vegetation Strata:	леттацс.		
7.				Deminitions of vegetation Strata.			
		= Total Cove		Tree- Woody plants, excluding woody	vinae		
Herb Stratum (Plot size:)	· ·	- Total Gove	•1	approximately 20 ft (6m) or more in he		(7.6	
Eupatorium capillifolium	40	yes	FACU	cm) or larger in diameter at breast heigh	-	ζ	
Panicum hemitomon	30	yes	OBL	Sapling- Woody plants, excluding woo			
Ludwigia peruviana	15	no	OBL	approximately 20 ft (6m) or more in he		than 3	
Andropogon glomeratus	2	no	FACW	in. (7.6 cm) DBH.	3		
5. Cyperus spp.	2	no	FACW	Shrub- Woody plants, excluding wood	lv vines.		
6.				approximately 3 to 20 ft (1 to 6 m) in h			
7.				Herb- All herbaceous (non-woody)plar	nts. includina		
8. 9.				herbaceous vines, regardless of size.		dy	
9.				plants, except woody vines, less than	approximately	/ 3 ft (1	
10.				m) in height.			
11.				Woody vine- All woody vines, regardle	ess of height.		
12.							
	89	= Total Cove	er				
Woody Vine Stratum (Plot size:_	)						
Ampelopsis arborea	2	yes	FAC				
Vitus rotundifolia	2	yes	FAC				
3.				1			
<b>4</b> . <b>5</b> .				Hydrophytic	,		
[5.				Vegetation Present? Yes	No		

4 = Total Cover

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region-Interim Version

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil: Polk- Pomona SOIL

SOIL			Sampling Point:5
Profile Description: (Describe to the depth needed to	document the indicator or confirm the	absence of indicator	s.)
Depth Matrix	Redox Features		
inches) Color (moist) % Color (moi	st) % Type¹ Loc²	Texture	Remarks
⊢6 10 YR 3/1			very dark gray fine sand
-12 10 YR 6/2			light brownish gray sand
12-21 10 YR 7/2			light gray sand
1-26 5 YR 3/3			dark reddish brown loamy fine sand
			-
Type: C=Concentration, D=Depletion, RM=Reduced Ma	atrix, CS=Covered or Coated Sand Grains.	<sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8) (L	.RR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S,	T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRF	(0)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	,	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
	Depleted Dark Surface (F7)		Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P,T,U)			_ ' '
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Mart (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA	l <b>51</b> )	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (	LRR O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, 1	<sup>-</sup> , U)	hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)		problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 1		
Sandy Redox (S5)	Piedmont Floodplain Soils (F19)		
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (	•	3C 153D)
Onlpped Matta (60) Dark Surface (S7) (LRR P, S, T, U)		, (,	,,
Restrictive Layer (If observed):		1	
Type:			
Depth (inches):		Hydric Soil Prese	ent? Yes ✓ No .
Remarks:		Inyulic Soli Fresi	entr les v No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk Sampling Date: 10/			te: 10/1/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 52			nt:52	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 7 27S 23E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.143067	Z Long:82.0	43324		Datum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	NA		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes _ ✓	_ No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo	
Are Vegetation, Soil,			(If needed, explain	any answers i	n Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featu	res. etc.	
Hydrophytic Vegetation Present?	YesNo	]				
Hydric Soil Present?	Yes✓No	Is the Sampled Area w	rithin a Wetland?	Yes✓	No	
Wetland Hydrology Present?	Yes✓No					
Remarks: Disturbed by railroad tracks and transn		<del></del>				
HYDROLOGY			· · · · · · · · · · · · · · · · · · ·			
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum (	of two required)	
Primary Indicators (minimum of one is required; of	theck all that apply)		Surface Soil		or two rodanody	
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Veg		ve Surface (R8)	
High Water Table (A2)	Aquatic Fauna (B13)	()	Drainage Par			
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR III	Moss Trim Li	, ,		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (0	32)	
Sediment Deposits (B2)		on Living Roots (C3) Crayfish Burrows (C8)				
Drift Deposits (B3)	Presence of Reduced Ir	• , ,		sible on Aerial	Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	, ,	Geomorphic		magery (00)	
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)	<del></del>		FAC Neutral			
Field Observations:	Other (Explain in Nema	, KOJ		1651 (150)		
Surface Water Present?	Yes ✓ No	Denth (inches): 0-36				
Water Table Present?	Yes No					
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)	NO	_ Depar (menes)	Hydrology Present?	Yes <u></u> ✓	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	Fresence	Tes		
Remarks:						
I						

VEGETATION - Use scientific na	mes of plants			Sampling Point:	52
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		·		Number of Dominant Species	
2.	-		-	That Are OBL, FACW, or FAC: $\frac{4}{}$	(A)
3.	- ——			Total Number of Dominant	<b></b>
4.	-			Species Across All Strata:	(B)
5.				Percent of Dominant Species	/A/D)
6.			C.W.	That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove	er	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1. Cornus foemina	2	yes	FACW	FACW species x2=	
2.				FAC species x3=	_
3.				FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	(B)
6.					<b>-</b> ` '
7.				Prevalance Index = B/A =	
	2	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1. Baccharis sp.	2	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	lain)
3.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology m	ust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
Horb Stratum (Plat airc)	2	= Total Cove	er	Tree- Woody plants, excluding woody vines,	/7 C
Herb Stratum (Plot size:)	40		OBL	approximately 20 ft (6m) or more in height and 3 in. cm) or larger in diameter at breast height (DBH).	(7.0
Cyperus erythrorhizos     Superas erythrorhizos	40	yes	OBL	1	
Eupatorium capillifolium	20	yes	FACU	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less to	hon 2
Andropogon spp.	10	no	FAC	in. (7.6 cm) DBH.	man 3
Pontederia cordata     Auduliaia portuiana	10	no	OBL OBL	<b>.</b> ' '	
Ludwigia peruviana     Panicum hemitomon	2	no	OBL	Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
7. Erianthus spp.	2	no	FAC		
		no		Herb- All herbaceous (non-woody)plants, including	d.,
<ol> <li>Juncus spp.</li> <li>Woodwardia virginica</li> </ol>		no no	OBL	herbaceous vines, regardless of size. Includes woo plants, except woody vines, less than approximately	•
10.		no	OBL	m) in height.	011(1
11.				Woody vine- All woody vines, regardless of height.	
12.				Woody vine- All woody vines, regardless of fielght.	
IZ.	90	= Total Cove		1	
Woody Vine Stratum (Plot size:	١ .	- TOTAL COVE	:1		
i	)	VOS	FAC		
Vitus rotundifolia     Z.		yes	1-70	1	
3.			-		
4.		<del></del>		   Hydrophytic	
5.	<u> </u>			Vegetation Present? YesNo	
<b>₩</b> •				Togomaon   Togoner	<del></del>

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

2 = Total Cover

County/soil: Polk- Pomona		
SOIL		

SOIL								Sampling Point: 52	
Profile De	scription: (Describe	to the dep	th needed to doc	ument the	e indicator or	confirm the ab	sence of indicators	s.)	
Depth	Matrix			Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks	
0-6	10 YR 3/1							very dark gray fine sand	
6-12	10 YR 6/2							light brownish gray sand	
12-21	10 YR 7/2							light gray sand	
21-26	5 YR 3/3							dark reddish brown loamy fine sand	
21-20	31133						•	dark reddish brown loarny line sand	
		·							
Timo: C=	Concentration, D=Dep	letion DM-	-Poducod Matrix (		od or Coated S	Sand Grains	21 ocation: D1 = Do	re Lining, M=Matrix.	
_,,	oil Indicators:	ieuon, ravi-	-reduced Matrix, t	JO-COVE	eu or Coaleu o	oana Granis.	LOCATION, FL-FU	Indicators for Problematic Hydric Soils 3:	
Histol				Doha	rahia Balasi Su	rface (S8) (LRR	C T III	1 cm Muck (a9) (LRR O)	
	Epidon (A2)					S9) (LRR S, T, I		2 cm Muck (A10) (LRR S)	
_	Histic (A3)					al (F1) (LRR O)	1	Reduced Vertic (F18) (outside MLRA 150A, B)	
	gen Sulfide (A4)				y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)	
	fied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)	
Orgar	nic Bodies (A6) (LRR I	P, T, U)		Redo	x Dark Surface	e (F6)		(MLRA 153B)	
5 cm	Mucky Mineral (A7) (L	RR P,T,U)		Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)	
	Presence (A8) (LRR			Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)	
1					(F10) <b>(LRR U)</b>	. ,		Other (Explain in Remarks)	
	ted Below Dark Surfa	æ (A11)		Deple	eted Orchric (F	11) (MLRA 151)	)		
Thick Dark Surface (A12)				Iron-I	Manganese Ma	sses (F12) (LRI	R O, P,T)	disadisadas a referencia de la companio de la companio de la companio de la companio de la companio de la comp	
Coast Prairie Redox (A16) (MLRA 150A)Sandy Mucky Mineral (S1) (LRR O, S)			Α)		-	3) (LRR P, T, U	· · ·	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or	
			•	Delta	Orchric (F17)	(MI RA 151)		problematic.	
	Gleved Matrix (S4)	LINI 0, 0,				B) (MLRA 150A	150R)		
	Redox (S5)					Soils (F19) (MI			
	ed Matrix (S6)						) (MLRA 149A, 153	C 452D)	
i '	, ,				iaious brigin L	Carry Sons (1 20	) (NILITA 145A, 155	c, 133 <i>b)</i>	
	Surface (S7) (LRR P,								
Restrictiv	e Layer (If observed	);							
ŀ	Type:								
	Depth (inches):						Hydric Soil Prese	nt? Yes <u></u> No	
Remarks:									
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk	unty: Polk Sampling Date: 10/1/09			
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 53				
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	e: 7 27S 23E		- ·-··	
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con	vex, none): none	;	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.142950	Long: <u>-82.0</u>	043484	!	Datum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	. NA		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain	n Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo	
Are Vegetation, Soil,			(If needed, explain	any answers in	Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featur	es, etc.	
Hydrophytic Vegetation Present?	YesNo		•			
Hydric Soil Present?	YesNo	Is the Sampled Area within a Wetland? YesNo				
Wetland Hydrology Present?	Yes✓No					
Remarks: Disturbed, grazed by 2 horses, 1 sheep	and 1 goat; very little vegetation	on				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Vec	getated Concave	e Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (		Dry-Season	Water Table (Ca	2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	,	Crayfish Burn	•	<i>'</i>	
Drift Deposits (B3)	Presence of Reduced Iro	*		isible on Aerial I	magery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in			Position (D2)	3 7(1)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral			
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-6				
Water Table Present?	Yes No					
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)			Hydrology Present?	Yes <u></u> ✓I	No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	p. recent.			
	,, ,, , ,, , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Remarks:						

VEGETATION - Use scientific na	mes of plants			Sar	npling Point:	53
	Absolute %	Dominant	Indicator	Dominance Test Worksheet		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	2	(4)
2.				That Are OBL, FACW, or FAC	<u>2</u>	(A)
3.				Total Number of Dominant	•	<b>(5)</b>
4.				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species	400.00	
6.	-			That Are OBL, FACW, or FAC	100.00	(A/B)
7.				Prevalance Index worksheet		
		= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:				OBL species	x1=	
1.	<del></del> ,			FACW species		_
2.				FAC species	x3=	_
3.				FACU species	x4=	
4.				UPL species	^^ x5=	
<del>5</del> .	-			Column Totals:	-^(A)	- (В)
6.		<del></del>			_('')	— (D)
7.		<del></del>		Prevalance Index = B/A =		
1.		= Total Cove		Hydrophytic Vegetation Indi		
Shrub Stratum (Plot size:		- Total 00VC		✓ Dominance Test is 50%		
•	_/			Prevalence Index is ≤3	-	
<u>1.</u> 2.						alain)
				Problematic Hydrophyt	ic vegetation (Exp	Jiaiii)
3.	• ———			1, , , , , , , , , ,		
4.	-	<del></del>		Indicators of hydric soil and w		nust
5. 6.				be present, unless disturbed of <b>Definitions of Vegetation St</b>	or problematic.	
				Definitions of vegetation 50	rata:	
7.				<u> </u>		
Llant Stratum (Diatoina)	0	= Total Cove	er	Tree- Woody plants, excluding		<i>(</i> 7.0
Herb Stratum (Plot size:)	40		E 4 60 4 /	approximately 20 ft (6m) or more		(7.6
1. Rhexia spp.	10	yes	FACW	cm) or larger in diameter at brea		
Ludwigia repens	10	yes	OBL	Sapling- Woody plants, excludi	•	
3.				approximately 20 ft (6m) or more in. (7.6 cm) DBH.	e in neight and less	tnan 3
4.				-{ ` ´		
5.				Shrub- Woody plants, excluding		
6.				approximately 3 to 20 ft (1 to 6 r	-	
7.	·			Herb- All herbaceous (non-woo		
8.	<u> </u>			herbaceous vines, regardless o		
9.				plants, except woody vines, less	than approximately	y 3 π (1
10.	<u> </u>			m) in height.		
11.				Woody vine- All woody vines, r	egardless of height.	
12.				_]		
	20	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3.						
4.				Hydrophytic		1
5.				<b>1</b>	s <u> </u>	· .
	0	= Total Cove	er	1		
Remarks: (If observed, list morph	ological adapta	ations below).		-		
Percent cover estimates based or			roader co	mmunity.		

								Sampling Point:	
	scription: (Describe Matrix	to the de	pth needed to doc			confirm the ab	sence of indicators.	)	
Depth inches)	Color (moist)	%	Color (moist)	%	Features Type <sup>1</sup>	Loc²	Texture	Remarks	
1101103)	Color (moist)		Color (moist)		Турс		Texture	Remarks	
-6	10 YR 3/1							very dark gray fine sand	
-12	10 YR 6/2					·		light brownish gray sand	
2-21	10 YR 7/2							light gray sand	
1-26	5 YR 3/3							dark reddish brown loamy fine sand	
	oncentration, D=Dep	letion, RM	=Reduced Matrix, (	CS=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.	
-	I Indicators:							Indicators for Problematic Hydric Soils 3:	
Histol (						rface (S8) (LRR		1 cm Muck (a9) (LRR O)	
	Epidon (A2)					S9) (LRR S, T, 1		2 cm Muck (A10) (LRR S)	
	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)	
					ny Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)	
				eted Matrix (F3 ox Dark Surface			Anomalous Bright Loamy Soils (F20)		
					• •		(MLRA 153B)		
				eted Dark Surfa			Red Parent Material (TF2)		
Redox Depressions (F8)				(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)			
1 cm Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)		Other (Explain in Remarks)			
Deplete	ed Below Dark Surfac	ce (A11)		Dept	eted Orchric (F	11) (MLRA 151)	)		
Thick D	Dark Surface (A12)			Iron-	Manganese Ma	isses (F12) (LRI	R O. P.T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland	
_	Prairie Redox (A16) (	MI DA 150	١٨١		=	3) (LRR P, T, U	,		
	,		•		•		hydrology must be present, unless disturbed or problematic.		
	Mucky Mineral (S1) (	LRR O, S			Orchric (F17)			problematic.	
	Gleyed Matrix (S4)					B) (MLRA 150A,	•		
	Redox (S5)					1 Soils (F19) (MI			
	d Matrix (S6)			Anon	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 153C	, 153D)	
	urface (S7) (LRR P,								
lestrictive	Layer (If observed)	:							
	Гуре:	,							
	Depth (inches):						Hydric Soil Preser	t? Yes <u></u> ✓ No	

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Polk Sampling Date: 10/1			10/1/09	
Applicant/Owner: Progress Energy Florida, Inc.	·	State: FL Sampling Point: 54			:54	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 18 27S 23E				
Landform (hillslope, terrace, etc.): N	/A	Local relief (concave, con	vex, none); none	s	lope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.138624</u>	Long: <u>-82.0</u>	<u>043701</u>	D	atum: WGS84	
Soil Map Unit Name: Holopaw fine sand			NWI classification:			
Are climatic / hydrologic conditions on the site ty	ypical for this time of year?	Yes	No	(If no, explain in	ı Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normal? Y	esNo	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in f	Remarks)	
SUMMARY OF FINDINGS - Attach s	ite map showing sampli	ng point locations,	tra <u>nsects, impo</u>	rtant feature	s, <u>etc.</u>	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area v	within a Wetland?	Yes <u></u> ✓ N	0	
Wetland Hydrology Present?	YesNo					
Remarks: Disturbed, mowed, some grazed						
HADBOI OCA						
HYDROLOGY			On the desired sealings.			
Wetland Hydrology Indicators:	1 . W. O C and A.		Secondary Indicate		wo requirea)	
Primary Indicators (minimum of one is required;		.=	Surface Soil		= 1 (70)	
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	·	getated Concave	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa			
✓ Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim Li			
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (C2)	)	
Sediment Deposits (B2)	Oxidized Rhizospheres					
Drift Deposits (B3)	Presence of Reduced Ire	on (C4)Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7	)Other (Explain in Remar	rks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	_ Depth (inches): 0-24	_			
Water Table Present?	Yes No	_ Depth (inches):0	Wetland			
Saturation Present?	Yes No	_ Depth (inches):0	- Hydrology			
(includes capillary fringe)			Present?	Yes _ <n< td=""><td>lo</td></n<>	lo	
Describe Recorded Data (stream gauge, monito	oring well, aerial photos, previous	inspections), if available:				
Remarks:			<del></del>			

VEGETATION - Use scientific na	mes of plants				mpling Point:	54
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshee	t:	
1. 2.	<del>-</del>			Number of Dominant Species That Are OBL, FACW, or FA		(A)
3.				Total Number of Dominant	<b>.</b>	
4.	·			Species Across All Strata:	<u>6</u>	(B)
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FA	C: 100.00	(٨١٥)
7.				Prevalance Index workshee	et:	
		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	_
1. Salix spp.	2	yes	FACW	FACW species	x2=	_
2.	- <del> </del>		·	FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	_(B)
6.	·					
7.	-			Prevalance Index = B/A		
		= Total Cove	er	Hydrophytic Vegetation Ind		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50		
Baccharis sp.	15	yes	FAC	Prevalence Index is ≤		
2.				Problematic Hydrophy	tic Vegetation¹ (Exp	olain)
3.				4.		
4.				Indicators of hydric soil and		nust
5.				be present, unless disturbed		
6.	<del></del>			Definitions of Vegetation S	trata:	
7.	45	- Total Cause		<u> </u>		
Herb Stratum (Plot size:)	15	= Total Cove	er	Tree- Woody plants, excluding approximately 20 ft (6m) or mo		/7 E
1. Juncus effusus	20	V00	FACW	cm) or larger in diameter at bre		(7.0
Typha spp.	20	yes	OBL	<b>4</b>		
3. Thalia spp.	15	yes	OBL	Sapling- Woody plants, exclude approximately 20 ft (6m) or mo		than 3
Ludwigia peruviana	10	no	OBL	in. (7.6 cm) DBH.	ic in height and less	liiaii 5
Eupatorium capillifolium	10	no	FACU	Shrub- Woody plants, excludir	na woody vines	
6. Panicum hemitomon	2	no	OBL	approximately 3 to 20 ft (1 to 6		
7. Rhexia spp.	$-\frac{2}{2}$	no	FACW	Herb- All herbaceous (non-woo		
Woodwardia virginica		no	OBL	herbaceous vines, regardless		dv
9.				plants, except woody vines, les		
10.				m) in height.		
11.				Woody vine- All woody vines,	regardless of height.	
12.					_	
Woody Vine Stratum (Plot size:_	81	= Total Cove	r	·		
Ampelopsis arborea		yes	FAC			
2.			1710	1		
3.						
4.		<del></del>		Hydrophytic		
5.		•			es ✓ No	_
		= Total Cove	<u></u>			<u>-</u>

Percent cover estimates based on meandering survey of the broader community.

Remarks: (If observed, list morphological adaptations below).

epth ches)	ption: (Describe Matrix Color (moist)	to the de	ath accorded to doc					Sampling Point:
ches)			pui needed to doc			confirm the at	sence of indicators	s.)
5 10	Color (moist)				Features			
		%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
	) YR 3/1							very dark gray fine sand
	) YR 6/2							light brownish gray fine sand
			**				common medium	
21 10	YR 4/2		10 YR 4/4				mottles	dark grayish brown fine sand
-38 10	) YR 7/2							light gray fine sand
							-	<u> </u>
voe: C=Con	centration D=Depl	etion RM	I=Reduced Matrix, (	S=Cove	red or Coated 9	Sand Grains.	2Location: PL=Po	re Lining, M=Matrix.
dric Soil In								Indicators for Problematic Hydric Soils 3:
Histol (A1				Poly	value Below Su	rface (S8) (LRF	R S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epid	•					S9) (LRR S, T,		2 cm Muck (A10) (LRR S)
Black Hist						al (F1) (LRR O		Reduced Vertic (F18) (outside MLRA 150A, B)
	Sulfide (A4)			_	ny Gleved Matri		,	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified I	Layers (A5)			Depl	eted Matrix (F3	) `´		Anomalous Bright Loamy Soils (F20)
Organic B	ganic Bodies (A6) (LRR P, T, U)Redox Dark Surface (F6)					(MLRA 153B)		
5 cm Mucky Mineral (A7) (LRR P,T,U)Depleted Dark Surface (F7)					Red Parent Material (TF2)			
✓ Muck Presence (A8) (LRR U)  Redox Depressions (F8)					Very Shallow Dark Surface (TF12) (LRR T, U)			
1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)			Other (Explain in Remarks)					
	. , .	- (0.14)				11) (MLRA 151	1	
	Below Dark Surfac k Surface (A12)	e (A11)				isses (F12) (LR	•	
	nirie Redox (A16) (I	M DA 15	0.6.)		•	3) (LRR P, T, L		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
	, ,,		•	_	Orchric (F17)		''	hydrology must be present, unless disturbed or problematic.
	icky Mineral (S1) (I	.KK 0, S	)		, ,	(MLRA 151) B) (MLRA 150A	460D)	problematic.
	eyed Matrix (S4)			_				
_Sandy Re	dox (S5) Matrix (S6)					n Soils (F19) (M	ILRA 149A) D) (MLRA 149A, 153	C 153D)
_ ''	ace (S7) (LRR P. S	2 T III		/1101	nalous Brigin E	ourny cons (i 2	o) (MEIGH 140A, 100	0, 1002)
	ayer (If observed)	<u> </u>						
Тур								
Dep	oth (inches):						Hydric Soil Prese	nt? Yes <u> </u>
emarks:								***

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk	Sampling Date: 10/1/09				
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	Sampling Point: 55				
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 18 27\$ 23E					
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	/ex, none): none	Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: 28.137616						
Soil Map Unit Name: Holopaw fine sand			NWI classification:	NA			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>√</u>	_ No	(If no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes/_No			
	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)			
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.			
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area w	rithin a Wetland?	Yes No			
Wetland Hydrology Present?	Yes No						
Remarks: Disturbed and grazed	(						
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)			
Primary Indicators (minimum of one is required; c	heck all that apply)		Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (F	39)		etated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)	•	Drainage Pat				
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir	, ,			
Water Marks (B1)	Hydrogen Sulfide Odor (	•	<del></del>	Vater Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres of	•	Crayfish Burro	• •			
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)						
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	<del></del>					
Field Observations:							
Surface Water Present?	Yes No	Depth (inches):					
Water Table Present?	Yes No	Depth (inches):					
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology				
(includes capillary fringe)			Present?	Yes No			
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:					
	•						
Remarks:							
		•					

VEGETATION - Use scientific nar	mes of plants				Sampling Point:	55
	Absolute %	Dominant	Indicator	Dominance Test Worksh	neet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spe	cies	(8)
2.				That Are OBL, FACW, or	FAC: <u>2</u>	(A)
3.				Total Number of Dominan	ıt .	45)
4.	·			Species Across All Strata	<u>2</u>	(B)
5.	-			Percent of Dominant Spe	cies	
6.	· ——			That Are OBL, FACW, or		(A/B)
7.	-			Prevalance Index works		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:				OBL species	x1=	
1.	,			FACW species	x2=	_
2.	. ———			FAC species	x3=	_
3.				FACU species	x4=	_
4.	• ———		-	UPL species	x5=	_
5.	·			Column Totals:	(A)	— (B)
6.				-	(/ '/	_(5)
7.	<del></del>	<del></del>		Prevalance Index = E	3/A =	
		= Total Cove		Hydrophytic Vegetation		
Shrub Stratum (Plot size:	•	10.0,000	-,	✓ Dominance Test is		
1.	/			Prevalence Index i		
2.	•				phytic Vegetation <sup>1</sup> (Exp	olain)
3.	. ——			Froblematic Hydro	priytic vegetation (Exp	Jiaiii)
4.				 		
5.				Indicators of hydric soil a be present, unless disturb		nust
6.				Definitions of Vegetation		
7.				Deminions of Vegetation	n Strata.	
1.		= Total Cove			ation and other	I
Herb Stratum (Plot size:)	U	- Total Cove	<del>5</del> 1	Tree- Woody plants, exclude approximately 20 ft (6m) or		(7.6
1. Sesbania spp.	40	yes	FAC	cm) or larger in diameter at		,
2. Cyperus spp.	20	yes	FACW	Sapling- Woody plants, ex	cluding woody vines	
Ludwigia repens	10	no	OBL	approximately 20 ft (6m) or		than 3
4. Rhexia spp.	10	no	FACW	in. (7.6 cm) DBH.		
5. Hydrocotyle spp.	5	no	OBL	Shrub- Woody plants, excl	uding woody vines	
6. Panicum hemitomon	2	no	OBL	approximately 3 to 20 ft (1 t		
7. Xyris spp.	2	no	OBL	Herb- All herbaceous (non-		
8. Fimbristylis spp.	2	no	FACW	herbaceous vines, regardle	,,,	vbc
9			171011	plants, except woody vines		-
10.				m) in height.	, ,,	, , ,
11.				Woody vine- All woody vin	es regardless of height	
12.				1	oo, rogaralooo or noight.	
12.	91	= Total Cove				
Woody Vine Stratum (Plot size:	)	- 10141 0010	<b>51</b>			
1.	,					
2.	•					
3.	·					
4.				Hydrophytic		
5.				Vegetation Present?	Yes ✓ No	_
		= Total Cove	er	- 29000001110001111		<del></del>
Remarks: (If observed, list morph				l .		
Percent cover estimates based or	-		oroader cor	mmunity		

SOIL	Tolk Holopati					Sampling Point:55
Profile De	scription: (Describe to the de	pth needed to doc	ument the indicator or co	onfirm the ab	sence of indicators.)	
Depth	Matrix		Redox Features			
(inches)	Color (moist) %	Color (moist)	% Type¹	Loc²	Texture	Remarks
0-6	10 YR 3/1					very dark gray fine sand
6-9	10 YR 6/2					light brownish gray fine sand
					common medium	
9-21	10 YR 4/2	10 YR 4/4			mottles	dark grayish brown fine sand
21-38	10 YR 7/2					light gray fine sand
Times C=C	Concentration, D=Depletion, RM	-Dadwood Moteix (	CC-Countred or Control Co	nd Croins	<sup>2</sup> Location: PL=Pore	Lining M-Motric
	il Indicators:	i-Reduced Matrix, (	55-Covered of Coaled Sa	nu Granis.		Indicators for Problematic Hydric Soils 3:
Histol			Polyvalue Below Surfa	ice (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)	•	Thin Dark Surface (S9			2 cm Muck (A10) (LRR S)
Black	Histic (A3)		Loamy Mucky Mineral			Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		Loamy Gleyed Matrix	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		Depleted Matrix (F3)	FC\	-	Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P, T, U)		Redox Dark Surface (	•		(MLRA 153B)
	Mucky Mineral (A7) (LRR P,T,U	)	Depleted Dark Surface		-	Red Parent Material (TF2)
	Presence (A8) (LRR U)		Redox Depressions (F	-8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm l	Muck (A9) (LRR P,T)		Marl (F10) (LRR U)		-	Other (Explain in Remarks)
	ted Below Dark Surface (A11)		Depleted Orchric (F11			
	Dark Surface (A12)		Iron-Manganese Mass			Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (MLRA 15	0A)	Umbric Surface (F13)	(LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (LRR O, S	)	Delta Orchric (F17) (N	ILRA 151)	I	problematic.
Sandy	Gleyed Matrix (S4)		Reduced Vertic (F18)		•	•
	Redox (S5)		Piedmont Floodplain S	, ,,	•	
	ed Matrix (S6)		Anomalous Bright Loa	my Soils (F20	) (MLRA 149A, 153C,	, 153D)
	Surface (S7) (LRR P, S, T, U)					
1	e Layer (If observed):					
1	Type: Depth (inches):				Hydric Soil Presen	t? Yes ✓ No .
Remarks:	Deptit (inches).				Inyunc Son Fresen	tr 1es 140
T CHIGH S.						
						•
1						
1						
<u> </u>				···		

Subregion (LRR or MLRA): LRR U Lat: 28.136655 Long: _82.041153 Datum: _WGS84  Soil Map Unit Name: _Lochloosa fine sand	Section, Township, Range: 18. 275 23E   Landform (hillslope, terrace, etc.): N/A   Lat: 28.136655   Lorg: -82.041153   Datum: WGS84	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Dat	e: 10/1/09
Landform (hillstope, terrace, etc.): N/A LRU Lat: 28.136655 Long: _82.041153 Datum: _WGS84  Soil Map Unit Name: _Lochboos fine sand	Landform (hillistope, terrace, etc.): N/A LRU Lat: 28.136655 Long: _82.041153 Datum: _WGS84  Soli Map Unit Name: _Lochloosa fine sand	Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poi	nt: <u>56</u>
Subregion (LRR or MLRA): LRR U Lat: 28.136655 Long: _82.041153 Datum: _WGS84  Soil Map Unit Name: _Lochloosa fine sand	Subregion (LRR or MLRA): LRR U Lat: 28.136655 Long: _82.041153 Datum: _WGS84 Soil Mep Unit Name: _Lochloosa fine sand NWI classification: _NA Nec dimatic / hydrologic conditions on the site typical for this time of year? Yes No (iff no, explain in Remarks)	Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	e: 18 27S 23E		
Soil Map Unit Name: _cochloosa fine sand	Soil Map Unit Name: Lochloosa fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Soil or Hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Water (A1)	Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, con	vex, none): none		Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes _ No _ No _ (If noe, explain in Remarks)  Are Vegetation Soil or Hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes _ No _   Is the Sampled Area within a Wetland? Yes _ No _   No _    Wetland Hydrology Indicators:	Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes _ No _ No Are Vegetation	Subregion (LRR or MLRA): LRR U	Lat: 28.136655	Long: <u>-82.0</u>	<u>041153</u>		Datum: WGS84
Are Vegetation	Are Vegetation	Soil Map Unit Name: Lochloosa fine sand			NWI classification:	: <u>NA</u>	
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydric Soil Present? Yes No Sil Present? Yes No No Set and Hydrology Present?  Wetland Hydrology Present?	Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydro Soil Present? Yes ✓ No	Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes	No	(If no, explain	in Remarks)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Hydros Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  HYDROLOGY  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Mari Deposits (B13)  Water Table (A2)  Saturation (A3)  Mari Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Present?  Field Observations:  Surface Water (A1)  Recent Iron Reduction in Tilled Soils (C6)  Shallow Aquilard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology Indicators (minimum of two required)  Is the Sampled Area within a Wetland?  Yes No Depth (inches):  Is the Sampled Area within a Wetland?  Yes No Depth (inches):  Wetland Hydrology   Yes No Depth (inches):  Wetland Hydrology   Yes No Depth (inches):  Wetland Hydrology   Yes No Depth (inches):  Wetland Hydrology   Yes No Depth (inches):  Wetland Hydrology   Yes No Depth (inches):  Wetland Hydrology   Yes No	SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydro Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Frimary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water Table (A2)  Aquatic Fauna (B13)  Water Table (A2)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Algal Mat or Crust (B4)  Primary Lopesits (B5)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Algal Mat or Crust (B4)  Field Observations:  Surface Water (A5)  Algal Mat or Crust (B4)  Present?  Pessent?  Pessent?  Pessent?  Pessent?  Pessent?  Pessent?  Pessent?  Pessent?  Pessent?  Pessent?  Pessent Poposits (B5)  Present?  Pessent?  Pessent?  Pessent Poposits (B6)  Depth (inches):  Wetland  Hydrology Present?  Pessent?  Pessent?  Pessent.  Present?  Pessent?	Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normal?	Yes/_No
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Recent Iron Reduction in Remarks Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Setiman Wetland? Yes No No Depth (inches): Wetland Hydrology Hydrology Area within a Wetland? Yes No No Depth (inches): Wetland Hydrology Hyes within a Wetland? Yes No No Depth (inches): Wetland Hydrology Hyes within a Wetland? Yes No No Depth (inches): Wetland Hydrology Hyes within a Wetland? Yes No No Depth (inches): Wetland Hydrology Hyes within a Wetland? Yes No No Metland Reduction? Yes No No Depth (inches): Yes No Present? Yes No Present? Yes No Present? Yes No Present? Yes No Petland Hydrology Present? Yes No Present? Yes No Petland Hydrology Present? Yes No Petland Hydrology Present? Yes No Petland Hydrology Present? Yes No Petland Hydrology Present?	Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Frimary Indicators (minimum of two required) Frimary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Water Table (A2) Aquatic Fauna (B13) Water Marks (B1) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Inon Deposits (B5) In Indicators (Minimum of two required) Field Observations: Ves	Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in	n Remarks)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Surface Water (A1)  Water Table (A2)  Aquatic Fauna (B13)  Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Aquation (C4)  Aquation (C4)  Saturation Visible on Aerial Imagery (C9)  Aquation Reduction in Tilled Soils (C6)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Present?  Yes No Present?  Yes No Present?  Yes No Present?  Yes No Present?  Yes No Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No No Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No No Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Yes No Poeth (inches):  Wetland Hydrology Present?  Ye	Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Surface Water (A1)  Water Table (A2)  Aquatic Fauna (B13)  Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Wetland  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Present  No  Present  No  Present  Yes  No	SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations,	transects, impo	rtant featui	es, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Inon Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Ves No Depth (inches):  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No Present?  Yes No Depth (inches):  Oxidized Rhizospheres (Present? No Present? Yes No Present? Yes No Present? Yes No Present? Yes No Present? Yes No Present?	Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Inon Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No Present?  Yes No Depth (inches):  Oxidized Rhizospheres (Present)  Wetland  Hydrology  Present?  Yes No Present?  Yes No Depth (inches):  Wetland	Hydrophytic Vegetation Present?	Yes ✓ No				
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Asturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Saturation Present?  Yes No Depth (inches):  Wetland  Wetland  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland  Wetland  Water Allicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Apace Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No No Present?  Yes No Present?  Wetland	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Asturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Field Observations:  Surface Water All (A2)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No  Present?  Yes No  Present?  Yes No  Present?  Yes No  Present?  Yes No  Present?  Yes No  Present?  Yes	Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes✓	No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Iron Deposits (B5)	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Stained Leaves (B9)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5	Wetland Hydrology Present?	Yes No	]			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Remarks:	****				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	LIVEROL COV					
Surface Soil Cracks (B6)  Surface Water (A1)	Surface Soil Cracks (B6)  Surface Water (A1)						
Surface Water (A1)Water-Stained Leaves (B9)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)	Surface Water (A1)Water-Stained Leaves (B9)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B8)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)Sparsely Vegetated Concave Surface (B10)						of two required)
High Water Table (A2)	High Water Table (A2)						
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Youngle on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       YesNo	✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Youngle on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       YesNo	<del></del>		B9)		_	e Surface (B8)
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNoDepth (inches): Water Table Present? YesNoDepth (inches):  Saturation Present? YesNoDepth (inches):	Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNoDepth (inches): Water Table Present? YesNoDepth (inches):  Saturation Present? YesNoDepth (inches):						
Sediment Deposits (B2)	Sediment Deposits (B2)	· ·					
Drift Deposits (B3)	Drift Deposits (B3)	Water Marks (B1)				•	(2)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)	Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)	Sediment Deposits (B2)				,	
Iron Deposits (B5)	Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)	Drift Deposits (B3)		, ,			Imagery (C9)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Westand Present? Yes No Depth (inches): Outline (includes capillary fringe)  Wetland Hydrology Present? Yes No No No Depth (inches): Outline (includes Capillary fringe)	✓ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC Neutral Test (D5)   Factorial Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):  Yes No Depth (inches):  Yes Yes No Depth (inches):  Yes Yes Yes Yes No No Depth (inches):  Yes No Depth (inches):  Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Algal Mat or Crust (B4)	· <u></u>	, ,		, ,	
Field Observations:           Surface Water Present?         YesNo	Field Observations:           Surface Water Present?         YesNo	<del></del>					
Surface Water Present?       Yes No Depth (inches):	Surface Water Present?       Yes No/ Depth (inches):	✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Water Table Present? YesNo Depth (inches):	Water Table Present? YesNo Depth (inches):	Field Observations:					
Saturation Present? Yes ✓ No Depth (inches): 0 Hydrology (includes capillary fringe) Present? Yes ✓ No	Saturation Present? Yes _ ✓ No _ Depth (inches): 0 Hydrology (includes capillary fringe) Present? Yes _ ✓ No	Surface Water Present?			-		
Saturation Present? Yes V No Depth (inches): 0 Hydrology (includes capillary fringe) Present? Yes V No No	Saturation Present? Yes V No Depth (inches): 0 Hydrology (includes capillary fringe) Present? Yes V No No Person No	Water Table Present?			- Wetland		
(,,,,,,,,,,,,,,,,,,		Saturation Present?	Yes No	_ Depth (inches): 0			
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				Present?	Yes <u>✓</u>	No
		Remarks:					
Remarks:	Remarks:						
Remarks:	Remarks:						
Remarks:	Remarks:						
Remarks:	Remarks:						
Remarks:	Remarks:						
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Remarks:	Remarks:						
Remarks:	Remarks:						
Remarks:	Remarks:						
Remarks:	Remarks:						
Remarks:	Remarks:						*.

VEGETATION - Use scientific na	<u>.</u>				pling Point:	56
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>4</u>	(A)
3.				Total Number of Dominant	_	
4.	<del>-</del> -			Species Across All Strata:	<u>5</u>	(B)
5.				Percent of Dominant Species	90.00	/ A /D
6.				That Are OBL, FACW, or FAC:	<u>80.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cov	er/	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	<del></del> -			OBL species	x1=	_
1. Salix spp.	2	yes	FACW	FACW species	x2=	
2.			-	FAC species	x3=	_
3.				FACU species	_x4=	
<b>4</b> . <b>5</b> .				UPL species	x5=	— <sub>/B</sub> \
6.			<u> </u>	Column Totals:	(A)	_ <sup>(B)</sup>
7.			-	Prevalance Index = B/A =		
		= Total Cov		Hydrophytic Vegetation Indica	ators:	
Shrub Stratum (Plot size:	)	10.0.		✓ Dominance Test is 50%		
1. Ludwigia peruviana	30	yes	OBL	Prevalence Index is ≤3.0	1	
Baccharis sp.	25	yes	FAC	Problematic Hydrophytic		olain)
Callicarpa americana		no	FACU	7 1 7	3 ( )	,
4.				<sup>1</sup> Indicators of hydric soil and we	tland hydrology r	nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ta:	
7.						
luct Over a (Di i	57	= Total Cov	er er	Tree- Woody plants, excluding wo		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Indigofera hirsuta	15	yes	NL 54014	cm) or larger in diameter at breas		
Bidens spp.     Urena lobata		yes	FACU FACU	Sapling- Woody plants, excluding approximately 20 ft (6m) or more		than 2
Eupatorium capillifolium	2	no	FACU	in. (7.6 cm) DBH.	in neight and less	liiaii 3
Cupatonam capilificitam     Rhexia spp.		no	FACW	Shrub- Woody plants, excluding v	woody vines	
6.		- 110	17.011	approximately 3 to 20 ft (1 to 6 m)		
7.		-		Herb- All herbaceous (non-woody	•	
			-	herbaceous vines, regardless of s	,, ,	
9.			- · ·	plants, except woody vines, less t		
10.				m) in height.		
11.				Woody vine- All woody vines, reg	ardless of height.	
12.				}		
	34	= Total Cov	er			
Woody Vine Stratum (Plot size:	)		<b>-</b> 4-0			
1. Rubus spp.	10	yes	FACU	4		
Vitus rotundifolia	2	no	FAC			
3.	- ——		<u> </u>	1., , , ,,		
<u>4.</u> 5.				Hydrophytic	/ N.	
J.		- Total Oc		Vegetation Present? Yes	No	
	12	= Total Cov	er	1		

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region- Interim Version

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

	(inches) Color (moist) % Color (moist) % Type! Loc" Texture Rem    Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist) % Type! Loc" Texture Rem   Color (moist) % Color (moist)										
	Color (moist) % Color (moist) % Type¹ Loc⁴ Texture Rem  10 1 YR 4/1 6-36 10 YR 7/3 76-36 10 YR 6/3 76-36 10 YR 6/3 77-36 Common medium mottles light brown sandy day loam  40-46 10 YR 6/2 77-36 Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  10 YR 6/2 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 5/4 10 YR 5/4 10 YR 6/2 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 6/2 10 YR 5/4 10 YR 6/2 10 YR 6/3 10 YR 6/2 1			ence of indicators.)	confirm the ab			ptn needed to doc	o tne dej		
Description   Common medium   Common medium   Description   Descriptio	Do Fig. 10 YR 4/1   Carry Fig. 2   Carry Fig. 3   Carry Fig. 4   Carry Fig. 3   Carry Fig. 4   Carry Fig. 6   Carry Fig. 4   Carry Fig. 4   Carry Fig. 4   Carry Fig. 4	Remarks	Rer	Texture	Loc²			Color (moist)	%		
10   10   17   17   17   10   17   17	10 YR 7/3										
10 46   10 YR 6/3   pale brown sandy clay loam   pale brown sandy clay l	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   Common medium mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam mottles   light brownish gray sandy clay loam sandy clay loam mottles   light brownish gray sandy clay loam sandy clay loam mottles   light brownish gray sandy clay loam sandy light Loam sandy light loam surface (S9) (LRR S, T, U)										
10.46	A0-46										
10 YR 6/2	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thorm Call Call Call Call Call Call Call Cal	ioam	pale brown sandy day loan				- —			10 YR 6/3	36-40
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  1	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  1-ydric Soil Indicators:	ndy clay loam	light brownigh aray candy o					10 VD 5/4		10 VD 6/2	10.46
Hydric Soil Indicators: Histor (A1) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Marky Mineral (A7) (LRR P, T, U)  Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Martix (F3) Mucky Mineral (A7) (LRR P, T, U)  Peleted Dark Surface (F6) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A16) (MLRA 150A) Desat Prairie Redox (A16) (MLRA 150A) Desat Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S7) (LRR P, S, T) Delta Orchric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 153B) Piedmont Floodplain Soils (F10) (LRR P, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Piedmont Floodplain Soils (F10) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 151)  It om Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Dark Surface (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F10) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Elack Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F1)  Muck (A9) (LRR P, T, U)  Piedmont Floodplain Soils  Redox Dark Surface (F7)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (A9) (LRR S, T, U)  Lorm Muck (A9) (LRR S, T, U)  Lorm Muck (A9) (LRR S, T, U)  Lorm Muck (A9) (LRR O, P, T)  Jepleted Matrix (F2)  Piedmont Floodplain Soils  Anomalous Bright Loamy  Marl (F10) (LRR U)  Depleted Dark Surface (A11)  Thick Dark Surface (A11)  Sandy Mucky Mineral (S1) (LRR O, S)  Siripped Matrix (S4)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	idy ciay loam	iigiit brownisti gray sandy c	Hotues				10 11 3/4		10 11 0/2	10-40
Hydric Soil Indicators: Histor (A1) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Marky Mineral (A7) (LRR P, T, U)  Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Martix (F3) Mucky Mineral (A7) (LRR P, T, U)  Peleted Dark Surface (F6) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A16) (MLRA 150A) Desat Prairie Redox (A16) (MLRA 150A) Desat Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S7) (LRR P, S, T) Delta Orchric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 153B) Piedmont Floodplain Soils (F10) (LRR P, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Piedmont Floodplain Soils (F10) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 151)  It om Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Dark Surface (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F10) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Elack Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F1)  Muck (A9) (LRR P, T, U)  Piedmont Floodplain Soils  Redox Dark Surface (F7)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (A9) (LRR S, T, U)  Lorm Muck (A9) (LRR S, T, U)  Lorm Muck (A9) (LRR S, T, U)  Lorm Muck (A9) (LRR O, P, T)  Medicators for Problematic H  1 cm Muck (A10) (LRR S, T, U)  Reduced Matrix (F1) (LRR O, P, T)  Piedmont Floodplain Soils  Anomalous Bright Loamy  No  No  No  No  No  No  No  No  No  N										
Hydric Soil Indicators: Histor (A1) Histor Epidon (A2) Black Histor (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Marky Mineral (A7) (LRR P, T, U)  I cm Muck (A9) (LRR P, T, U) Stratified Layers (A8) For Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, P, T) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S6) Sandy Redox (S5) Depleted Dark Surface (A12) Pedenor Froblematic Hydric Soils (F10) (LRR P, T, U) Polyvalue Below Surface (S8) (LRR N, T, U) Pedenor Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) MRA (F10) (LRR U, Pedenor Froblematic Hydric Soils (F19) (LRR P, T, U) Polymatrix (F10) (LRR U, Pedox Depressions (F8)  Loamy Mucky Mineral (A7) (LRR P, T, U) Polymatrix (F10) (LRR U, Pedenor Froblematic Hydric Soils (F12) (LRR T, U)  Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Umbric Surface (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	Hydric Soil Indicators:  Histol (A1)  Polyvalue Below Surface (S8) (LRR S, T, U)  Histic Epidon (A2)  Thin Dark Surface (S9) (LRR S, T, U)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F8)  Marl (F10) (LRR U)  Depleted Dark Surface (F8)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (A9) (LRR S, T, U)  Loamy Gleyed Matrix (S4)  Pledwarf (F1) (LRR O, T)  Pledwarf (F1) (LRR O, F, T)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Indicators for Problematic H  1 cm Muck (A10) (LRR S, T, U)  Reduced Vertic (F18) (MLRA 150A)  Depleted Below Surface (A11)  Indicators for Problematic H  1 cm Muck (A10) (LRR S, T, U)  Reduced Vertic (F11) (MLRA 151)  Indicators of hydrophytic vege hydrophytic ve		**************************************								
Hydric Soil Indicators: Histor (A1) Histor Epidon (A2) Black Histor (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Marky Mineral (A7) (LRR P, T, U)  I cm Muck (A9) (LRR P, T, U) Stratified Layers (A8) For Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, P, T) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S6) Sandy Redox (S5) Depleted Dark Surface (A12) Pedenor Froblematic Hydric Soils (F10) (LRR P, T, U) Polyvalue Below Surface (S8) (LRR N, T, U) Pedenor Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) MRA (F10) (LRR U, Pedenor Froblematic Hydric Soils (F19) (LRR P, T, U) Polymatrix (F10) (LRR U, Pedox Depressions (F8)  Loamy Mucky Mineral (A7) (LRR P, T, U) Polymatrix (F10) (LRR U, Pedenor Froblematic Hydric Soils (F12) (LRR T, U)  Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Umbric Surface (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	Hydric Soil Indicators:  Histol (A1)  Polyvalue Below Surface (S8) (LRR S, T, U)  Histic Epidon (A2)  Thin Dark Surface (S9) (LRR S, T, U)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F8)  Marl (F10) (LRR U)  Depleted Dark Surface (F8)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (A9) (LRR S, T, U)  Loamy Gleyed Matrix (S4)  Pledwarf (F1) (LRR O, T)  Pledwarf (F1) (LRR O, F, T)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Indicators for Problematic H  1 cm Muck (A10) (LRR S, T, U)  Reduced Vertic (F18) (MLRA 150A)  Depleted Below Surface (A11)  Indicators for Problematic H  1 cm Muck (A10) (LRR S, T, U)  Reduced Vertic (F11) (MLRA 151)  Indicators of hydrophytic vege hydrophytic ve		Lining, M=Matrix.	<sup>2</sup> Location: PL=Pore	Sand Grains.	ed or Coated	CS=Cover	=Reduced Matrix.	etion, RM	oncentration, D=Deple	Type: C=C
Histic Epidon (A2)  Black Histic (A3)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Depleted Matrix (F3)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Scr Mucky Mineral (A7) (LRR P, T, U)  Corganic Bodies (A6) (LRR P, T, U)  Form Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F6)  Mart (F19) (LRR P, T, U)  Depleted Dark Surface (F7)  Mart (F10) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	Histic Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Pedemont Floodplain Soils  Anomalous Bright Loamy  (MLRA 153B)  Depleted Matrix (F3)  Depleted Dark Surface (F6)  Anomalous Bright Loamy  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Muck Presence (A8) (LRR U)  Pedemont Floodplain Soils  (MLRA 153B)  Muck Presence (A8) (LRR P, T, U)  Pepleted Dark Surface (F7)  Red Parent Material (TF2)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Thin Dark Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (F1) (LRR O, P, T)  Loamy Mucky Mineral (F1) (LRR O, P, T)  Pedemont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes _ ✓ No	atic Hydric Soils 3:	ndicators for Problematic I	· I			*				
Black Histic (A3)	Black Histic (A3)	R O)	1 cm Muck (a9) (LRR O)	S, T, U) _	ırface (\$8) (LRR	ralue Below Sι	Polyv			A1)	Histol (
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Derk Surface (F7)  Marl (F10) (LRR U)  Depleted Derk Surface (F8)  Marl (F10) (LRR U)  Depleted Below Dark Surface (TF12) (LRR T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7)  Dark Surface (S7) (LRR P, T, U)  Depleted Orchric (F18) (MLRA 150A)  Delta Orchric (F18) (MLRA 150A)  Sandy Redox (S7)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (LRR P, S, T, U)  Anomalous Bright Loamy Soils (F20)  MLRA 153B)  Anomalous Bright Loamy Soils (F20)  MLRA 151D  Dethe (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P,T)  Depleted Dark Surface (F7)  Mart (F10) (LRR U)  Depleted Below Dark Surface (F7)  Mart (F10) (LRR U)  Depleted Below Dark Surface (F7)  Depleted Below Dark Surface (F8)  Other (Explain in Remarks (F8))  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Siripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	RR S)	2 cm Muck (A10) (LRR S	_	(S9) (LRR S, T,	Dark Surface	Thin I			Epidon (A2)	Histic (
Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A7) (LRR P, T, U)  Stratified Layers (A6) (LRR P, T, U)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Depteted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Redox Perot Material (TF2)  (MLRA 151)  Depteted Crichric (F11) (MLRA 151)  Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No	Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A7) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A7) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A6) (LRR P, T, U) Stratified Layers (A7) (LRR P, T, U) Stratifi	) (outside MLRA 150A, B)	Reduced Vertic (F18) (οι	_	ral (F1) (LRR O)	ny Mucky Mine	Loam			Histic (A3)	Black I
Organic Bodies (A6) (LRR P, T, U)  Seed Dark Surface (F6)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Depth (inches):  Hydric Soil Present?  Yes No	Organic Bodies (A6) (LRR P, T, U)  Sem Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Pepleted Dark Surface (F7)  Red Parent Material (TF2)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallow Dark Surface  Other (Explain in Remarks  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Pettin Charles:  Hydric Soil Present?  Yes No	Soils (F19) (LRR P, S, T)	Piedmont Floodplain Soil:	-							
		amy Soils (F20)		-							
✓ Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12) (LRR T, U)         1 cm Muck (A9) (LRR P,T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Orchric (F11) (MLRA 151)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P,T)       ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Orchric (F17) (MLRA 151)       problematic.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Hydric Soil Present?       Yes ✓ No	Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Judicators of hydrophytic vege hydrophytic vege hydrology must be present, uniproblematic.  Pettor (F17) (MLRA 151)  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes _ ✓ No				• •		_				
1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11) Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed): Type: Depth (inches):  Marl (F10) (LRR U) Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T) Iron-Manganese Masses (F12) (LRR O, P,T) Iron-Manganese Masses (F12) (LRR O, P,T) Iron-Manganese Masses (F12) (LRR O, P,T) Iron-Manganese Masses (F12) (LRR O, P,T) Iron-Manganese Masses (F12) (LRR O, P,T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 151) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A), 153C, 153D)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes  No	1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11) Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches):  Marl (F10) (LRR U) Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T) JIndicators of hydrophytic vege hydrop	, ,		-	` '			)		. , , ,	
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Single Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Depleted Orchric (F11) (MLRA 151)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No	Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	, ,, , ,	<del>-</del> '	-	s (F8)	x Depressions	Redo		J)	Presence (A8) (LRR U	<u>✓</u> Muck
Thick Dark Surface (A12)	Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	marks)	Other (Explain in Remark	-	1	(F10) (LRR U	Marl			fuck (A9) (LRR P,T)	1 cm N
Coast Prairie Redox (A16) (MLRA 150A)	Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Predmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present?  Yes No				11) (MLRA 151	eted Orchric (F	Deple		e (A11)	ed Below Dark Surface	Deplet
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Umbric Surface (F13) (LRR P, T, U)  Polta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No	Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Park Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	: vegetation and wetland	Indicators of hydrophytic yea	O, P,T) 3	asses (F12) (LR	Manganese M	Iron-I			Dark Surface (A12)	Thick [
Sandy Mileral (S4) Sandy Redox (S5) Siripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sindy Redox (S5) Sindy Redox (S5) Sindy Redox (S6) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Pleatmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes  No				13) (LRR P, T, U	ric Surface (F1	Umbr	0A)	/ILRA 15	Prairie Redox (A16) (N	Coast
	Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Park Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No		problematic.	ŗ	(MLRA 151)	Orchric (F17)	Delta	)	RR O, S	Mucky Mineral (S1) (L	Sandy
	Sandy Redox (S5)			150B)	8) (MLRA 150A	iced Vertic (F1	Redu	•			
		•		RA 149A)	n Soils (F19) (M	nont Floodplai	Piedr			Redox (S5)	Sandy
Restrictive Layer (If observed):  Type:  Depth (inches):	Restrictive Layer (If observed):  Type:  Depth (inches): Hydric Soil Present? Yes✓ No		153D)	(MLRA 149A, 153C,	oamy Soils (F20	nalous Bright l	Anon			d Matrix (S6)	Strippe
Type:	Type:								i, T, U)	urface (S7) (LRR P, S	Dark S
Depth (inches): Hydric Soil Present? Yes ✓ No .	Depth (inches): Hydric Soil Present? Yes  Ves Very No.						*			Layer (If observed):	Restrictive
				*							
Remarks:	Remarks:	_ No	? Yes <u>✓ N</u>	Hydric Soil Present						Depth (inches):	
											Remarks:
·											

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		Sampling Date: 10/1/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: 57
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: 18 27S 23E	
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	/ex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U		Long: <u>-82.0</u>	41071	Datum: WGS84
Soil Map Unit Name: Lochloosa fine sand			NWI classification:	NA .
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances	
		naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit		ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes/ No		•	
Hydric Soil Present?	Yes No	Is the Sampled Area w	rithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes No			
Remarks:				
LIVEROL COV				
HYDROLOGY				
Wetland Hydrology Indicators:				ors (minimum of two required)
Primary Indicators (minimum of one is required; c			Surface Soil	
✓ Surface Water (A1)	Water-Stained Leaves (6	39)		etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	` ,
✓ Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim Li	
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Vater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres of		Crayfish Burn	
Drift Deposits (B3)	Presence of Reduced Iro	, ,		sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic	• •
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	•
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	KS)	FAC Neutral	Test (D5)
Field Observations:	Voc. / N	Double (back and a 40		
Surface Water Present?	YesNo		1	
Water Table Present?	Yes No		Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na wall pagial photos provious	incontions) if available:	Present?	Yes No
Describe Recorded Data (Stream gauge, monitori	ng weir, aenai priotos, previous	inspections), ii available.		
Remarks:				
		•		

VEGETATION - Use scientific na	mes of plants			Sampling Point:	57
Trans Chrotum (Districts	Absolute %	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status	Number of Descinant Consis	
1.				Number of Dominant Species That Are OBL, FACW, or FAC:  5	(A)
2.					
3.				Total Number of Dominant	(B)
4.				Species Across Ali Strata:	. ,
5.				Percent of Dominant Species 83.33	(A/B)
6.				That Are OBL, FACVV, or FAC:	
7.			-	Prevalance Index worksheet:	
Sapling Stratum (Plot size:	0	= Total Cove	er	Total % Cover of: Multiply by OBL species x1=	<u>:</u>
1. Salix spp.	10	yes	FACW	FACW species x2=	<del></del>
Acer rubrum	10	yes	OBL	FAC species x3=	
Quercus nigra	2	no	FAC	FACU species x4=	<del></del>
4.	· <del></del>		1710	UPL species x5=	
<del>5</del> .	· ——			Column Totals: (A)	—— (B)
6.				Column rotals.	— (D)
7.	. ——			Prevalance Index = B/A =	
1.		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	- Total Cove	51	✓ Dominance Test is 50%	
	_/		ODL	Prevalence Index is ≤3.0¹	
Ludwigia peruviana     Receberia en	20	yes	OBL	<del> </del>	'aminin'
2. Baccharis sp.	10	yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (E	xpiain)
3.				<b>{</b>	
4.	· <del></del>	<del></del>		Indicators of hydric soil and wetland hydrology	/ must
5. 6.				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:	
				Deminitions of vegetation Strata:	
7.	30			<u> </u>	
Herb Stratum (Plot size:)	30	= Total Cove	er	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3	in /7.6
1. Urena lobata	_		FACU	cm) or larger in diameter at breast height (DBH).	11. (7.0
		yes	NL FACO		
		no	INL	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and le	aa than 2
3. 4.				in. (7.6 cm) DBH.	ss triair s
5.	•			Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
6. 7.	·				
7.				Herb- All herbaceous (non-woody)plants, including	
8. 9.				herbaceous vines, regardless of size. Includes with plants, except woody vines, less than approximate	-
				m) in height.	ely S II (1
10. 11.				i '	L.A.
				Woody vine- All woody vines, regardless of heig	nt.
12.	· —	_ T-1-1 O		4	
Maria I Nova Obrah ar (Blada)	7	= Total Cove	er		
Woody Vine Stratum (Plot size:			E40		
Vitus rotundifolia		yes	FAC	-	
2.					
3.				<b>.</b>	
4.				Hydrophytic	
5.				Vegetation Present? YesNo_	<del></del>
	2	= Total Cove	er		
Remarks: (If observed, list morph Percent cover estimates based or	-		oroader co	mmunity.	

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type! Loo* Texture Remaind Redox Features  10 YR 4/1	mpling Point:5
Color (moist)	
Def	
6-36 10 YR 7/3 36-40 10 YR 6/3 36-40 10 YR 6/2 40-46 10 YR 6/2 36-40 YR 6/2 36-40 YR 7/2 36-40 YR 7/2 36-40 YR 7/2 36-40 YR 7/2 36-40 YR 7/2 36-40 YR 7/2 36-40 YR 7	rks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   Teconomic PL=Pore Lining, M=Matrix.   Indicators for Problematic Hy Hydric Soil Indicators:   Indicators for Problematic Hy Histol (A1)   Polyvalue Below Surface (S8) (LRR S, T, U)   1 cm Muck (a9) (LRR O)   Loamy Mucky Mineral (A1)   Loamy Gleyed Matrix (F3)   Loamy Gleyed Matrix (F3)   Anomalous Bright Loamy Surface (A8) (LRR P, T, U)   Reduced Vertic (F18) (LRR D)   Loamy Mucky Mineral (A1)   Reduced Vertic (F18) (LRR D)   Reduced Vertic (F17) (LRR D)   Reduced Vertic (F18) (LRR D)   Reduced Vertic (F17) (MLRA 151)   Reduced Vertic (F17) (MLRA 151)   Reduced Vertic (F18) (MLRA 150A)   Reduced Vertic (F17) (MLRA 151)   Reduced Vertic (F18) (MLRA 150A)   Reduced Vertic (F17) (MLRA 151)   Reduced Vertic (F18) (MLRA 150A)   Reduced Vertic (F18) (MLRA 150B)   Reduced Vertic (F17) (MLRA 151)   Reduced Vertic (F18) (MLRA 150A)   Reduced Vertic (F17) (MLRA 151)   Reduced Vertic (F18) (MLRA 150A)   Reduced Vertic (F18) (MLRA 150B)   Reduced Vertic (F18) (MLRA 150A)   Reduced Vertic (F18) (MLRA 150B)   Piedmont Floodplain Soils (F19) (MLRA 149A)   Reduced Vertic (F18)	
d0-46 10 YR 6/2 10 YR 5/4 Common medium mottles light brownish gray sandy clar common medium mottles light brownish gray sandy clar clark common medium mottles light brownish gray sandy clark	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thick can Grain Select Se	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Hydric Soil Indicators:  Hydric Soil Indicators:  Histic Epidon (A2)  Black Histic (A3)  Holyadue Below Surface (S9) (LRR S, T, U)  Black Histic (A3)  Holyadrogen Suffide (A4)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Sorm Mucky Mineral (A7) (LRR P, T, U)  Fedox Dark Surface (F6)  Thin Dark Surface (F7)  Muck Presence (A8) (LRR V)  Depleted Bolow Dark Surface (F8)  Depleted Bolow Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (outs (F10) (LRR O, S)  Piedmont Floodplain Soils (F12) (LRR O, P, T)  Redox Dark Surface (F7)  Red Parent Material (TF2)  Ward (F10) (LRR U)  Depleted Defow Dark Surface (A12)  Liron-Manganese Masses (F12) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes _ ✓ No	
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F8)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Beleted Orchric (F13) (MLRA 150A)  Delta Orchric (F11) (MLRA 151)  Poelted Orchric (F13) (LRR P, T, U)  Depleted Orchric (F13) (LRR P, T, U)  Depleted Orchric (F13) (LRR P, T, U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Delta Orchric (F13) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Dents Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No	loam
Hydric Soil Indicators:	
Histol (A1)	
Histic Epidon (A2)  Black Histic (A3)  Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Edward Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Depleted Orchric (F13) (MLRA 151)  Problematic.  Reduced Vertic (F18) (outs (A10) (LRR O, P,T)  Problematic.  Redox Depressions (F8)  Wery Shallow Dark Surface (T12)  Umbric Surface (F13) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Predmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes✓ No	Jric Soils <sup>3</sup> :
Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Edward Persence (A8) (LRR P,T)  Depleted Dark Surface (F7)  Depleted Dark Surface (A1)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7)  Dark Surface (S7) (LRR P, S, T, U)  Estrictive Layer (If observed):  Type:  Depleted Matrix (F2)  Depleted Matrix (F3)  Depleted Matrix (F3)  Anomalous Bright Loamy S  (MLRA 1518)  Anomalous Bright Loamy S  (MLRA 153B)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Red Parent Material (TF2)  Pepleted Dark Surface (F7)  Red Parent Material (TF2)  Warl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Indicators of hydrophytic vegets hydrology must be present, unle problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Sandy Redox (S5)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Deplth (inches):  Hydric Soil Present? Yes No	
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  S or Mucky Mineral (A7) (LRR P,T,U)  Depleted Matrix (F3)  Redox Dark Surface (F7)  Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Stripped Matrix (S4)  Derived Matrix (F2)  Piedmont Floodplain Soils ( Anomalous Bright Loamy S  (MLRA 1518)  Anomalous Bright Loamy S  (MLRA 153B)  Pepleted Dark Surface (F7)  Red Parent Material (TF2)  Very Shallow Dark Surface  Other (Explain in Remarks)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Indicators of hydrophytic vegeta hydrology must be present, unle problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A, 150B)  Sandy Redox (S6)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	
Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Eddox Dark Surface (F6)  Seedox Dark Surface (F7)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  ✓ Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  ✓ Muck Presence (A8) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Depleted Below Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No	
Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallow Dark Surface  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Dorchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  3tndicators of hydrophytic vegeta hydrology must be present, unle problematic.  Reduced Vertic (F13) (MLRA 151)  Predmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	,, , , ,
	315 (F2U)
✓ Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface         1 cm Muck (A9) (LRR P,T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Orchric (F11) (MLRA 151)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P,T)       Indicators of hydrophytic vegets hydrology must be present, unle hydrology must be present, unle problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Orchric (F17) (MLRA 151)       problematic.         Sandy Redox (S5)       Reduced Vertic (F18) (MLRA 150A, 150B)       problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (If observed):       Type:       Hydric Soil Present?       Yes✓ No	
1 cm Muck (A9) (LRR P,T)	(TF12) (LRR T. U)
Thick Dark Surface (A12)	, (,
Coast Prairie Redox (A16) (MLRA 150A)	
Coast Prairie Redox (A16) (MLRA 150A)	tion and watland
Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type: Depth (inches): Hydric Soil Present? Yes No	
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)Piedmont Floodplain Soils (F10) (MLRA 149A, 153C, 153D)	
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	
Restrictive Layer (If observed):         Type:           Depth (inches):         Hydric Soil Present?         Yes _ ✓ No	
Type:            Depth (inches):         Hydric Soil Present? Yes✓ No	
Depth (inches): Hydric Soil Present? Yes 🗸 No	
	<u>'</u>

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Dat	te:10/1/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poi	nt: <u>58</u>
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	e: <u>18 27S 23E</u>		
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, con-	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.134733</u>	3 Long: <u>-82.0</u>	)39919		Datum: WGS84
Soil Map Unit Name: Smyrna and Myakka fine sa	and		_NWI classification	; <u>N</u> A	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo
	or Hydrology		(If needed, explain	ı any answers i	n Remarks)
SUMMARY OF FINDINGS - Attach sit				•	*
Hydrophytic Vegetation Present?	Yes No	1			
Hydric Soil Present?	Yes✓No	Is the Sampled Area v	vithin a Wetland?	Yes/	No
Wetland Hydrology Present?	YesNo	]			
Remarks:					
			_	_	<del></del>
HYDROLOGY				<del></del>	
Wetland Hydrology Indicators:			Secondary Indicate		of two required)
Primary Indicators (minimum of one is required; of			Surface Soil	, ,	
Surface Water (A1)	Water-Stained Leaves (	(B9)			ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)	
Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C	(2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced In	ron (C4)	Saturation V	isible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No				
Water Table Present?	Yes No	_ Depth (inches):0			
Saturation Present?	Yes No		Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	, I		
Remarks:					
i voria) No.					
]					

County/s SOIL	oil: Polk-Smyma							Sampling Point:5
Profile E	escription: (Describe t	to the de	pth needed to do	ument the i	ndicator or	confirm the ab	sence of indicators	.)
Depth	Matrix			Redox Fe	atures			
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc2	Texture	Remarks
0-4	10 YR 2/1							black fine sand
4-12	10 YR 6/1		·			•		gray fine sand
12-18	7.5 YR 3/2							dark brown fine sand
							many fine distinct	
18-25	10 YR 5/3		5 YR 5/3				bodies	brown fine sand
<u> </u>						<del></del>		
¹Type: C	=Concentration, D=Deple	etion, RN	1=Reduced Matrix,	CS=Covered	or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
	ioil Indicators:							Indicators for Problematic Hydric Soils 3:
	ol (A1)					rface (S8) (LRR		1 cm Muck (a9) (LRR O)
1	c Epidon (A2)					S9) (LRR <b>S</b> , T, 1		2 cm Muck (A10) (LRR S)
	k Histic (A3)					al (F1) (LRR O)	)	Reduced Vertic (F18) (outside MLRA 150A, B)
	rogen Sulfide (A4)				Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	tified Layers (A5)				d Matrix (F3			Anomalous Bright Loamy Soils (F20)
Orga	anic Bodies (A6) (LRR P	', T, U)		Redox I	Dark Surface	e (F6)		(MLRA 153B)
5 cn	n Mucky Mineral (A7) (LF	RR P,T,U	)	Deplete	d Dark Surfa	ace (F7)		Red Parent Material (TF2)
Mud	k Presence (A8) (LRR U	J)		Redox I	Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cn	Muck (A9) (LRR P,T)			Marl (F	10) (LRR U)			Other (Explain in Remarks)
Dep	leted Below Dark Surface	e (A11)		Deplete	d Orchric (F	11) (MLRA 151	)	
Thic	k Dark Surface (A12)			Iron-Ma	nganese Ma	sses (F12) (LR	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
E .					_			maioacoro or riyar opriyao regetation ana wettana

\_Umbric Surface (F13) (LRR P, T, U)

Reduced Vertic (F18) (MLRA 150A, 150B)
Piedmont Floodplain Soils (F19) (MLRA 149A)
Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

\_Delta Orchric (F17) (MLRA 151)

hydrology must be present, unless disturbed or

No

Yes \_

problematic.

Hydric Soil Present?

\_Coast Prairie Redox (A16) (MLRA 150A)

\_Sandy Mucky Mineral (S1) (LRR O, S)

\_Sandy Gleyed Matrix (S4) \_Sandy Redox (S5) \_Stripped Matrix (S6)

> Type: \_\_\_\_ Depth (inches):

Remarks:

\_\_\_\_Dark Surface (S7) (LRR P, S, T, U)
Restrictive Layer (If observed):

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		Sampling Date: 10/1/09
Applicant/Owner: Progress Energy Florida, Inc.				
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range		. 5
Landform (hillslope, terrace, etc.): N/A		· · · · · · · · · · · · · · · · · · ·		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.135371			Datum: WGS84
Soil Map Unit Name: Smyrna and Myakka fine sa			 _NWI classification:	NA
Are climatic / hydrologic conditions on the site typ		Yes _✓	_	(If no, explain in Remarks)
			Are circumstances	
		naturally problematic?	(If needed, explain	any answers in Remarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>		ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	YesNo		•	·
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes/_No	]		
Remarks:		•		
			****	, , , , , , , , , , , , , , , , , , , ,
HYDROLOGY				·
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season \	Vater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	ows (C8)
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No		-	
Water Table Present?	Yes No	Depth (inches): 0	Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	
(includes capillary fringe)			Present?	Yes No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:		
Remarks:				
	**			
			•	

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	59
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(A)
2.				That Are OBL, FACVV, OF FAC.	( )
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	(5)
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	(/45)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL speciesx1=	_ !
1.				FACW speciesx2=	
2.				FAC speciesx3=	_ 1
3.				FACU speciesx4=	
4.				UPL speciesx5=	
5.				Column Totals: (A)	(B)
6.					_
7.	·			Prevalance Index = B/A =	
	0	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.					
4.				Indicators of hydric soil and wetland hydrology r	nust
5.				be present, unless disturbed or problematic.	
6.	***************************************			Definitions of Vegetation Strata:	
7.					
	0	= Total Cove		Tree- Woody plants, excluding woody vines,	- 1
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	. (7.6
Cyperus spp.	40	yes	FACW	cm) or larger in diameter at breast height (DBH).	1
Scirpus spp.	10	no	OBL	Sapling- Woody plants, excluding woody vines,	
Ludwigia linearis	10	no	OBL	approximately 20 ft (6m) or more in height and less	than 3
Ludwigia repens	10	no	OBL	in. (7.6 cm) DBH.	
5. Rhexia spp.	2	no	FACW	Shrub- Woody plants, excluding woody vines,	
6.			-	approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.		<u> </u>		herbaceous vines, regardless of size. Includes wo	
9.	·			plants, except woody vines, less than approximatel	
10.				m) in height.	
11.	·			Woody vine- All woody vines, regardless of height	
12.				1	
	72	= Total Cove	r		
Woody Vine Stratum (Plot size:	)	•			
1.					
2.				1	
3.					
4.	· <del></del>			  Hydrophytic	
5.				Vegetation Present? Yes No	
<u> </u>		= Total Cove		Toge whom Frederick   Tog NO	<u>-</u>
Remarks: (If observed, list morph			••	1	
Percent cover estimates based or	-		roader co	mmunity	
	ouuoinig s		. 5445, 601	····· <del>-</del> ·······························	

Count	ulsnil.	Polk-Sm	vma
Count	y/ JUII.	L OIV-OILI	yııa

SOIL							Sampling Point: 59
	scription: (Describe t	o the dep	th needed to docu	ment the indicator or	confirm the ab	sence of indicators.)	
Depth	Matrix			Redox Features			
(inches)	Color (moist)	%	Color (moist)	% Type'	Loc²	Texture	Remarks
0-4	10 YR 2/1						black fine sand
4-12	10 YR 6/1						gray fine sand
12-18	7.5 YR 3/2						dark brown fine sand
						many fine distinct	
18-25	10 YR 5/3		5 YR 5/3			bodies	brown fine sand
		—					-
Type: C=0	Concentration D=Deple	tion RM=	Reduced Matrix C	S=Covered or Coated	Sand Grains	<sup>2</sup> Location: PL=Pore	Lining M=Matrix
	il Indicators:		riodacca main, o	o control or coulous	Suna Grano.		ndicators for Problematic Hydric Soils 3:
Histol	(A1)		_	Polyvalue Below Su	rface (S8) (LRR		1 cm Muck (a9) (LRR O)
1—	Epidon (A2)			Thin Dark Surface (		-	2 cm Muck (A10) (LRR S)
	Histic (A3)		_	Loamy Mucky Mine		_	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		-	Loamy Gleyed Matr		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5) ic Bodies (A6) (LRR P,	T. UI	-	Depleted Matrix (F3 Redox Dark Surface		-	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	Mucky Mineral (A7) (LR		-	Depleted Dark Surfa	, ,		Red Parent Material (TF2)
1	Presence (A8) (LRR U		-	Redox Depressions		-	Very Shallow Dark Surface (TF12) (LRR T, U)
		,	-	Mart (F10) (LRR U)		~	Other (Explain in Remarks)
	Muck (A9) (LRR P,T)		-			-	Other (Explain III Remarks)
	ted Below Dark Surface Dark Surface (A12)	(A11)	-	Depleted Orchric (F tron-Manganese Ma			
	, ,	U DA 450	-	Umbric Surface (F1	, ,,		Indicators of hydrophytic vegetation and wetland
	Prairie Redox (A16) (N		<del>"</del> )				ydrology must be present, unless disturbed or problematic.
·	Mucky Mineral (S1) (L	RR O, S)	-	Delta Orchric (F17)		•	orobiematic.
	Gleyed Matrix (S4) Redox (S5)		_	Reduced Vertic (F1 Piedmont Floodplair			
	ed Matrix (S6)		-			) (MLRA 149A, 153C,	153D\
	Surface (S7) (LRR P, S	T 10	-		ourry cons (i zo	, (III.E104 1457, 7660,	1000)
	Layer (If observed):	, 1, 0,					
	Туре:						
	Depth (inches):					Hydric Soil Present	? Yes <u>/</u> No
Remarks:						•	
1							
ļ							
į							

Applicant/Owner: Progress Energy Florida, Inc. Investigator(s). Mike Arrants, Lianne Ramos-Mofienski Investigator(s). Mike Arrants, Lianne Ramos-Mofienski Section, Township, Range: 18 27S 23E  Landform (hillobe), terrace, etc.): N/A Local relief (concave, convex, none):none Slope (%):	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Date:	10/6/09
Local relief (concave, convex, none): _none	Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	60
Subregion (LRR or MLRA); LRR U Lat: 28.133127 Long: 42.039905 Datum: WGS84  Soil Map Unit Name: Smyrna and Myakka fine sand  Are dimattic / hydrologic conditions on the site typical for this time of year?  Are Vegetation  Soil or Hydrology significantly disturbed? Are Vegetation  Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present?  Hydrosoil Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Remarks:  Hydrace Water (A1) Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced fron (C4)  Agail Mat or Crust (B4)  Recent Iron Deposits (B5)  Thin Muck Surface (C7)  Indicators in Sulford (B3)  Presence of Reduced fron (C4)  Reduced Fresent?  Yes  No  Depth (inches):  Oxidized Rhizospheres  FAC Neutral Test (D5)  Wetland Hydrology Sulface (C7)  FAC Neutral Test (D5)  Wetland Hydrology Hydrology (Present)?  Face (Wetland Hydrology)  Sulface Water (A1)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced fron (C4)  Spartsish Burrows (C8)  Spartsish Burrows (C8)  Spartsish Burrows (C8)  Face (Ba)  Face (Ba)  Face (Ba)  Face (Ba)  Face (Ba)  Face (Ba)  Wetland Hydrology (Present)?  Yes  No  Depth (inches):  Oxidized Rhizospheres)  Depth (inches):  Oxidized Rhizospheres)  Depth (inches):  Oxidized Rhizospheres)  Depth (inches):  Oxidized Rhizospheres)  Depth (inches):  Depth (inches):  Oxidized Rhizospheres  Present?  Present?  Yes  No  Depth (inches):  Oxidized Rhizospheres  Depth (inches):  Oxidized Rhizospheres  Depth (inches):  Oxidized Rhizospheres  Depth (inches):  Oxidized Rhizospheres  Depth (inches):  O	Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range	e: <u>18 27S 23E</u>		
Soil Map Unit Name: Smyrna and Myakka fine sand Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation Soil or Hydrology significantly disturbed? Are vegetation Soil or Hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Figh Water Table (A2)  Aquatic Fauna (813)  Water Marks (81)  Water Marks (81)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Fight Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C8)  In Ino Deposits (B5)  In Ino Deposits (B5)  In Ino Deposits (B5)  In Ino Deposits (B5)  Ves No  Depth (inches):  Uset In Inches:  Wetland Hydrology Indicators (Marks Insert)  Sediment Deposits (B5)  FAC Neutral Test (D5)  FIELD Oxidized Rhizospheres on Living Roots (C3)  FAC Neutral Test (D5)  FIELD Oxidized Rhizospheres (B4)  Water Table Present?  Yes No  Depth (inches):  Uset Marks (B4)  Depth (inches):  Uset Marks (B4)  Present?  Yes No  Depth (inches):  Uset Metland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Present?  Yes No  Depth (inches):  Uset Marks (B4)  Depth (inches):  Uset Marks (B4)  Wetland Hydrology  Wetland Hydrology  Present?  Yes No  Depth (inches):  Uset Marks (B4)  Wetland Hydrology  Present?  Yes No  Depth (inches):  Uset Marks (B4)  Wetland Hydrology  Present?  Yes No  Wetland Hydrology  Present?  Yes No  Wetland Hydrology  Present?  Yes No  Wetland Hyd	Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none	Slope	e (%):
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Subregion (LRR or MLRA): LRR U	Lat: 28.133127	Long: <u>-82.</u> (	39905	Datu	m: <u>WGS84</u>
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes / No	Soil Map Unit Name: Smyrna and Myakka fine sa	and		_NWI classification:	NA	
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes / No	Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes	No	(If no, explain in Re	emarks)
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes _ No	Are Vegetation, Soil,	or Hydrology				
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No				(If needed, explain	any answers in Ren	narks)
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Frimary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U) Mater Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)  Diff Deposits (B3) Presence of Reduced Iron (C4) Saluration Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) FAC Neutral Test (D5)  Field Observations: Surface Water Present?  Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inches): _0_4  Wetland Hydrology Present? Yes _ No _ Depth (inc				transects, impo	rtant features,	etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland Hydrology  Present?  Yes No Depth (inches):  Wetland Hydrology  Present? Yes No Depth (inches):  Wetland Hydrology  Present? Yes No Depth (inches):  Wetland Hydrology  Present? Yes No Depth (inches):  Present? Yes No Depth (inches):  Yes No						
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Surface Soil Cracks (B6)  ✓ Surface Water (A1)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — In Induction Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Hydrology  Wetland  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Wetland  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology  Fresent?  Yes ✓ No — Depth (inches): 0-4  Hydrology	Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes/No	
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9) — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2) — Aquatic Fauna (B13) — Drainage Patterns (B10)  ✓ Saturation (A3) — Marl Deposits (B15) (LRR U) — Moss Trim Lines (B16) — Water Marks (B1) — Hydrogen Sulfide Odor (C1) — Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Drift Deposits (B3) — Presence of Reduced Iron (C4) — Saturation Visible on Aerial Imagery (C9) — Iron Deposits (B5) — Thin Muck Surface (C7) — Shallow Aquitard (D3) — FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Ves ✓ No Depth (inches): 0 Wetland Hydrology Present?  Ves ✓ No Depth (inches): 0 Wetland Hydrology Present?  Ves ✓ No Depth (inches): 0 Wetland Hydrology Present?  Ves ✓ No Present?  Ves ✓ No Depth (inches): 0 Wetland Hydrology Present?  Ves ✓ No Present	Wetland Hydrology Present?	YesNo				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Remarks:					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  — Moss Trim Lines (B16)  — Water Marks (B1)  — Marl Deposits (B15) (LRR U)  — Moss Trim Lines (B16)  — Dry-Season Water Table (C2)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  — FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  — Yes ✓ No Depth (inches): 0 Wetland Hydrology  Gincludes capillary fringe)						
✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)						required)
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?			,			
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)	` ′		B9)			face (B8)
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	<del></del> •				, ,	
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Saturation (A3)	, , , , ,	•	<del></del>	. ,	
Drift Deposits (B3)	Water Marks (B1)		•	<del></del> •		
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/ NoDepth (inches):0_4  Water Table Present? Yes/ NoDepth (inches):0  Saturation Present? Yes/ NoDepth (inches):0  Hydrology  Present? Yes/ No	Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burr	rows (C8)	
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Drift Deposits (B3)	Presence of Reduced Iro	on (C4)		_	ery (C9)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Field Observations:         Surface Water Present?       Yes/ No Depth (inches):	Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	itard (D3)	
Surface Water Present?  Yes _	✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Water Table Present?  Yes No Depth (inches):0	Field Observations:					
Saturation Present?  Yes No Depth (inches):0  Hydrology  Present?  Yes No	Surface Water Present?			-		
Saturation Present? Yes No Depth (inches):0	Water Table Present?	Yes No	Depth (inches): 0	Watland		
	Saturation Present?	Yes No	Depth (inches): 0			
	. , , , ,			Present?	Yes <u>√</u> No _	
	Remarks:		<del></del>			
Demarks:	ivenary.					
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Tree Stratum (Plot size:	VEGETATION - Use scientific nam	Absolute %	Dominant	Indicator	Sampling Point:  Dominance Test Worksheet:	
Number of Dominant Species   3	Tree Stratum (Plot size:				Domination Foot Workshoot.	
That Are OBL, FACW, or FAC: 3 (0)		0010.	oposios.	Oluluo	Number of Dominant Species	
Total Number of Dominant   3 (t)						A)
Species Across All Strata:   Species   Species Across All Strata:   Species   Specie					Total Number of Dominant	
Percent of Dominant Species					3 (	B)
That Are OBL, FACW, or FAC: 100.00    FAC: 100.00					Percent of Deminant Species	
Prevalance Index worksheet:				• • • • • • • • • • • • • • • • • • • •		A/B)
Saping Stratum (Plot size:)						
Sapling Stratum (Plot size:			= Total Cove		Total % Cover of: Multiply by:	
FACW species   X2=   X	Sapling Stratum (Plot size:	)				
Section   Stratum (Plot size:	· · ·	,				
A						
4.					4 ·	
Column Totals:					<del></del>	
Frevalance Index = B/A =     Prevalance Index = B/A =   Prevalance Index =	5.					B)
Shrub Stratum (Plot size:					<u> </u>	•
Shrub Stratum (Plot size:	7.				Prevalance Index = B/A =	
1. Baccharis sp. 2 yes FAC Prevalence Index is ≤3.0¹  2. Problematic Hydrophytic Vegetation¹ (Explain 3.0²)  4. Problematic Hydrophytic Vegetation¹ (Explain 3.0²)  4. Problematic Hydrophytic Vegetation¹ (Explain 3.0²)  1. Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.  Definitions of Vegetation Strata:  Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.1 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.1 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less that in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less that in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less that in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less that in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less that in. (7.6 cm) DBH.  Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 31 m) in height.  Woody Vine Stratum (Plot size:			= Total Cove	er	Hydrophytic Vegetation Indicators:	
2.	Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
3.	1. Baccharis sp.	2	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
4.   Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.  6.   Definitions of Vegetation Strata:  7.   Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.1 cm) or larger in diameter at breast height (DBH).  5. Scleria spp.   10					Problematic Hydrophytic Vegetation <sup>1</sup> (Explai	in)
be present, unless disturbed or problematic.    Definitions of Vegetation Strata:	3.					
6. 7.	4.				$oxed{1}^1$ Indicators of hydric soil and wetland hydrology mus	st
7.	5.				be present, unless disturbed or problematic.	
Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.0 cm) or larger in diameter at breast height (DBH).  2. Ludwigia peruviana 20 yes OBL 3. Amphicarpum muhlenbergianuu 15 no FACW 4. Andropogon spp. 10 no FACW 5. Scleria spp. 10 no FACW 6. Rhyncospora spp. 2 no FACW 7. Rhexia spp. 2 no FACW 8. Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  10. 11. 12. 89 = Total Cover  Woody Vine Stratum (Plot size:) 1. 2. 3. 4. 4. 50 = Total Cover  Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less that in. (7.6 cm) DBH.  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less that in. (7.6 cm) DBH.  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or height approximately 20 ft (6m) or more in height approximately 20 ft (6m) or long in height approximately 20 ft (6m) or height approximately 20 ft (6m) or height approximately 20 ft (6m) or height approximately 20 ft (6m) or height approximately 20 ft (6m) or height approximately 20 ft (6m) or height approximately 20 ft (6m) or height approximately 20 ft (6m) or height approximately 20 ft (10 fc m) in height approximately 20 ft (10 fc m) in height approximately 20 ft (20 fc m) o					Definitions of Vegetation Strata:	
Herb Stratum (Plot size:) 1. Spartina spp. 30 yes FACW 2. Ludwigia peruviana 20 yes OBL 3. Amphicarpum muhlenbergianui 15 no FACW 4. Andropogon spp. 10 no FACW 5. Scleria spp. 2 no FACW 6. Rhyncospora spp. 2 no FACW 7. Rhexia spp. 2 no FACW 8. Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody vines, regardless of height.  10. 11. 12. 89 = Total Cover  Hydrophytic  4. Hydrophytic  4. Hydrophytic  4. Hydrophytic  4. Vegetation Present? Yes No	7.					
1. Spartina spp. 30 yes FACW Cm) or larger in diameter at breast height (DBH).  2. Ludwigia peruviana 20 yes OBL Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less that in. (7.6 cm) DBH.  5. Scleria spp. 10 no FACW in. (7.6 cm) DBH.  5. Scleria spp. 2 no FACW approximately 3 to 20 ft (1 to 6 m) in height.  7. Rhexia spp. 2 no FACW Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 to 20 ft (1 to 6 m) in height.  10.		2	= Total Cove	er		
2. Ludwigia peruviana 2. Amphicarpum muhlenbergianui 3. Amphicarpum muhlenbergianui 4. Andropogon spp. 10 10 10 10 10 10 10 10 10 10 10 10 10	Herb Stratum (Plot size:)					.6
3. Amphicarpum muhlenbergianui 15 no FACW 4. Andropogon spp. 10 no FAC 5. Scleria spp. 10 no FACW 6. Rhyncospora spp. 2 no FACW 7. Rhexia spp. 2 no FACW 9. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10			yes		cm) or larger in diameter at breast height (DBH).	
4. Andropogon spp. 10 no FAC in. (7.6 cm) DBH.  5. Scleria spp. 10 no FACW Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  7. Rhexia spp. 2 no FACW Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 to m) in height.  10. m) in height.  11. woody Vine All woody vines, regardless of height.  12. 89 = Total Cover  Woody Vine Stratum (Plot size:)  1. 2. 3. 4. 5.			yes			
Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  7. Rhexia spp. 2 no FACW 8. Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height.  10.			no			ın 3
6. Rhyncospora spp. 2 no FACW approximately 3 to 20 ft (1 to 6 m) in height.  7. Rhexia spp. 2 no FACW Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft m) in height.  10.			no		4 '	
7. Rhexia spp.       2       no       FACW       Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 fm) in height.         10.       3.       4.			no			
8.			no		approximately 3 to 20 ft (1 to 6 m) in height.	
9.		2	no	FACW		
10.					1	
11.						π (1
12.					, ,	
89					woody vine- All woody vines, regardless of height.	
Woody Vine Stratum (Plot size:)       1.         2.       2.         3.	12.					
1.		, 89	= Total Cove	er		
2.       3.         3.       4.         5.       Hydrophytic         Vegetation Present? Yes ✓ No         0 = Total Cover	l. •	)				
3.						
4.						
5. Vegetation Present? Yes ✓ No					<b>.</b>	
0 = Total Cover	4.					
	<b>5</b> .		_ T-4-1-0-		vegetation Present? YesNo	<del></del>
Remarks: (If observed, list morphological adaptations below).	December (Makes 1971)			er	<u> </u>	

Percent cover estimates based on meandering survey of the broader community.

		n the de		ument th	e indicator or	confirm the at	osence of indicators.	1	
epth	Matrix		pui nocaca to acc		Features			••	•
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture		Remarks
-4	10 YR 2/1		Color (moloty				10/110/0	black fine sand	
-12	10 YR 6/1							gray fine sand	
2-18	7.5 YR 3/2						-	dark brown fine sai	nd
			-				many fine distinct		
8-25	10 YR 5/3		5 YR 5/3				bodies	brown fine sand	
Tyne: C=(	Concentration, D=Depl	etion RM	t=Reduced Matrix	CS=Cove	red or Coated S	and Grains	2l ocation: Pt =Por	re Lining, M=Matrix.	
,,	il Indicators:	C11011, 1111	Treduced Matrix,	00 0010	rea or ocalou c	una Grano.	EGGGGGT. TE TO		ematic Hydric Soils 3:
Histol				Poly	value Below Sur	face (S8) (LRF	R S, T, U)	1 cm Muck (a9) (	-
Histic	Epidon (A2)			Thin	Dark Surface (S	69) (LRR S, T,	U)	2 cm Muck (A10)	(LRR S)
Black	Histic (A3)			Loan	ny Mucky Miner	al (F1) (LRR O	)	Reduced Vertic (	18) (outside MLRA 150A, E
Hydro	gen Sulfide (A4)			Loan	ny Gleyed Matri:	x (F2)		Piedmont Floodp	ain Soils (F19) (LRR P, S, T)
Stratif	ied Layers (A5)			Depl	eted Matrix (F3)	)		Anomalous Brigh	t Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	, T, U)		Redo	ox Dark Surface	(F6)		(MLRA 153B)	
5 cm f	Mucky Mineral (A7) (LI	RR P,T,U	)	Depl	eted Dark Surfa	ice (F7)		Red Parent Mate	rial (TF2)
✓_Muck	Presence (A8) (LRR I	J)		Redo	ox Depressions	(F8)		Very Shallow Dar	k Surface (TF12) (LRR T, U)
1 cm /	Muck (A9) (LRR P,T).			Marl	(F10) (LRR U)			Other (Explain in	Remarks)
Deple	ted Below Dark Surfac	e (A11)		Depl	eted Orchric (F	11) (MLRA 151	1)		
Thick	Dark Surface (A12)	, ,		Iron-	Manganese Ma	sses (F12) (LR	R O, P,T)	3Indiantors of hydronb	ytic vegetation and wetland
Coast	Prairie Redox (A16) (I	VLRA 15	0A)	Umb	oric Surface (F13	3) (LRR P, T, L	J)		sent, unless disturbed or
Sandy	Mucky Mineral (S1) (I	.RR O, S		Delta	a Orchric (F17) (	(MLRA 151)		problematic.	
Sandy	Gleyed Matrix (S4)		•	Redu	uced Vertic (F18	3) (MLRA 150A	l, 150B)		
	Redox (S5)				mont Floodplain				
Stripp	ed Matrix (S6)			Anor	nalous Bright Lo	oamy Soils (F2	0) (MLRA 149A, 1530	C, 153D)	
Dark \$	Surface (S7) (LRR P,	S. T. U)							
estrictiv	e Layer (If observed)								
	Type:								
	Depth (inches):						Hydric Soil Presei	nt? Yes	No
emarks:									

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk	Sampling Date: 10/6/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: 61
Investigator(s): Mike Arrants, Lianne Ramo	s-Mofienski	Section, Township, Range	: 18 27S 23E	
Landform (hillslope, terrace, etc.): N/A	<b>,</b>	Local relief (concave, convex, none): none Slope (%		
Subregion (LRR or MLRA): LRR U		Long: -82.0	39742	Datum: WGS84
Soil Map Unit Name: Smyrna and Myakka fine s				NA NA
Are climatic / hydrologic conditions on the site typ		Yes✓	_ No	(If no, explain in Remarks)
• • • • • • • • • • • • • • • • • • • •	or Hydrology		Are circumstances r	
	or Hydrology			any answers in Remarks)
SUMMARY OF FINDINGS - Attach si			•	•
Hydrophytic Vegetation Present?	Yes <u> </u>	<b>J</b>		
Hydric Soil Present?	Yes✓_No	Is the Sampled Area w	vithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes✓No			
Remarks:		1		
HYDROLOGY				
Wetland Hydrology Indicators:		***************************************	Secondary Indicator	rs (minimum of two required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil C	Cracks (B6)
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Vege	etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	•	Drainage Patte	erns (B10)
Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lin	
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Vater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burro	` ′
Drift Deposits (B3)	Presence of Reduced In			
Algal Mat or Crust (B4)	Recent Iron Reduction in			
Iron Deposits (B5)	Thin Muck Surface (C7)		ard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral T	· '
Field Observations:	Other (Explain III Remai	ito)		
Surface Water Present?	Yes Noٰ	Denth (inches): 0-18		
Water Table Present?	Yes✓ No		1	
i	Yes No		Wetland	
Saturation Present?	100	Deptil (iliches)	Hydrology Present?	Vac ( Na
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ing well godel photos provious	inepartions) if available:	Present?	Yes No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	mspections), ii avaliable.		
Remarks:				

VEGETATION - Use scientific nar	mes of plants			Sampling	g Point:	61
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	7	رم،
2.				That Are OBL, FACW, or FAC:	<u>7</u>	(A)
3.				Total Number of Dominant	_	
4.				Species Across All Strata:	<u>7</u>	(B)
5.				Percent of Dominant Species		ł
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	 r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	_	. 0.0.	•	OBL species x1=		
1.				FACW species x2=		-
2.				FAC species x3:		-
3.			<u></u>	FACU species x4		-
4.			·	UPL species x5		-
5.				Column Totals: (A)		- <sub>(B)</sub>
6.	-			Coldiffit Totals. ——(A)		-('')
7.	·			Prevalance Index = B/A =		ŀ
7.		= Total Cove		Hydrophytic Vegetation Indicator		——
Chruh Stratum (Blat size:		- Total Cove	ı	✓ Dominance Test is 50%	5.	
Shrub Stratum (Plot size:	)					
1.				Prevalence Index is ≤3.0 <sup>1</sup>	1	
2.				Problematic Hydrophytic Ve	getation" (Exp	lain)
3.				1.		
4.				<sup>1</sup> Indicators of hydric soil and wetlan		iust
5.				be present, unless disturbed or pro	blematic.	
6.				Definitions of Vegetation Strata:		ŀ
7.				4		ŀ
l <u>.</u> <u></u>	0	= Total Cove	r	Tree- Woody plants, excluding woody	•	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in h	-	(7.6
Juncus effusus	10	yes	FACW	cm) or larger in diameter at breast he	ight (DBH).	- 1
Muridannia nudiflora	10	yes	FAC	Sapling- Woody plants, excluding wo		
Sagittaria graminea	10	yes	OBL	approximately 20 ft (6m) or more in h	eight and less t	han 3
Panicum hemitomon	10	yes	OBL	in. (7.6 cm) DBH.		
5. Ludwigia peruviana	10	yes	OBL	Shrub- Woody plants, excluding woo		
Pontederia cordata	10	yes	OBL	approximately 3 to 20 ft (1 to 6 m) in I	neight.	
7. Linum sp.	10	yes	FACW	Herb- All herbaceous (non-woody)pla	ants, including	
8.				herbaceous vines, regardless of size.	Includes wood	dy
9.		•		plants, except woody vines, less than	approximately	3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, regard	less of height.	
12.				1		
	70	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)					
1.	,					
2.				1		
3.						
4.				Hydrophytic		
5.	•			Vegetation Present? Yes	√ No	
		= Total Cove				<del></del>
Remarks: (If observed, list morph			•	I		
Percent cover estimates based or	-		roader coi	mmunity		]
1. 5.551K 55451 55KHIIGK5 DG56G 01	canacing a	.a. vo, or the b	. 54451 601	······································		

County/soil: Polk-Smyrna	
SOIL	Sampling Poi

SOIL								Sampling Point: 61
Profile De	scription: (Describe	to the de	pth needed to docu	ument th	e indicator or	confirm the ab	sence of indicators.	)
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>†</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	10 YR 2/1							black fine sand
4-12	10 YR 6/1							gray fine sand
12-18	7.5 YR 3/2							dark brown fine sand
							many fine distinct	
18-25	10 YR 5/3		5 YR 5/3				bodies	brown fine sand
·							-7	
	Concentration, D=Dept	etion, RM	I=Reduced Matrix, C	S=Cover	red or Coated S	Sand Grains.		e Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol			-			rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)		•		•	S9) (LRR S, T,	•	2 cm Muck (A10) (LRR S)
	Histic (A3)		-			ral (F1) (LRR 0)	)	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		-		ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		-		eted Matrix (F3)	•		Anomalous Bright Loamy Soils (F20)
_ `	ic Bodies (A6) (LRR F		-		ox Dark Surface	` ,		(MLRA 153B)
5 cm l	Mucky Mineral (A7) (Ll	RR P,T,U	) _		eted Dark Surfa			Red Parent Material (TF2)
_✓_Muck	Presence (A8) (LRR I	J)	-	Redo	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)		_	Marl	(F10) (LRR U)			Other (Explain in Remarks)
	ted Below Dark Surfac	o (A11)		— Denk	eted Orchric (E	11) (MLRA 151	1	
		e (ATT)	-			sses (F12) (LR	*	
_	Dark Surface (A12)		-	_	•	. , .		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 15	0A) _	Umbi	ric Surface (F1)	3) <b>(LRR P, T, U</b>		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (I	LRR O, S	) _	Delta	Orchric (F17)	(MLRA 151)		problematic.
Sandy	Gleyed Matrix (S4)			Redu	uced Vertic (F18	8) (MLRA 150A	, 150B)	
	Redox (S5)		-	Piedr	mont Floodplain	Soils (F19) (M	LRA 149A)	
_ ′	ed Matrix (S6)		_				D) (MLRA 149A, 153C	, 153D)
Dark 9	Surface (S7) (LRR P, S	STIN			_			
	E Layer (If observed)						1	
	Type:	•						
	Depth (inches):						Hydric Soil Presen	nt? Yes ✓ No .
Remarks:	Deptit (inches).						Tryanc con ricaci	109
i terriarne.								
ļ								
ŀ								
1								
1								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Date:10/6/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 62			62
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	_Section, Township, Range	e: <u>19 27S 23E</u>		
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, conv	vex, none): none	Slo	ppe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.127668	Long: <u>-82.0</u>	39923	Da	tum: WGS84
Soil Map Unit Name: Placid and Myakka fine sar		_	_NWI classification	: Shrub Wetland	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in I	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		s/No
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in R	emarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>	te map showing sampli	ng point locations, t	ransects, impo	rtant features	, e <u>tc.</u>
Hydrophytic Vegetation Present?	Yes No				-
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	YesNo	' <u></u>
Wetland Hydrology Present?	YesNo				
Remarks:					
L					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of tw	vo required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Ve	getated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	,	Drainage Pa	atterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	, ,	
Drift Deposits (B3)	Presence of Reduced Ire			isible on Aerial Ima	anery (C9)
· · · ·	Recent Iron Reduction in	•	Geomorphic		agery (Co)
Algal Mat or Crust (B4)					
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	I lest (Do)	
Field Observations:	v - No ✓	Double (See de sea).			
Surface Water Present?	Yes No/ Yes No/		-		
Water Table Present?	<u></u>		- Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)	<del> </del>		Present?	Yes <u>✓ No</u>	·
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:			
Remarks:				.,	
· ·					
1					
1					

VEGETATION - Use scientific na	mes of plants				Sampling Point: _	62
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Works	heet:	
1. 2.				Number of Dominant Spe That Are OBL, FACW, or		(A)
3.	· ———			Total Number of Dominar	nt .	(D)
4.				Species Across All Strata	<u>1</u>	(B)
5.				Percent of Dominant Spe	cies 100.0	00 (A/B)
6.				That Are OBL, FACW, or	FAC:	<u> </u>
7.				Prevalance Index works		
Sapling Stratum (Plot size:		= Total Cove	r	Total % Cover of: OBL species	<u>Multiply l</u> x1=	<u>by:</u>
1.				FACW species	x2=	
2.				FAC species	x3=	
3.				FACU species	x4=	<del></del>
4.				UPL species	x5=	
5.				Column Totals:	(A)	——(B)
6.				_		
7.				Prevalance Index = I	B/A =	
	0	= Total Cove	r	Hydrophytic Vegetation		
Shrub Stratum (Plot size:	)			✓ Dominance Test is	s 50%	
1.	- <del> </del>			Prevalence Index		
2.				Problematic Hydro	ophytic Vegetation <sup>1</sup>	(Explain)
3.	· <del>· · · · · · · · · · · · · · · · · · </del>			1.		
4.				Indicators of hydric soil a		gy must
5.	. <del></del>			be present, unless disturt		
6.				Definitions of Vegetatio	n Strata:	
7.		Tatalo		<u>.</u>		
Herb Stratum (Plot size:)	0	= Total Cove	ſ	Tree- Woody plants, exclu- approximately 20 ft (6m) or		2 in /7.6
·	0E		OBL	cm) or larger in diameter a	_	-
Ludwigia peruviana     Panicum hemitomon	- <del>95</del> 5	yes no	OBL OBL	ļ '		•
3.		110	OBL	Sapling- Woody plants, ex approximately 20 ft (6m) or		
4.	· <del></del>			in. (7.6 cm) DBH.	more in neight and	icos man o
5.				Shrub- Woody plants, exc	luding woody vines	
6.				approximately 3 to 20 ft (1		
7.	-			Herb- All herbaceous (non		tina
8.				herbaceous vines, regardle		
9.				plants, except woody vines	, less than approxim	ately 3 ft (1
10.				m) in height.		
11.	- <del></del>			Woody vine- All woody vir	es, regardless of hei	ight.
12.	· <del></del>					
Woody Vine Stratum (Plot size:_	100 )	= Total Cove	r			
1.						
2.						
3.				l		
4.				Hydrophytic	Van / N	_
5.		- Total Carr		Vegetation Present?	Yes <u>√</u> No	·
	0	= Total Cove	I	I		

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region-Interim Version

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

Redox Features   Redox Features   Remarks	
very dark gray fine sand gray fine sand gray fine sand black fine sand black fine sand black fine sand black fine sand black fine sand black fine sand black fine sand  common medium masses  dark brown fine sand  very dark gray fine sand black fine sand black fine sand  common medium masses  dark brown fine sand  dark brown fine sand  very dark gray fine sand black fine sand  common medium masses  dark brown fine sand  dark brown fine sand  very dark gray fine sand  black fine sand  common medium masses  dark brown fine sand  dark brown fine san	
25 10 YR 6/1 530 5 YR 5/1  26 7.5 YR 3/2  27 10 YR 2/1  28 Common medium masses  28 Common medium masses  29 Cartining, M=Matrix.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Wype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  **Location: Pt=Pore Lining, M=Matrix, Matrix.  Indicators for Problematic Hydric Soil Indicators of Problematic Hydric Soil Lang Musk Mineral (A1) (LRR O)  I cm Muck (A9) (LRR S, T, U)  Polyvalue Below Surface (S9) (LRR S, T, U)  Polyvalue Below Surface (S9) (LRR O)  Windicators of Problematic Hydric Soil Lang Musk Surface (F12) (MLRA 153)  Windicators of hydrophytic vegetation and Problematic Hydric Soil (LRR O, P, T)  Windicators of hydrophytic vegetation and Problematic Hydric (S0)  Windicators of hydrophytic vegetation and Problematic Hydric (S0)  Windicators of hydrophytic vegetation and Problematic Hydric (S0)  Windicators (S5)  Windicators (F13) (MLRA 150A)  Windicators (F13) (MLRA 150A)  Windicators (F13) (MLRA 150A)  Problematic Hydric Soil  Windicators of hydrophytic vegetation and Problematic Hydric (F13) (MLRA 150A)  Windicators of hydrophytic vegetation and Problematic Hydric (F13) (MLRA 150A)  Windicators of hydrophytic vegetation and Problematic Hydric (F13) (MLRA 150A)  Windicators of	
SYR 5/1  Disack fine sand  common medium masses  dark brown fine sand  common medium masses  floating masses  floating M=Matrix  colling M=Matrix	
Pose Technical Part of the properties of the pro	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix.  ype: C=Concentration, D=Depleted Matrix.  ype: C=Concentration, D=Depleted Infinity.  Indicators for Problematic Hydric Soil  Indicators for Problematic Hydric Soil  ype: C=Concentration, D=Depleted Ling, M=Matrix.  Indicators for Problematic Hydric Soil  ype: C=Concentration, D=Depleted Operation.  1 cm Muck (A9) (LRR S)	
Adric Soil Indicators: Histol (A1) Histic Epidon (A2) Histic Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Commendation Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F6)  Amount (A7) (LRR P, T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Medox (S5)  Dela Ordanic F10) (LRR O, P, T, U)  Dela Ordanic F17) (MLRA 150A)  Dela Ordanic F17) (MLRA 150A)  Dela Ordanic F17) (MLRA 150A)  Dela Ordanic F17) (MLRA 150A)  Dela Ordanic F17) (MLRA 150A)  Dela Ordanic F17) (MLRA 150A)  Dela Ordanic F17) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Delta Ordanic F18) (MLRA 150A)  Piedmont Floodplain Soils (F20)  (MLRA 150B)  Piedmont Floodplain Soils (F19) (LRR O, F, T)  Indicators for Problematic Hydric Soil  1 cm Muck (A9) (LRR S, T, U)  2 cm Muck (A10) (LRR O, S)  Mucky Mineral (F1) (LRR O, F, T, U)  Marl (F10) (LRR U)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sendy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Problematic.  Reduced Vertic (F18) (MLRA 150A)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
Artic Soil Indicators: Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Histic Epidon (A2)  Black Histic (A3) Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Commy Mucky Mineral (A7) (LRR P, T, U)  Depleted Below Dark Surface (A9)  I cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Loamy Mucky Mineral (B1) (LRR D)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR P, S, T, U)  Sandy Mucky Mineral (S1) (LRR P, S, T, U)  Depleted Orchric (F13) (LRR P, T, U)  Depleted Orchric (F13) (LRR P, T, U)  Loamy Mucky Mineral (B1)  J cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F20)  (MLRA 153B)  Indicators for Problematic Hydric Soil  1 cm Muck (A9) (LRR S, T, U)  Pedlemed Matrix (F2)  Loamy Mucky Mineral (F1) (LRR O, F, T)  J coast Prairie Redox (A16) (MLRA 150A)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (outside MLR  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLR Hydrogen Sulfide (A4) Piedmont Floodplain Soils (F19) (LR Stratified Layers (A5) Pepleted Matrix (F2) Piedmont Floodplain Soils (F19) (LR Stratified Layers (A5) Pepleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P,T,U) Pepleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (In Muck (A9) (LRR P,T) Pepleted Dark Surface (F11) (MLRA 151) Depleted Below Dark Surface (A12) Pepleted Orchric (F11) (MLRA 151)  Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Inon-Manganese Masses (F12) (LRR O, P,T) Sandy Mucky Mineral (S1) (LRR O, S) Piedmont Floodplain Soils (F19) (MLRA 149A) Sardy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
	a 150A, B R P, S, T) RR T, U)
Type:	
Depth (inches): Hydric Soil Present? Yes ✓ No emarks:	

Project/Site: Levy Nuclear Plant - Transmission L	City/County: Polk		Sampling Date: 10/6/09		
Applicant/Owner: Progress Energy Florida, Inc.			Sampling Point: 63		
Investigator(s): Mike Arrants, Lianne Ramos					
Landform (hillslope, terrace, etc.): N/A	Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U		Long: <u>-82.0</u>	39751	Datum: WGS84	
Soil Map Unit Name: Smyrna and Myakka fine sa			_NWI classification:		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology				
	or Hydrology			any answers in Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	YesNo	Is the Sampled Area w	vithin a Wetland?	YesNo	
Wetland Hydrology Present?	YesNo	]			
Remarks:		•			
				ļ	
				!	
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)	
Primary Indicators (minimum of one is required; o	heck all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	ows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	i i	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral	` '	
Field Observations:			T		
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No				
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)			Hydrology Present?	Yes ✓ No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	1. 1000		
, , , , , , , , , , , , , , , , , , ,		,			
Pomorko:					
Remarks:					

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	63
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2. 3. 4.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(0)
				Species Across All Strata:	(B)
5.				Percent of Dominant Species	(4 (5)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.				FACW species x2=	-
2.				FAC species x3=	-
2. 3. 4. 5.				FACU species x4=	-
4				UPL species x5=	-
5				Column Totals: (A)	- (B)
6.		•		(//)	_('')
7.				Prevalance Index = B/A =	
,		= Total Cove	<del></del>	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:		10101 0010	•	✓ Dominance Test is 50%	
Baccharis sp.	/ 	Vec	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
2.		yes	TAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	dain)
3.				Froblematic Hydrophytic Vegetation (Exp	iaiii)
4.				1	
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology m be present, unless disturbed or problematic.	iust
6.				Definitions of Vegetation Strata:	
7.				Deminions of Vegetation Strata.	,
<i>I</i> .	5	- Tatal Cava		<u> </u>	
Harb Stratum (Blot size: )	5	= Total Cove	·r	Tree- Woody plants, excluding woody vines,	<i>(</i> 7.0
Herb Stratum (Plot size:)	00		OBL	approximately 20 ft (6m) or more in height and 3 in. cm) or larger in diameter at breast height (DBH).	(7.6
Ludwigia peruviana	80	yes	OBL		
Euthamia spp.     Paspalum notatum	10	no	FAC	Sapling- Woody plants, excluding woody vines,	Alb. a O
	5	no	FACU	approximately 20 ft (6m) or more in height and less in. (7.6 cm) DBH.	tnan 3
4. Phyllanthus urinaria	55	no	FAC		
5.				Shrub- Woody plants, excluding woody vines,	
6. 7.				approximately 3 to 20 ft (1 to 6 m) in height.	
				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	-
9.				plants, except woody vines, less than approximately m) in height.	311(1
10.				`	
11.	·			Woody vine- All woody vines, regardless of height.	
12.					
	100	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	<u> </u>
	0	= Total Cove	r		
Remarks: (If observed, list morph	ological adapta	tions below).			
Percent cover estimates based or	n meandering s	urvey of the b	roader cor	mmunity.	Į

County/so	oil: Polk-Myakka							Sampling Point:		
	escription: (Describe	to the d	epth needed to do	cument the	e indicator or	confirm the ab	sence of indicators			
Depth	Matrix		•	Redox	Features			•		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks		
0-7	10 YR 3/1							very dark gray fine sand		
7-25	10 YR 6/1							gray fine sand		
25-30	5 YR 5/1							black fine sand		
							common medium			
30-36	7.5 YR 3/2		10 YR 2/1				masses	dark brown fine sand		
ļ								•		
	Concentration, D=Dep	letion, RI	M=Reduced Matrix,	CS=Cover	ed or Coated S	Sand Grains.	*Location: PL=Po	re Lining, M=Matrix.		
1 -	oil Indicators:							Indicators for Problematic Hydric Soils 3:		
	I (A1)					rface (S8) (LRR		1 cm Muck (a9) (LRR O)		
	Epidon (A2)				•	S9) (LRR S, T,	•	2 cm Muck (A10) (LRR S)		
	Histic (A3)			_		ral (F1) (LRR O)	)	Reduced Vertic (F18) (outside MLRA 150A, B)		
	ogen Sulfide (A4)				y Gleyed Matr	` '		Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ified Layers (A5)				eted Matrix (F3	•		Anomalous Bright Loamy Soils (F20)		
Orga	nic Bodies (A6) (LRR F	P, T, U)		Redo	x Dark Surface	e (F6)		(MLRA 153B)		
5 cm	Mucky Mineral (A7) (LI	RR P,T,I	J)	Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)		
✓ Muc	k Presence (A8) (LRR	U)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm	Muck (A9) (LRR P,T)			Marl (	(F10) (LRR U)			Other (Explain in Remarks)		
Dept	eted Below Dark Surfac	e (A11)		Deple	eted Orchric (F	11) (MLRA 151	)			
Thick	Dark Surface (A12)			Iron-N	Manganese Ma	isses (F12) (LR	R O, P,T)	31		
Coas	t Prairie Redox (A16) (	MI RA 1	50A)	Umbr	ic Surface (F1	3) (LRR P, T, U	)	Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or		
	, , ,		•					problematic.		
Sandy Mucky Mineral (S1) (LRR O, S)				Delta	Ordino (F17)	(MITUM 191)		problemaile.		

\_Reduced Vertic (F18) (MLRA 150A, 150B)

\_Piedmont Floodplain Soils (F19) (MLRA 149A)

\_Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Hydric Soil Present?

Yes <u>✓</u> No

\_Sandy Gleyed Matrix (S4)

\_Sandy Redox (S5) \_Stripped Matrix (S6)

Remarks:

Project/Site: Levy Nuclear Plant - Transmission Li	ines	City/County: Polk		_Sampling Date: 10/6/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Po	int:64	
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	_Section, Township, Range	e: 19 27S 23E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none		_Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.12433</u> 0	30 Long: <u>-82.039886</u> Datum: <u>WGS84</u>				
Soil Map Unit Name: Smyrna and Myakka fine sa	and					
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	_ (If no, explair	n in Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal?	YesNo	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers	in Remarks)	
SUMMARY OF FINDINGS - Attach sit	e map showing sampl	ing point locations, t	ransects, impo	ortant featu	res, etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	YesNo	is the Sampled Area v	vithin a Wetland?	Yes✓	_No	
Wetland Hydrology Present?	Yes No					
HYDROLOGY			Cdan Indiaa	(inimum	-(Luc accuired)	
Wetland Hydrology Indicators:	the state of seconds A		Secondary Indicat		of two requirea)	
Primary Indicators (minimum of one is required; c		(5.6)	Surface Soil Cracks (B6) B9)Sparsely Vegetated Concave Surface (B			
Surface Water (A1)	Water-Stained Leaves	(B9)		-	ve Sunace (BB)	
High Water Table (A2)	Aquatic Fauna (B13)	== ·n		atterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	•	Moss Trim L	. ,		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (	C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	. , ,	Crayfish Bu	• •		
Drift Deposits (B3)	Presence of Reduced I	• •		√isible on Aeria	I Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction	· · · · · · · · · · · · · · · · · · ·				
Iron Deposits (B5)	Thin Muck Surface (C7			• •		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutra	ıl Test (D5)		
Field Observations:						
Surface Water Present?	Yes No		-			
Water Table Present?	Yes No					
Saturation Present?	Yes No	Depth (inches):0-2	Hydrology			
(includes capillary fringe)			Present?	Yes <u></u>	_No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	s inspections), if available:				
Remarks:						

VEGETATION - Use scientific n	ames of plants			Sa	mpling Point:	64
	Absolute %	Dominant	Indicator	Dominance Test Workshee	t:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	3 0	(4)
2.				That Are OBL, FACW, or FA	C: 9	(A)
3.				Total Number of Dominant	11	(D)
4.				Species Across All Strata:	<u>11</u>	(B)
5.				Percent of Dominant Species	9 91 92	(A/D
6.				That Are OBL, FACW, or FA	C: <u>81.82</u>	(A/B)
7.				Prevalance Index workshee	et:	•
		= Total Cove	r	Total % Cover of:	Multiply b	<b>y</b> :
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	······
2.				FAC species	x3=	
3.				FACU species	x4=	
4.				UPL species	x5=	
5.				Column Totals:	(A)	(B)
6.				1	· · · · · ·	· ′
7.				Prevalance Index = B/A	=	
		= Total Cove	r	Hydrophytic Vegetation Ind	licators:	
Shrub Stratum (Plot size:	1			/ Dominance Test is 50	0/_	

2.		-		That Are OBL, FACW, or FA	.С: , <u>а</u>	(A)
3.				Total Number of Dominant	4.4	<b>(D)</b>
4.				Species Across All Strata:	<u>11</u>	(B)
5.				Percent of Dominant Species	S 04.00	
6.				That Are OBL, FACW, or FA		(A/B)
7.				Prevalance Index workshe		
		= Total Cov	 er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	,		OBL species	x1=	
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	
5.				Column Totals:	(A)	– (B)
6.					` /	``
7.				Prevalance Index = B/A	=	
		= Total Cov	er	Hydrophytic Vegetation Inc		
Shrub Stratum (Plot size:	-	. Glai Gov	<b>.</b>	✓ Dominance Test is 50		
Baccharis sp.		yes	FAC	Prevalence Index is ≤		
2.				Problematic Hydrophy		olain)
3.				1 robiomatio riyaropin	y no regordanti (Exp	J.G.I.I.
4.	<del></del>			Indicators of hydric soil and	wetland hydrology n	nuet
5.				be present, unless disturbed		iiust
6.	·			Definitions of Vegetation S		
7.	· ——					
	5	= Total Cov		Troe Woody plants evaluating	n woody vinos	
Herb Stratum (Plot size:)	5	- Total Cov		Tree- Woody plants, excluding approximately 20 ft (6m) or mo		(7.6
Cynodon dactylon	10	yes	FACU	cm) or larger in diameter at bro	•	(
Cyperus spp.	10	yes	FACW	Sapling- Woody plants, exclude	_	
Hydrocotyle spp.	10	yes	OBL	approximately 20 ft (6m) or mo		than 3
Phyllanthus urinaria	10 \	yes	FAC	in. (7.6 cm) DBH.		
5. Phyla nodiflora	10	yes	FACW	Shrub- Woody plants, excludi	na woody vines	
Muridannia nudiflora	10	yes	FAC	approximately 3 to 20 ft (1 to 6	•	
7. Cyperus surinamensis	10	yes	FACW	╡ ``		
Chamaesyce serpens	10		FAC	Herb- All herbaceous (non-wo herbaceous vines, regardless	• • • • • • • • • • • • • • • • • • • •	, du
Cyperus rotundus	10	yes	UPL	plants, except woody vines, les		
	10	yes	FAC	m) in height.	ss than approximately	, 5 (1
10. Cyperus globulosus 11.		yes	- FAC	Woody vine- All woody vines,	rogardless of boight	
			. ——	woody vine- All woody vines,	regardless of neight.	
12.		T-1-1-0		4		
NAVa a sta Nija a Chartana (Dlat airea	100	= Total Cov	er			
Woody Vine Stratum (Plot size:	)					
1.			· <del></del>	4		
2.				1		
3.				┥		
4.				Hydrophytic	, ,	
5.		<del></del>		Vegetation Present? Y	′es <u>   √      </u> No <u> </u>	
	0	= Total Cov	er			
Remarks: (If observed, list morph						
Percent cover estimates based of	n meandering s	survey of the b	oroader co	emmunity.		

OIL rofile De									
rofile De								Sampling Point:	
	escription: (Describe	to the dep	th needed to doc			onfirm the ab	sence of indicators.)	l e e e e e e e e e e e e e e e e e e e	
oth	Matrix			Redox Fea					
thes)	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture	Remarks	
	10 YR 3/1							very dark gray fine sand	
5	10 YR 6/1							gray fine sand	
30	5 YR 5/1							black fine sand	
							common medium		
36	7.5 YR 3/2		10 YR 2/1				masses	dark brown fine sand	
						<del></del>			
0-	Ctti D-D	- <del> </del>	Ded and Massive	00-0			ZI nantina. DI nDani	. I fall a . B . B . B . Addi.	
	Concentration, D=Dep	letion, RM	Reduced Matrix, (	-S=Covered (	or Coated Sa	nd Grains.	<sup>2</sup> Location: PL=Pore		
	oil Indicators:					(00) (I DE		Indicators for Problematic Hydric Soils 3:	
_Histol						ice (S8) (LRF		1 cm Muck (a9) (LRR O)	
	Epidon (A2)					) (LRR S, T,		2 cm Muck (A10) (LRR S)	
	Histic (A3)					(F1) (LRR O	١ .	Reduced Vertic (F18) (outside MLRA 150A, B)	
	gen Sulfide (A4)				leyed Matrix	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)	
_Stratif	fied Layers (A5)			Depleted	Matrix (F3)			Anomalous Bright Loamy Soils (F20)	
_Orgar	nic Bodies (A6) (LRR F	P, T, U)		Redox D	ark Surface (	F6)	•	(MLRA 153B)	
	Mucky Mineral (A7) (L				Dark Surface	•		Red Parent Material (TF2)	
						. ,	•		
wuck	Presence (A8) (LRR	U)			epressions (F	· oj		Very Shallow Dark Surface (TF12) (LRR T, U)	
1 cm Muck (A9) (LRR P,T)				Marl (F10	) (LRR U)		Other (Explain in Remarks)		
Dente	ted Below Dark Surface	re (Δ11)		Depleted	Orchric (F11	) (MLRA 151	)		
		JC (/ \			•				
Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A)				Iron-Manganese Masses (F12) (LRR O, P,T)   3Indicators of hydrophytic vegetation and w					
				Umbric S	iurface (F13)	(LRR P, T, U	)	hydrology must be present, unless disturbed or	
Sand	y Mucky Mineral (S1) (	LRR O. SI		Delta Ord	chric (F17) (N	ILRA 151)	į	problematic.	
	y Gleyed Matrix (S4)	L , ,				(MLRA 150A	150R\		
	y Redox (S5)					Soils (F19) (M			
								4500)	
Ѕтпрр	oed Matrix (S6)			Anomaio	us Bright Loa	imy Soils (F20	) (MLRA 149A, 153C	, 1530)	
Dark :	Surface (S7) (LRR P,	S, T, U)							
		· · · · · · · · · · · · · · · · · · ·					1		
estrictiv	e Layer (If observed)	j;							
strictiv		):							
strictiv	Туре:	);					Hydric Soil Presen	t? Yes √ No	
		)•					Hydric Soil Presen	t? Yes ✓ No	
	Туре:						Hydric Soil Presen	t? Yes _ ✓ No	
	Туре:						Hydric Soil Presen	t? Yes ✓ No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes _ ✓ No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
emarks:	Туре:						Hydric Soil Presen	t? Yes <u>√</u> No	
	Туре:						Hydric Soil Presen	t? Yes <u>✓</u> No	
	Туре:						Hydric Soil Presen	t? Yes ✓ No	
	Туре:				-		Hydric Soil Presen	t? Yes <u>√</u> No	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk Sampling Date: 10/6/09					
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 65					
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range					
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, convex, none): none Slope (%):					
Subregion (LRR or MLRA): LRR U							
Soil Map Unit Name: Basinger mucky fine sand,			_NWI classification:	Freshwater Eme	rgent Wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ _ No				
• • •	or Hydrology		Are circumstances		, s∕No		
	or Hydrology		(If needed, explain	anv answers in Re	emarks)		
SUMMARY OF FINDINGS - Attach sit			,	•	•		
Hydrophytic Vegetation Present?	YesNo		, , , , , , , , , , , , , , , , , , , ,		,		
Hydric Soil Present?	Yes ✓ No	Is the Sampled Area w	ithin a Wetland?	YesNo			
Wetland Hydrology Present?	YesNo						
Remarks:	-						
HYPROLOCY							
HYDROLOGY	<del></del>						
Wetland Hydrology Indicators:			Secondary Indicato	•	o required)		
Primary Indicators (minimum of one is required; c		Surface Soil Cracks (B6)  B9) Sparsely Vegetated Concave Surface (I					
Surface Water (A1)	Water-Stained Leaves (I	B9)	· · · ·		urface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat				
Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim Lir				
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Vater Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres	. ,	Crayfish Burn				
Drift Deposits (B3)	Presence of Reduced Iro				gery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in						
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	l est (D5)			
Field Observations:	Van (	5 0 6 1 3 5 4		•			
Surface Water Present?	Yes No		1				
Water Table Present?	Yes No		Wetland				
Saturation Present?	Yes No	Depth (inches): 0-3	Hydrology				
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na wall parial photos provious	inanadiana) if available:	Present?	Yes No			
Describe Necorded Data (Stream gauge, monitori	ng well, aerial priotos, previous	mspections), ii available.					
Remarks:	,						
	we t						

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	65
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status	Niverbox of Deminent Consider	
1.	-			Number of Dominant Species	(A)
2.				That Ale Obt., I ACVV, OI I AC.	
3.				Total Number of Dominant	(B)
4.				Species Across All Strata: <sup>™</sup>	` ′
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	, 0	= Total Cove	er	Total % Cover of: Multiply by: OBL species x1=	
Acer rubrum	/ 15	V00	OBL	FACW species x2=	-
2.		yes	OBL	FAC species x3=	- 1
3.				FACU species x4=	- 1
				- · ·	-
4.	· —			UPL species x5=	一 <sub>/B</sub> 、
5.				Column Totals:(A)	— <sup>(B)</sup>
6.				Description of Index - B/A -	
7.	- 45			Prevalance Index = B/A =	
0, 10, 1, (5), 1		= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:				Dominance Test is 50%	
Sambucus canadensis	2	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.				<u> </u>	
4.				Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
	2	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	. (7.6
Ludwigia peruviana	60	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Panicum hemitomon	15	no	OBL	Sapling- Woody plants, excluding woody vines,	
3. Muridannia nudiflora	2	no	FAC	approximately 20 ft (6m) or more in height and less	than 3
4. Micromeria spp.	2	no	NL	in. (7.6 cm) DBH.	
5. Woodwardia virginica	10	no	OBL	Shrub- Woody plants, excluding woody vines,	
6. 7.				approximately 3 to 20 ft (1 to 6 m) in height.	
				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wo	-
9.				plants, except woody vines, less than approximate	ly 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height	i.
12.					
	89	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.	-				
4.	-			Hydrophytic	
5.				Vegetation Present? YesNo	
		= Total Cove		1	
Remarks: (If observed, list morph					
Percent cover estimates based or		•	roader co	mmunity.	

Depth	scription: (Describe t	to the der	th pooded to doe	umont the	indicator or	confirm the ab	canca of indicator	Sampling Point:
	Matrix	to the dep	in needed to doc	Redox F		COMMIN ME 4D	sence of mulcator	5.)
inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks
)-7	10 YR 4/1							dark gray fine sand
7-19	10 YR 7/2							light gray fine sand
	10 YR 4/3; 10 YR							
19-39	6/2							light brownish gray fine sand
39-80	10 YR 6/2							brown and light brownish gray fine sand
Type: C=C	oncentration, D=Deple	etion, RM	Reduced Matrix, 0	S=Covered	or Coated S	Sand Grains.	<sup>2</sup> Location: PL=P	ore Lining, M=Matrix.
Hydric Soil	I Indicators:							Indicators for Problematic Hydric Soils 3:
Histol (	(A1)			Polyval	ue Below Su	rface (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)						S9) <b>(LRR S, T,</b> I		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)			Loamy	Gleyed Matri	ix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)					ed Matrix (F3)	•		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)				Redox	Dark Surface	e (F6)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)			Depleted Dark Surface (F7)				Red Parent Material (TF2)	
✓ Muck Presence (A8) (LRR U)R				Redox	Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm M	fuck (A9) (LRR P,T)			Marl (F	10) (LRR U)			Other (Explain in Remarks)
	ed Below Dark Surface	o (A11)		Denlete	od Orchric (F	11) (MLRA 151)		
		e (A11)			•			
	Dark Surface (A12)				-	sses (F12) (LRI		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast I	Prairie Redox (A16) (N	VILRA 150	)A)	Umbric Surface (F13) (LRR P, T, U)				hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (L	.RR O, S)		Delta C	rchric (F17)	(MLRA 151)		problematic.
Sandy	Gleyed Matrix (S4)			Reduce	ed Vertic (F18	B) (MLRA 150A,	150B)	
Sandy	Redox (S5)			Piedmo	nt Floodplair	Soils (F19) (MI	_RA 149A)	
Strippe	ed Matrix (S6)			Anoma	lous Bright Lo	oamy Soils (F20	) (MLRA 149A, 153	C, 153D)
Dark S	urface (S7) (LRR P. S	S. T. U)						
_	Layer (If observed):	<del></del>	·				Т	· · · · · · · · · · · · · · · · · · ·
	Гуре:							
	Depth (inches):						Hydric Soil Pres	ent? Yes ✓ No .
Remarks:								······································

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk	_Sampling Date:_	10/7/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 66			66	
Investigator(s): Mike Arrants, Lianne Ramo	s-Mofienski	_Section, Township, Range	e: 19 27S 23E			
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, con	vex, none): none	Slc	ope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.120491</u>	Long: <u>-82.039922</u> Datum:			tum: WGS84	
Soil Map Unit Name: Pompano fine sand			NWI classification	: Freshwater Pon	d	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes✓	_ No	_ (If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal? Ye	s/No	
Are Vegetation, Soil	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in R	emarks)	
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations, t	ransects, impo	ortant features	s, etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes✓No		
Wetland Hydrology Present?	Yes/ No					
Remarks:						
<u> </u>						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of to	vo required)	
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	l Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concave S	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	_ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bu	rrows (C8)		
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	/isible on Aerial Im	agery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction is	in Tilled Soils (C6)Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	<del></del>				
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-24				
Water Table Present?	Yes No	Depth (inches): 0				
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)	***		Present?	Yes <u>✓</u> No	•	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	1			
Remarks:						
incinaris.						
		•				
i						

VEGETATION - Use scientific na	mes of plants				Sampling Point: _	66
	Absolute %	Dominant	Indicator	Dominance Test Worksh	eet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spec	u	(A)
2.				That Are OBL, FACW, or	rac.	. ,
3.				Total Number of Dominan	7()	(B)
4.				Species Across All Strata:		
5.				Percent of Dominant Spec	50.0	00 (A/B)
6.				That Are OBL, FACW, or		
7.				Prevalance Index works		
Conline Stratum (Blat sine)		= Total Cove	r	Total % Cover of:	<u>Multiply</u>	<u>by:</u>
Sapling Stratum (Plot size:	<u>.</u>		E 4 (0) 4 /	OBL species	x1=	
1. Salix spp.	2	yes	FACW	FACW species _	x2=	
2.				FAC species	x3=	
3.				FACU species	x4=	
4.				UPL species	x5=	
5.		<del></del>		Column Totals:	(A)	(B)
6.	·					
7.		= Total Cove		Prevalance Index = B		
Shrub Stratum (Plot size:	_	- Total Cove	1	Hydrophytic Vegetation  ✓ Dominance Test is		
· · · · · · · · · · · · · · · · · · ·	<i>/</i>			Prevalence Index is		
<u>1.</u> 2.	·	<del></del>		<del></del>		(Evaloia)
3.				Problematic Hydro	priylic vegetation	(Explain)
4.				l Nedicatora of budgia cail as		
5.				Indicators of hydric soil and be present, unless disturb		
6.	· <del></del>			Definitions of Vegetation		
7.	· ———			Dominiono di Vogettatioi	. Otrum.	
		= Total Cove		Tree- Woody plants, exclud	ling woody vince	
Herb Stratum (Plot size:)	J	- Total Cove	•	approximately 20 ft (6m) or		3 in /7.6
Muridannia nudiflora	5	yes	FAC	cm) or larger in diameter at		
Panicum repens	5	ves	FACW	Sapling- Woody plants, exc		
Phyllanthus urinaria	5	yes	FAC	approximately 20 ft (6m) or		
Eupatorium capillifolium	5	yes	FACU	in. (7.6 cm) DBH.	<b>g</b>	
Ludwigia peruviana	5	yes	OBL	Shrub- Woody plants, exclu	ıdina woodv vines.	
6. Panicum hemitomon	5	yes	OBL	approximately 3 to 20 ft (1 to		
7. Commelina spp.	5	yes	FACW	Herb- All herbaceous (non-	woody)plants inclu	dina
8. Cyperus polystachyos	5	yes	FACW	herbaceous vines, regardles		
9. Juncus scirpoides	5	yes	FACW	plants, except woody vines,		
10.	•			m) in height.		
11.				Woody vine- All woody vine	es, regardless of he	ight.
12.						
	45	= Total Cove	r	·		
Woody Vine Stratum (Plot size:	)					
1.						
2.				]		
3.						
4.				Hydrophytic		
5.				Vegetation Present?	YesN	o <u> </u>
	0	= Total Cove	r	]		

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region-Interim Version

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Texture Texture Remarks  Color (moist) Redox Features Texture Texture Remarks  Diack fine sand Gray fine sand Gray fine sand Int-16 INTR 6/7 INTR 6		it: Polk- Pomona							Consiling Daint. 60
Natival	SOIL								Sampling Point: 66
Inches	Profile De	scription: (Describe t	o the de	pth needed to docu			confirm the ab:	sence of indicators.)	
10 YR 5/1	Depth	Matrix			Redox	Features			
2-11   10 YR 6/1   10 YR 6/2   10 YR 5/6; 2.5 Y 5/4; 10 YR 5/2; 10 YR 6/2; 10   few fine distinct mottles   gray fine sand   light brownish   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish   light bro	(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
10 YR 6/2   10 YR 5/6; 2.5 Y 5/4; 10 YR 5/6; 10 YR 6/2; 10   few fine distinct mottles   gray fine sand   light brownish gray fine sandy loam   light brownish (48) (LRR S, T, U)   light brownish gray fine sandy loam   light light sandy loam   light lig	0-2	10 YR 2/1							black fine sand
11-16   10 YR 6/2		10 YR 6/1							gray fine sand
10 YR 5/6; 2.5 Y 5/4; 10 YR 5/2; 10 YR 7/2									
54', 10 YR 5/2; 10 YR 6/2; 10 YR 6/2; 10 YR 7/2				40 VD E/C: 0 E V					
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Third indicators for Problematic Hydric Soils 3:				5/4; 10 YR 5/2; 10 YR 6/2; 10					
Hydric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Hydrogen Sulfide (A5)  Brack Histic (A5) Hydrogen Sulfide (A6) Hydrogen Sulfide (A6) Hydrogen Sulfide (A6) Hydrogen Sulfide (A7) Hydrogen Sulfide (A8) Hydrogen Sulfide (	16-24	5 Y 5/1	_	YR 7/2				mottles	gray fine sandy loam
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR O)  Stratiffied Layers (A5)  Muck Mill (LRR P, T, U)  Stratiffied Layers (A6)  For Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F1)  Tom Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150)  Delta Orchric (F17) (MLRA 150)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (LRR P, T, U)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Very Shallow Dark Surface (F71)  Marl (F10) (LRR U)  Depleted Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Hydric Soil Present?  Yes No									
Histol (A1)	Type: C=	Concentration, D=Depl	etion, RM	=Reduced Matrix, C	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix.
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Piedmont Floodplain Soils (F19) (LRR 150A, B) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Organic Bodies (A6) (LRR P, T, U) Peleted Matrix (F3) Poepleted Matrix (F3) Anomalous Bright Loamy Soils (F20)  Mucky Mineral (A7) (LRR P,T,U) Peleted Dark Surface (F6) Mucky Mineral (A7) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR T, U) Peleted Below Dark Surface (A11) Thick Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Piedmont Floodplain Soils (F19) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No  Loamy Mucky Mineral (C10) (LRR O, S) Piedmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes No Piedmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes No Poetmont Floodplain Soils Freent? Yes No Poetmont Floodplain Soils Freent? Yes No Poetmont Floodplain Soils Freent Name Anomalous Bright Loamy Soils Freent Yes No Poetmont Floodplain Soils Freent Name Anomalous Bright Loamy Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodp	Hydric So	il Indicators:	·						Indicators for Problematic Hydric Soils 3:
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Piedmont Floodplain Soils (F19) (LRR 150A, B) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Organic Bodies (A6) (LRR P, T, U) Peleted Matrix (F3) Poepleted Matrix (F3) Anomalous Bright Loamy Soils (F20)  Mucky Mineral (A7) (LRR P,T,U) Peleted Dark Surface (F6) Mucky Mineral (A7) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR T, U) Peleted Below Dark Surface (A11) Thick Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Piedmont Floodplain Soils (F19) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No  Loamy Mucky Mineral (C10) (LRR O, S) Piedmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes No Piedmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, No Poetmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes No Poetmont Floodplain Soils Freent? Yes No Poetmont Floodplain Soils Freent? Yes No Poetmont Floodplain Soils Freent Name Anomalous Bright Loamy Soils Freent Yes No Poetmont Floodplain Soils Freent Name Anomalous Bright Loamy Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodplain Soils Freent Piedmont Floodp	Histol	(A1)			Polv	value Below Sur	face (S8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)
Black Histic (A3)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR O)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  Mucky Mineral (A7) (LRR P,T,U)  Pepleted Dark Surface (F7)  Muck Presence (A8) (LRR P,T)  Depleted Dark Surface (F8)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No  Loamy Mucky Mineral (F1) (outside MLRA 150A, 150B)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Reduced Vertic (F18) (MLRA 149A, 153C, 153D)  Reduced Vertic (F19) (LRR O, S)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes ✓ No  Hydric Soil Present?				-					
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Edward Matrix (F2)  Organic Bodies (A6) (LRR P, T, U)  Edward Depleted Matrix (F3)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Sc m Mucky Mineral (A7) (LRR P,T,U)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Leamy Gleyed Matrix (F2)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Mand (F10) (LRR V)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Mand (F10) (LRR U)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Liron-Manganese Masses (F12) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No  Inchanguas Noils (F20) (MLRA 159 Piedmont Floodplain Soils (F19) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Floodplain Soils (F20) (MLRA 159 Piedmont Floodplain Floodplai		. , ,		-					
Stratiffed Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Redox Dark Surface (F7)  Mad (F10) (LRR U)  Depleted Dark Surface (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No   Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soil (P20)  (MLRA 153B)  Anomalous Bright Loamy Soil (P20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No				-				٠.	
Organic Bodies (A6) (LRR P, T, U)  — Redox Dark Surface (F6)  — Sem Mucky Mineral (A7) (LRR P, T, U)  — Muck Presence (A8) (LRR U)  — 1 cm Muck (A9) (LRR P, T)  — Depleted Below Dark Surface (A11)  — Thick Dark Surface (A12)  — Coast Prairie Redox (A16) (MLRA 150A)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sandy Gleyed Matrix (S4)  — Sandy Redox (S5)  — Stripped Matrix (S6)  — Dark Surface (S7) (LRR P, S, T, U)  — Redox Dark Surface (F6)  — (MLRA 153B)  — Redox Dark Surface (F7)  — Redox Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Marl (F10) (LRR U)  — Other (Explain in Remarks)  — Other (Explain in Remarks)  — John (Explain in Remarks)  — Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  — Redox Dark Surface (F13) (LRR P, T, U)  — hydrology must be present, unless disturbed or problematic.  — Redox Dark Surface (F17) (MLRA 150A)  — Stripped Matrix (S4)  — Redox Dark Surface (F17)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F7)  — Redox Dark Surface (F12) (LRR P, T, U)  — hydric Soil Present?  — Yes _ ✓ No				-					
✓ Muck Presence (A8) (LRR U)			, T, U)	-	_ '				
✓ Muck Presence (A8) (LRR U)	5 cm	Mucky Mineral (A7) (LI	RR P.T.U	)	Dep	leted Dark Surfa	ice (F7)		Red Parent Material (TF2)
1 cm Muck (A9) (LRR P,T)				, -				•	
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Edward Vertic (F18) (MLRA 150A, 150B)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Delta Orchric (F17) (MLRA 151)  Popleta Orchric (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No			,,	-		•	(1 0)		
Thick Dark Surface (A12)	1 cm	Muck (A9) (LRR P,T)		-	мап	(F10) (LRR U)			Other (Explain in Remarks)
Thick Dark Surface (A12)	Deple	ted Below Dark Surfac	e (A11)	_	Dep	leted Orchric (F1	11) (MLRA 151)	)	
Coast Prairie Redox (A16) (MLRA 150A)	·		- (,	_	Iron-	Manganese Ma	sses (F12) (I RI	ROPT)	•
Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17) (MLRA 151) problematic. Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)		, ,		-		-			
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Park Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches): Hydric Soil Present? Yes ✓ No				•					
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):Type:				,			-	150R)	
Stripped Matrix (S6)				-					
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No				-		•	, , ,		4500)
Restrictive Layer (If observed):         Type:	Stnpp	ed Matrix (S6)		-	Ano	maious Bright Lo	oamy Solis (F20	) (MLKA 149A, 153C	, 153D)
Type:	Dark	Surface (S7) (LRR P, \$	S, T, U)						
Type:	Restrictiv	e Laver (If observed):	:						
Depth (inches): Hydric Soil Present? Yes, No,									
<del> </del>								Hydric Soil Presen	t2 Yes √ No
Remarks.	Domodia	Deput (inches).		· · · · · · · · · · · · · · · · · · ·				Triyunc 300 Fresen	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk Sampling Date: 10/7/09				
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 67				
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range	19 27S 23E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slop	oe (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.119000	000 Long: <u>-82.039998</u> Datum: <u>WGS8</u>				
Soil Map Unit Name: Pompano fine sand	11·113		NWI classification:	Freshwater Pond		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in R	emarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances normal? Yes✓_No			
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Re	marks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	te map showing sampli	ng point locations, t	ransects, impo	rtant features,	etc.	
Hydrophytic Vegetation Present?	Yes No		-			
Hydric Soil Present?	Yes No	is the Sampled Area w	ithin a Wetland?	YesNo_		
Wetland Hydrology Present?	YesNo					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	ure (minimum of two	roquirod)	
Primary Indicators (minimum of one is required; c	hack all that anniv)	Secondary Indicators (minimum of two requireSurface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (I	R <b>9</b> )		etated Concave Su	uface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	53,	Drainage Pat		inacc (BO)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir	, ,		
Water Marks (B1)	Hydrogen Sulfide Odor (	-		Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burre			
Drift Deposits (B3)	Presence of Reduced Iro		· ·	sible on Aerial Imag	nery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in					
Iron Deposits (B5)	Thin Muck Surface (C7)	· · ·				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral			
Field Observations:	· · ·	·	<u> </u>			
Surface Water Present?	Yes No	Depth (inches):				
Water Table Present?	Yes No					
Saturation Present?	Yes/ No		Wetland Hydrology			
(includes capillary fringe)			Present?	Yes <u>✓</u> No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				
Remarks:						
		•				
•						

VEGETATION - Use scientific nar	mes of plants				Sampling Point:	67
	Absolute %	Dominant	Indicator	Dominance Test Worksh	neet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spe		/۸۱
2.				That Are OBL, FACW, or	FAC: 8	(A)
3.				Total Number of Dominar	y	(B)
4.				Species Across All Strata		(0)
5.				Percent of Dominant Spe	cies 88.89	(A/B)
6.				That Are OBL, FACW, or	FAC: 00.09	(~0)
7.				Prevalance Index works	heet:	
		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	·			OBL species _	x1=	_
1. Salix spp.	5	yes	FACW	FACW species	x2=	_
2.	·			FAC species _	x3=	_
3.				FACU species	x4=	
4.				UPL species	x5=	
5	·			Column Totals:	(A)	_(B)
6.				]		
7.				Prevalance Index = E		
	5	= Total Cove	er	Hydrophytic Vegetation		
Shrub Stratum (Plot size:	<del></del> '			✓ Dominance Test is		
Ludwigia peruviana	5	yes	OBL	Prevalence Index i		
2.				Problematic Hydro	phytic Vegetation <sup>1</sup> (Exp	plain)
3.						
4.				Indicators of hydric soil a		nust
5.				be present, unless disturb		
6.				Definitions of Vegetatio	n Strata:	
7.						
Herb Stratum (Plot size:)	5	= Total Cove	er	Tree- Woody plants, exclude approximately 20 ft (6m) or		(7.6
Commelina spp.	2	yes	FACW	cm) or larger in diameter at	_	
2. Lemna spp.	2	yes	OBL	Sapling- Woody plants, ex	cluding woody vines,	
Polygonum punctatum	2	yes	FACW	approximately 20 ft (6m) or		than 3
Pontederia cordata	2	yes	OBL	in. (7.6 cm) DBH.		
5. Panicum hemitomon	2	yes	OBL	Shrub- Woody plants, excl	uding woody vines,	!
6. Eupatorium capillifolium	2	yes	FACU	approximately 3 to 20 ft (1		
7. Sacciolepis striata	2	yes	OBL	Herb- All herbaceous (non-	-woodv)plants, including	
8.				herbaceous vines, regardle		
9.				plants, except woody vines	, less than approximately	y 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vin	es, regardless of height.	
12.						
	14	= Total Cove	er	1		
Woody Vine Stratum (Plot size:	)					
1.						
2.	,			1		
3.						
4.				Hydrophytic		
5.	•			Vegetation Present?	YesNo	<u>.</u>
	0	= Total Cove	er			
Remarks: (If observed, list morph	ological adapta	ations below).				
Percent cover estimates based or	n meandering s	survey of the I	nroader coi	mmunity		

County/soil:	Dalk	Domnano

SOIL								Sampling Point:
Profile De	scription: (Describe	to the dep	th needed to doc	ument the	indicator or	confirm the abs	sence of indicators.	)
Depth	Matrix			Redox F				,
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
(IIICIICS)	Color (moist)		Color (IIIOISI)	-70	Туре		Texture	Remarks
0.6	10 VD 2/1							black muchy for and
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
								3 - , ,
			<del></del>					
'Type: C=0	Concentration, D=Depl	letion, RM:	=Reduced Matrix, (	CS=Covere	ed or Coated S	and Grains.	Location: PL=Por	e Lining, M=Matrix.
Hydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Polyva	alue Below Su	face (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
	Epidon (A2)					9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)						''	
						al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				ted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR F	P, T, U)		Redox	Dark Surface	(F6)		(MLRA 153B)
5 cm !	Mucky Mineral (A7) (LI	RRPTIN		Deplet	ted Dark Surfa	ice (F7)		Red Parent Material (TF2)
Muck	Presence (A8) (LRR I	U)			Depressions	(10)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm l	Muck (A9) (LRR P,T)			Marl (I	F10) (LRR U)			Other (Explain in Remarks)
	, , ,					(4) (MI DA 454)		
	ted Below Dark Surfac	æ (A11)				11) (MLRA 151)		•
Thick	Dark Surface (A12)			Iron-M	langanese Ma	sses (F12) (LRR	? O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	MI DA 150	(A)	Umbri	c Surface (E1	3) (LRR P, T, U)		
Coast	Frame Nedox (A10) (	WILION 130	A)					hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (I	LRR O, S)		Delta	Orchric (F17)	(MLRA 151)		problematic.
Sandy	Gleyed Matrix (S4)			Reduc	ed Vertic (F18	) (MLRA 150A,	150B)	
	Redox (S5)			_	•	Soils (F19) (ML	•	
								4530)
Stnpp	ed Matrix (S6)			Anom	atous Bright Le	oarny Solls (F20)	(MLRA 149A, 153C	, 1530)
Dark S	Surface (S7) (LRR P,	S, T, U)						
	e Layer (If observed)						1	
		•					}	
	Type:						l <u>-</u>	
	Depth (inches):						Hydric Soil Preser	it? Yes <u>√</u> No
Remarks:								
								•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Date:_	10/7/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	68		
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	_Section, Township, Range	: <u>19 27S 23E</u>		<del></del>		
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, con-	vex, none): <u>none</u>	Slo	ope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.118453	Long: <u>-82.0</u>	)39967	Da	atum: WGS84		
Soil Map Unit Name: Placid and Myakka fine sand	.d		_NWI classification:	: Freshwater Pon	ıd		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	_ No	_ (If no, explain in	Remarks)		
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Ye	esNo		
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in R	temarks)		
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	ortant features	s, etc.		
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	YesNo	·		
Wetland Hydrology Present?	Yes No						
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:		5,048,90	Secondary Indicate	ors (minimum of t	wo required)		
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil				
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	-	getated Concave S	Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	,	Drainage Pa	_	, .		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L				
Water Marks (B1)	Hydrogen Sulfide Odor (	·		Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur				
Drift Deposits (B3)	Presence of Reduced Iro			isible on Aerial Im	anery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic		uge., (00,		
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqu				
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutral				
Field Observations:		KOJ		100.(21,			
Surface Water Present?	Yes✓ No	Depth (inches): 0-12					
Water Table Present?	Yes No		1				
Saturation Present?	Yes No		Wetland				
(includes capillary fringe)		_ Dopai (mones)s	Hydrology Present?	Yes <u>✓</u> No	•		
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous	inspections), if available:	Fiesenti	169	<del>'</del>		
, , , , , , , , , , , , , , , , , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Decreeding.							
Remarks:							

VEGETATION - Use scientific nar	mes of plants				Sampling Point:	68
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	·		
1.		±1. = .	<del>-</del>	Number of Dominant Spec	ies	
2.				That Are OBL, FACW, or F		(A)
3.				Total Number of Dominant		·D)
4.				Species Across All Strata:	<u>11</u>	(B)
5.				Percent of Dominant Spec	ies ====	
6.	,			That Are OBL, FACW, or F		(A/B)
7.				Prevalance Index worksh		
	0	= Total Cove	-r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.		<del></del>		FACU species	x4=	_
4.				UPL species	x4= x5=	
5.				Column Totals:		— <sub>(B)</sub>
6.				Column rotais. —	(A)	— <sup>(B)</sup>
7.				Prevalance Index = B/	/A _	
1.		= Total Cove	-	Hydrophytic Vegetation I		
Shrub Stratum (Plot size:		- 10tal 00v0	<b>3</b> 1	✓ Dominance Test is		
`	/		I			
<u>1.</u> 2.				Prevalence Index is	a contract of the contract of	•-:\
3.	· ———			Problematic riyurup	phytic Vegetation¹ (Ex	plain)
				1		
4.				Indicators of hydric soil an		must
5. 6				be present, unless disturbe		
6.				Definitions of Vegetation	Strata:	
7.		= : : : : : : : : : : : : : : : : : : :		1		
Herb Stratum (Plot size:)		= Total Cove		Tree- Woody plants, excludi approximately 20 ft (6m) or n	more in height and 3 in.	. (7.6
1. Panicum repens	5	yes	FACW	cm) or larger in diameter at t		
Muridannia nudiflora	5	yes	FAC	Sapling- Woody plants, excl		
Commelina spp.	5	yes	FACW	approximately 20 ft (6m) or n	nore in height and less	than 3
Ludwigia linearis	5	yes	OBL	in. (7.6 cm) DBH.	•	
Cynodon dactylon	5	yes	FACU	Shrub- Woody plants, exclude		
6. Cyperus surinamensis	5	yes	FACW	approximately 3 to 20 ft (1 to	6 m) in height.	
7. Lemna spp.	5	yes	OBL	Herb- All herbaceous (non-w		
Eupatorium capillifolium	5	yes	FACU	herbaceous vines, regardles		
Panicum hemitomon	5	yes	OBL	plants, except woody vines, I	ess than approximatel	y 3 ft (1
10. Polygonum punctatum	5	yes	FACW	m) in height.		
11. Digitaria sp.	5	yes	FACU	Woody vine- All woody vine	s, regardless of height	•
12.	<del></del>					
	55	= Total Cove	:r	·		
Woody Vine Stratum (Plot size:	)		!			
1			!			
2.				1		
3.						
4.				Hydrophytic		
5.		· · · · · · · · · · · · · · · · · · ·		Vegetation Present?	Yes ✓ No	
	0	= Total Cove	er			
Remarks: (If observed, list morpho	ological adapta		<u> </u>			
Percent cover estimates based on			roader cor	nmunity		

OIL								Sampling Point:
		to the de	pth needed to doc	ument the indicator or	confirm the ab	sence of indicators.)		
epth	Matrix			Redox Features				
ches)	Color (moist)		Color (moist)		Loc²	Texture		Remarks
7	10 YR 3/1						very dark gray fin	e sand
25	10 YR 6/1						gray fine sand	
-30	5 YR 5/1						black fine sand	
						common medium		
-36	7.5 YR 3/2		10 YR 2/1			masses	dark brown fine sa	and
		letion, RN	/=Reduced Matrix,	CS=Covered or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore		
	il Indicators:							lematic Hydric Soils 3:
_Histol	, ,			Polyvalue Below Sur	rface (S8) (LRR	: S, T, U)	1 cm Muck (a9)	
_Histic	Epidon (A2)			Thin Dark Surface (\$	89) <b>(LRR S, T, I</b>	J) _	2 cm Muck (A10	)) (LRR S)
Black	Histic (A3)			Loamy Mucky Miner	al (F1) (LRR O)	_	Reduced Vertic	(F18) (outside MLRA 150A, E
Hvdro	gen Sulfide (A4)			Loamy Gleyed Matri	x (F2)		Piedmont Flood	plain Soils (F19) (LRR P, S, T)
_Stratif	ied Layers (A5)			Depleted Matrix (F3)	) ` ´	-	Anomalous Brig	ht Loamy Soils (F20)
_ ~	ic Bodies (A6) (LRR I			Redox Dark Surface			(MLRA 153B)	erial (TE2)
_	Mucky Mineral (A7) (L		1)	Depleted Dark Surfa		-	Red Parent Mat	
_Muck	Presence (A8) (LRR	U)		Redox Depressions	(F8)	-	_ ′	ark Surface (TF12) (LRR T, U)
_1 cm	Muck (A9) (LRR P,T)			Marl (F10) (LRR U)		-	Other (Explain in	n Remarks)
_Deple	ted Below Dark Surfac	ce (A11)		Depleted Orchric (F	11) (MLRA 151)	)		
_Thick	Dark Surface (A12)			Iron-Manganese Ma	sses (F12) (LRI	R O, P,T) 3	Indicators of hydron	hytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 15	60A)	Umbric Surface (F1:	3) (LRR P, T, U			resent, unless disturbed or
	Mucky Mineral (S1) (		•	Delta Orchric (F17)	(MLRA 151)		roblematic.	reseric, artiess distarbed of
	Gleyed Matrix (S4)		·'	Reduced Vertic (F18	-	150R)		
_	Redox (S5)			Piedmont Floodplain				
	ed Matrix (S6)					) (MLRA 149A, 153C,	153D)	
	Surface (S7) (LRR P,	e T II)		Alomaious Bright Et	Dairiy Solis (1 20	// (MEICH 145A, 1050,	1000)	
	e Layer (If observed)							
	Type:	,-						
	Depth (inches):					Hydric Soil Present	? Yes	✓ No .
marks:	Depti (inches).					Triyano Con i resem	103	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		Sampling Date: 10/7/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: 69
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	_Section, Township, Range		· -
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U		5 Long: <u>-82.0</u>	39611	Datum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification: _	NA .
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_No (	(If no, explain in Remarks)
• • • • • • • • • • • • • • • • • • • •	or Hydrology		Are circumstances n	
	or Hydrology			ny answers in Remarks)
SUMMARY OF FINDINGS - Attach sit			• • •	•
Hydrophytic Vegetation Present?	Yes✓No	I	, , , , , , , , , , , , , , , , , , , ,	,
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	vithin a Wetland?	YesNo
Wetland Hydrology Present?	Yes✓No	1		
Remarks:		1		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators	s (minimum of two required)
Primary Indicators (minimum of one is required; o	heck all that apply)		Surface Soil C	racks (B6)
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Vege	tated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patte	rns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Line	es (B16)
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season.W	ater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burrov	ws (C8)
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Visi	ble on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic Po	osition (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquita	ırd (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral To	est (D5)
Field Observations:				
Surface Water Present?	Yes No	Depth (inches):	.	
Water Table Present?	Yes No	Depth (inches):		
Saturation Present?	Yes No	Depth (inches): 4	Wetland Hydrology	
(includes capillary fringe)		-	1 -	res <u>√ No</u>
Describe Recorded Data (stream gauge, monitor	ng well, aerial photos, previous	inspections), if available:		
Remarks:				
	•			

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	69
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>(D)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	(A (D)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	0	= Total Cove	er	Total % Cover of: Multiply by: OBL species x1=	
1.				FACW species x2=	
2.				FAC species x3=	-
3.	•			FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	(B)
6.					
7.				Prevalance Index = B/A =	
	0	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology n	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
Herb Stratum (Plot size:)	0	= Total Cove	er	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in.	(7.6
Panicum repens	30	yes	FACW	cm) or larger in diameter at breast height (DBH).	
2. Phyllanthus urinaria	20	yes	FAC	Sapling- Woody plants, excluding woody vines,	
<ol><li>Andropogon spp.</li></ol>	20	yes	FAC	approximately 20 ft (6m) or more in height and less	than 3
4. Micromeria spp.	10	no	NL	in. (7.6 cm) DBH.	
<ol><li>Cyperus spp.</li></ol>	10	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Juncus marginatus	10	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	
9.				plants, except woody vines, less than approximately	/ 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.					
Woody Vine Stratum (Plot size;	100 )	= Total Cove	er		
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u> </u>	<u>·</u>
	0	= Total Cove	er		
Remarks: (If observed, list morph Percent cover estimates based or		-	roader co	mmunity.	

SOIL								Sampling Point:
	scription: (Describe t	o the dep	oth needed to docu			confirm the abs	sence of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Kedox %	Features Type	Loc²	Texture	Remarks
(inches)	Color (Hoist)		Color (Illuist)				Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
5-29	10 YR 7/1							light gray fine sand
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
					-			
,,	Concentration, D=Deple	etion, RM:	=Reduced Matrix, C	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	0.
	il Indicators:							ndicators for Problematic Hydric Soils 3:
Histol			-			face (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)		-	_	,	59) (LRR S, T, U	ı) _	2 cm Muck (A10) (LRR S)
	Histic (A3)		-			al (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4) ied Lavers (A5)		-		my Gleyed Matri leted Matrix (F3		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	nic Bodies (A6) (LRR P	T 10	-		ox Dark Surface		-	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
			-		leted Dark Surfa			Red Parent Material (TF2)
	Mucky Mineral (A7) (LF		-				-	<del></del>
	Presence (A8) (LRR L	ונ	-		ox Depressions	(ГО)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)		-	Man	(F10) (LRR U)		-	Other (Explain in Remarks)
Deple	ted Below Dark Surface	e (A11)	-	Dep	leted Orchric (F	11) (MLRA 151)		
Thick	Dark Surface (A12)		_	Iron	-Manganese Ma	sses (F12) (LRR	l O, P,T) 3	Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (M	MLRA 150	(A)	Umb	oric Surface (F1:	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (L		•	Delt	a Orchric (F17)	MI RA 151)		problematic.
		.KK (), (3)	-			3) (MLRA 150A,	150D)	
	r Gleyed Matrix (S4) r Redox (S5)				•	Soils (F19) (ML	•	
^	ed Matrix (S6)		-	_	•	, ,,	(MLRA 149A, 153C,	153D)
			-		maious brigin E	danny dona (1 20)	(1012104 1434, 1330,	1335)
	Surface (S7) (LRR P, S						г	
	e Layer (If observed):						İ	
	Type:						ludia Cail Bassani	? Yes √ No
	Depth (inches):						Hydric Soil Present	? Yes <u>√</u> No
Remarks:								
								•

Applicant/Owner Progress Energy Florida_Inc State FL Sampling Point: 70 Investigator(s): Mike Arrants, Lianne Ramos-Motienski Section, Township, Range: 30. 275 2362 79 275 23 E Landform (hillable), terrace, etc.): N/A Local relief (concave, convex, none):	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Dat	e: 10/7/09
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none):one	Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poir	nt: <u>70</u>
Submark   Continue	Investigator(s): Mike Arrants, Lianne Ramo	s-Mofienski	_Section, Township, Range	e: 30 27S 23E/29	27S 23 E	
Soil Map Unit Name: Pomora fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Soil or Hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?	Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	vex, none): none		Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?	Subregion (LRR or MLRA): LRR U	Lat: 28,112650	Long:82.0	39592		Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes _ No _ Are Vegetation Soil or Hydrology	Soil Map Unit Name: Pomona fine sand			NWI classification:	: <u>NA</u>	
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes _ No _ Are Vegetation Soil or Hydrology	Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes	_ No	(If no, explain	in Remarks)
Are Vegetation	Are Vegetation, Soil,	or Hydrology				
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13)  Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B3) Presence of Reducted Iron (C4) Inor Deposits (B5) Thin Muck Surface (C7) Inor Deposits (B5) In				(If needed, explain	any answers ir	n Remarks)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Stained Leaves (B9)  Saturation (A3)  Marf Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Dry-Season Water Table (C2)  Sediment Deposits (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Sturface Water Present?  Yes _ No _ Depth (inches): _ Output (Inches): _ Outp				ransects, impo	rtant featur	es, etc.
Wetland Hydrology Present?         Yes ✓ No           HYDROLOGY           Wetland Hydrology Indicators:           Secondary Indicators (minimum of two required)           Primary Indicators (minimum of one is required; check all that apply)         Surface Soil Cracks (B6)           ✓ Surface Water (A1)	Hydrophytic Vegetation Present?	Yes No				
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required, check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — In him Muck Surface (C7)  — In undation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  — FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?	Hydric Soil Present?	Is the Sampled Area v	vithin a Wetland?	Yes	No	
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Ves ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland	Wetland Hydrology Present?	Yes/No	]			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Vater Table Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Present?       Yes ✓ No Depth (inches): 0       Present?       Yes	Remarks:					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Vater Table Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Present?       Yes ✓ No Depth (inches): 0       Present?       Yes						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Vater Table Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Present?       Yes ✓ No Depth (inches): 0       Present?       Yes						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Vater Table Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Present?       Yes ✓ No Depth (inches): 0       Present?       Yes						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Vater Table Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Present?       Yes ✓ No Depth (inches): 0       Present?       Yes						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)      Surface Soil Cracks (B6)         ✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)         — High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)         ✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)        Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Induction Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes	HADBOI OCA					
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Inundation Visible on Aerial Imagery (B7)  Surface Water Present?  Yes ✓ No Depth (inches): 0  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drianage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland				Secondary Indicate	ors (minimum c	of two required)
✓ Surface Water (A1)		theck all that anniv)				. two required
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Mand Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?			R9)		, ,	e Surface (R8)
✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)   Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)   Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  V Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)    Field Observations:  Surface Water Present?  Water Table Present?  YesV No Depth (inches):0	` '	·	50,		_	e dunace (Bo)
Water Marks (B1)			D (1)			
Sediment Deposits (B2)	<u> </u>		•	•	• •	.2)
Drift Deposits (B3)	<del></del> ' '.				•	
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)	<del></del>					Imagani (CO)
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)			• •			imagery (C9)
✓ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)FAC Neutral Test (D5)   Field Observations: Surface Water Present? Yes✓ No Depth (inches):	<del> </del>		, ,	•	, ,	
Field Observations:           Surface Water Present?         Yes ✓ No Depth (inches):	<del></del>			<del></del>	' '	
Surface Water Present?  Yes _	· · · · · · · · · · · · · · · · · · ·	Other (Explain in Remai	KS)	FAC Neutral	Test (D3)	
Water Table Present?  Yes _ No _ Depth (inches): _0  Saturation Present?  Yes _ No _ Depth (inches): _0  Hydrology  Present?  Yes _ No _ Depth (inches): _0		Yes V No	Dooth (inches): 0.24			
Saturation Present?  Yes No Depth (inches):0  Hydrology  Present?  Yes No				·		
(includes capillary fringe) Present? Yes <u>✓ No</u>				Wetland		
		res No	Depth (inches):U			
				Present?	Yes <u>✓</u>	No
	Remarks:		<del></del>			
Remarks:	Tromano.				•	
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point: _	70
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Acer rubrum	2	yes	OBL	Number of Dominant Species	(A)
2. 3.				That Are OBL, FACW, or FAC: 4	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	00 (4/0)
6.				That Are OBL, FACW, or FAC:	<u>00</u> (A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	er	Total % Cover of: Multiply	bv:
Sapling Stratum (Plot size:	)			OBL species x1=	
1. Salix spp.	2	yes	FACW	FACW species x2=	
				FAC species x3=	
2. 3.	· ——			FACU species x4=	
4.				UPL species x5=	
<b>4</b> . <b>5</b> .				Column Totals: (A)	(B)
6.				,	— ` <i>′</i>
7.				Prevalance Index = B/A =	
	2	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:				✓ Dominance Test is 50%	ľ
Sambucus canadensis	30	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup>	(Explain)
3.					(=/- /
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrolo	ov must
5.	-			be present, unless disturbed or problematic.	gymast
6.	. —		-	Definitions of Vegetation Strata:	
7.				j	
	30	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)			•	approximately 20 ft (6m) or more in height and	3 in. (7.6
1. Ludwigia peruviana	40	yes	OBL	cm) or larger in diameter at breast height (DBH	
2. Lemna spp.	15	no	OBL	Sapling- Woody plants, excluding woody vines	
3. Salvinia minima	15	no	OBL	approximately 20 ft (6m) or more in height and	
Andropogon spp.	2	no	FAC	in. (7.6 cm) DBH.	
5. Panicum hemitomon	2	no	OBL	Shrub- Woody plants, excluding woody vines,	
6. Solidago spp.	2	no	FACU	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Carex spp.	2	no	FACW	Herb- All herbaceous (non-woody)plants, includ	dina
8. Setaria spp.	2	no	FAC	herbaceous vines, regardless of size. Includes	
9.				plants, except woody vines, less than approxim	-
10.	· <del></del>			m) in height.	, ,
11.				Woody vine- All woody vines, regardless of he	iaht.
12.	· —			,,,,ga	· •
12.	80	= Total Cove			
Woody Vine Stratum (Plot size:	,	- Total Gove		`	
1.					
2.					
3.					
	· <del></del>			Hudrophytia	
4. 5.				Hydrophytic Vegetation Present? Yes ✓ No	_
<u> </u>		= Total Cove		Vegetation Present? Yes <u>√</u> No	<b>'</b>
Pomarks: (If observed list mamb			,		
Remarks: (If observed, list morph		•	rooder e	n muunitu	
Percent cover estimates based or	i meandening s	urvey of the b	noauer cor	mmunity.	

SOIL	il: Polk- Pomona							Sampling Point: 70
	scription: (Describe	to the dep	th needed to doc	ument the	e indicator or	confirm the abs	ence of indicators.	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1					· <del></del> ·		light gray fine sand
29-33	N 5/0						<del> </del>	gray sandy clay loam
33-80	N 5/0							gray sandy clay
		. —						
¹Tyne: C=	Concentration, D=Dep	letion RM:	=Reduced Matrix (	S=Cover	ed or Coated 9	Sand Grains	2l ocation: PI =Por	re Lining, M=Matrix.
	il Indicators:	100001, 1001	r (oddood maarx, (	30 00101	ou or coulou t	Sand Gramo.		Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Polyv	alue Below Su	rface (S8) (LRR S		1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin [	Dark Surface (	S9) (LRR S, T, U	)	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loam	y Mucky Mine	ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				y Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
_ •	nic Bodies (A6) (LRR F	,			x Dark Surface			(MLRA 153B)
	Mucky Mineral (A7) (L				eted Dark Surfa			Red Parent Material (TF2)
	Presence (A8) (LRR	U)			x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)				(F10) (LRR U)			Other (Explain in Remarks)
	ted Below Dark Surfac	ce (A11)			-	11) (MLRA 151)		
Thick	Dark Surface (A12)			Iron-N	Manganese Ma	isses (F12) (LRR	O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 150	DA)	Umbr	ric Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (	LRR O, S)		Delta	Orchric (F17)	(MLRA 151)		problematic.
Sandy	Gleyed Matrix (S4)					8) (MLRA 150A,		
	Redox (S5)					n Soils (F19) (ML	,	
	ed Matrix (S6)			Anor	nalous Bright L	oamy Soils (F20)	(MLRA 149A, 1530	C, 153D)
	Surface (S7) (LRR P,							
Restrictiv	e Layer (If observed)	):						
	Type: Depth (inches):						Hydric Soil Preser	nt? Yes ✓ No .
Remarks:	Deptit (inches).		<del></del>	<del></del>			nyuric Son Fresei	RF Tes_v NO
i tomano.								
								•
								·
								•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Date:_	10/7/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	71
Investigator(s): Mike Arrants, Lianne Ramos	-Mofienski	Section, Township, Range	: 30 27S 23E/292	27S 23 E	
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Sid	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.110184	Long: <u>-82.0</u>	39515	Da	ntum: WGS84
Soil Map Unit Name: Eaton mucky fine sand, dep	ressional		_NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		esNo
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features	s, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes/ No	is the Sampled Area w	rithin a Wetland?	YesNo	·
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicato		vo required)
Primary Indicators (minimum of one is required; c			Surface Soil (		
✓ Surface Water (A1)	Water-Stained Leaves (E	39)		etated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	<b>-</b>	Drainage Pat	, ,	·
✓ Saturation (A3)	Mart Deposits (B15) (LR	•	Moss Trim Li		
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	-, , ,	Crayfish Burn		(00)
Drift Deposits (B3)	Presence of Reduced Iro	, ,	<del></del>	sible on Aerial Ima	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic I	, -	
Iron Deposits (B5)	Thin Muck Surface (C7)	ka)	Shallow Aquit		
✓ Inundation Visible on Aerial Imagery (B7)  Field Observations:	Other (Explain in Remark	KS)	FAC Neutral	Test (D5)	
Surface Water Present?	Yes No	Denth (inches): 0-12			
Water Table Present?	Yes_ ✓ No		1		
Saturation Present?	Yes No		Wetland		
	100100	Depth (inches)	Hydrology Present?	Von / No	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections) if available	Present?	Yes <u> </u>	<u>,                                    </u>
January Sana Canadan gauga, marinan	ng man, aanar phataa, pranaaa				
Remarks:					
Tremans.					
	•				

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	71
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	/A)
2.				That Are OBL, FACW, or FAC: 5	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
Acer rubrum	 5	yes	OBL	FACW species x2=	-
2.				FAC species x3=	-
3.				FACU species x4=	-
4.				UPL species x5=	-
5.				Column Totals: (A)	- (B)
6.	· ——		-	(/ )	- (5)
7.				Prevalance Index = B/A =	
7.	5	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	•	,	<b>,</b> '	✓ Dominance Test is 50%	
'	/ 	V00	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
Sambucus canadensis     Z.		yes	FACVV	<del></del>	lain)
3.				Problematic Hydrophytic Vegetation <sup>1</sup> (Expl	alii)
4.	· <del>· · · · · · · · · · · · · · · · · · </del>			] 	
5.				Indicators of hydric soil and wetland hydrology m	ust
5. 6.				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:	
	· <del></del>	<del></del>		Deminions of vegetation Strata.	
7.	5	- Total Caus		<b>.</b>	
Herb Stratum (Plot size:)	э	= Total Cove	er.	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (	(7 G
	20		E4014/	cm) or larger in diameter at breast height (DBH).	,7.0
Polygonum punctatum	20	yes	FACW	· · · · · · · · · · · · · · · · · · ·	
Hydrocotyle spp.	15	yes	OBL	Sapling- Woody plants, excluding woody vines,	.h 2
Ludwigia peruviana	10	yes	OBL	approximately 20 ft (6m) or more in height and less t in. (7.6 cm) DBH.	nan 3
Eupatorium capillifolium	5	no	FACU	i ' '	
5. Phyllanthus urinaria	5	no	FAC	Shrub- Woody plants, excluding woody vines,	
6. Cyperus spp.	5	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Diodia virginiana	5	no	FACW	Herb- All herbaceous (non-woody)plants, including	
8. Muridannia nudiflora	5	no	FAC	herbaceous vines, regardless of size. Includes wood	
Woodwardia virginica	5	no	OBL	plants, except woody vines, less than approximately	3π(1
10. Lemna spp.	2	no	OBL	m) in height.	
11. Centella asiatica	2	no	FACW	Woody vine- All woody vines, regardless of height.	
12. Bulbostylis barbata	2	no	FAC		
	81	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1. Rubus spp.	10	yes	FACU		
2.					
3.					
4.				Hydrophytic	
5.	- <del></del>			Vegetation Present? Yes <u>√</u> No	
	10	= Total Cove	er		
Remarks: (If observed, list morph	ological adapta	tions below).			
Percent cover estimates based or	n meandering s	urvey of the b	roader cor	nmunity.	

Count	∡/e∩il∙	Polk-	Faton

SOIL			Sampling Point:7
Profile Description: (Describe to the depth needed to	document the indicator or confirm the	absence of indicators	s.)
Depth Matrix	Redox Features		
(inches) Color (moist) % Color (moist)	st) % Type¹ Loc²	Texture	Remarks
D-6 10 YR 2/1			black mucky fine sand
3-29 10 YR 7/1			light gray fine sand
29-33 N 5/0			gray sandy clay loam
33-80 N 5/0			gray sandy clay
		_	
Type: C=Concentration, D=Depletion, RM=Reduced Ma	trix, CS=Covered or Coated Sand Grains.	<sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8) (L		1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S,	T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR	! O)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 1	151)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (	LRR O, P,T)	31
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T	•	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)		problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 15		
Sandy Redox (S5)	Piedmont Floodplain Soils (F19)	, ,	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (I	F20) (MLRA 149A, 153	C, 153D)
Dark Surface (S7) (LRR P, S, T, U)			
Restrictive Layer (If observed):			
Type:			
Depth (inches):		Hydric Soil Prese	ent? Yes ✓ No
Remarks:			
	·		
•			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Da	le: 10/7/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Poi	nt: <u>72</u>
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	_Section, Township, Range	: 30 27S 23E/29	27S 23 E	
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.109240</u>	) Long: <u>-82.0</u>	3487		Datum: WGS84
Soil Map Unit Name: <u>Eaton mucky fine sand, dep</u>	ressional		_NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	_ (If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance:	s normal?	YesNo
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers i	n Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ing point locations, t	ransects, impo	ortant featu	res, etc.
Hydrophytic Vegetation Present?	YesNo		_		
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes✓	No
Wetland Hydrology Present?	Yes No	]			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum o	of two required)
Primary Indicators (minimum of one is required; of	theck all that apply)		Surface Soil		<del></del>
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)		• •	ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	,	Drainage Pa	atterns (B10)	, ,
✓ Saturation (A3)	Mart Deposits (B15) (LF	RR U)	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (0	(2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish But	•	•
Drift Deposits (B3)	Presence of Reduced In			/isible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	: Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqu	uitard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutra		
Field Observations:				· · · · · · · · · · · · · · · · · · ·	
Surface Water Present?	Yes No	Depth (inches): 0-12	_]		
Water Table Present?	Yes No				
Saturation Present?	YesNo		Wetland Hydrology		
(includes capillary fringe)		_ , , , , _ , _ ,	Present?	Yes_✓	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	1		
Remarks:					
	•				
	•				

VEGETATION - Use scientific na	mes of plants			Sampling Point:	72
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species	۸)
2.			,	That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	'D\
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species 50.00	Λ /D\
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.				FACW species x2=	
2.				FAC species x3=	
3.				FACU species x4=	
4.	-			UPL species x5=	
5.				<del></del>	(B)
6.	- ——				•
7.				Prevalance Index = B/A =	
		= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explai	in)
3.					•
4.				Indicators of hydric soil and wetland hydrology mus	st
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.	-			1	
		= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7.	.6
Zizaniopsis miliacea	20	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Eupatorium capillifolium	10	yes	FACU	Sapling- Woody plants, excluding woody vines,	
Polygonum punctatum	5	no	FACW	approximately 20 ft (6m) or more in height and less that	an 3
4. Commelina spp.	5	no	FACW	in. (7.6 cm) DBH.	
5. Boehmeria cylindrica	5	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Sabatia spp.	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7.	- ——			Herb- All herbaceous (non-woody)plants, including	
				herbaceous vines, regardless of size. Includes woody	,
8.     9.	-			plants, except woody vines, less than approximately 3	
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.		<del></del>		•	
Woody Vine Stratum (Plot size:	47	= Total Cove	r 		
3.				<u>.</u>	
4.				Hydrophytic	
5.				Vegetation Present? YesNo	

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

0 = Total Cover

SOIL								Sampling Point:
	escription: (Describe	to the de	oth needed to doc			confirm the at	sence of indicator	s.)
Depth	Matrix		C-l (i-4)		Features	Loc²	Tardina	Demodes
(inches)	Color (moist)	<u> </u>	Color (moist)	%_	Type <sup>1</sup>		Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
	Concentration, D=Dep	letion, RM	=Reduced Matrix, (	CS=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
	oil Indicators:							Indicators for Problematic Hydric Soils 3:
Histo	• •				value Below Su			1 cm Muck (a9) (LRR O)
	Epidon (A2)				Dark Surface (		•	2 cm Muck (A10) (LRR S)
	( Histic (A3)				my Mucky Miner		)	Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4) ified Layers (A5)				my Gleyed Matri leted Matrix (F3			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	nic Bodies (A6) (LRR F	P. T. U)			ox Dark Surface			Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	Mucky Mineral (A7) (L				leted Dark Surfa			Red Parent Material (TF2)
	k Presence (A8) (LRR		,		ox Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
		0,			(F10) (LRR U)	• •		Other (Explain in Remarks)
	Muck (A9) (LRR P,T)						,	Other (Explain in Nemarks)
	eted Below Dark Surfac	æ (A11)			leted Orchric (F		•	
	Dark Surface (A12)				-Manganese Ma		•	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coas	t Prairie Redox (A16) (	MLRA 15	DA)		oric Surface (F1		')	hydrology must be present, unless disturbed or
_	y Mucky Mineral (S1) (I	LRR O, S	)		a Orchric (F17)	•		problematic.
	y Gleyed Matrix (S4)				uced Vertic (F1	, ·		
	y Redox (S5)				lmont Floodplair		•	
	oed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20	D) (MLRA 149A, 153	SC, 153D)
	Surface (S7) (LRR P, : ve Layer (If observed)						1	
Restrictiv	Type:	•						
	Depth (inches):		<del></del> .				Hydric Soil Prese	ent? Yes✓_ No
Remarks:								
							•	
ŀ								
l								
í								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Dat	e: <u>10/7/09</u>
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Poil	nt: <u>73</u>
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range	e: <u>30 27S 23E/29 2</u>	27S 23 E	
Landform (hillslope, terrace, etc.):N/A	<u></u>	Local relief (concave, con-	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.108525	Long:82.0	39478		Datum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification:	NA .	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		YesNo
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featur	es, etc.
Hydrophytic Vegetation Present?	Yes✓ No				-
Hydric Soil Present?	YesNo	Is the Sampled Area w	vithin a Wetland?	Yes	No
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate		f two required)
Primary Indicators (minimum of one is required; o			Surface Soil		
Surface Water (A1)	Water-Stained Leaves (I	B9)			e Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat		
Saturation (A3)	Marl Deposits (B15) (LR	·	Moss Trim Li	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (C	2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burr		
Drift Deposits (B3)	Presence of Reduced Iro			sible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:	V /				
Surface Water Present?	Yes No		1		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na well serial photos previous	inspections) if available:	Present?	Yes <u>√</u>	No
Describe Necolded Data (stream gauge, monitor	ing well, aenai priotos, previous	mspections), ii avaliable.			
Remarks:					

VEGETATION - Use scientific nar	mes of plants			Sa	ampling Point:	73
	Absolute %	Dominant	Indicator	Dominance Test Workshee	t:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1				Number of Dominant Specie		/A\
				That Are OBL, FACW, or FA	.C: <u>1</u>	(A)
2. 3. 4.				Total Number of Dominant	4	<b>(D)</b>
4.				Species Across All Strata:	<u>1</u>	(B)
5.				Percent of Dominant Species	\$ 400.00	(* ID)
6.				That Are OBL, FACW, or FA		(A/B)
7.	,			Prevalance Index workshe		
	0	= Total Cove	÷r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.	,			FACW species	x2=	-
2.				FAC species	x3=	-
3.				FACU species	x4=	-
4.			-	UPL species	x5=	-
5.				Column Totals:	(A)	- (B)
6.					v v	<b>-</b> '-'
7.				Prevalance Index = B/A	=	1
		= Total Cove	-r	Hydrophytic Vegetation Inc		
Shrub Stratum (Plot size:			,,	✓ Dominance Test is 50		
1.	/			Prevalence Index is ≤		1
2.				Problematic Hydrophy		rlain)
3.				1 Toblemade Hydrophi	ytto vogotation (Emp	nuii,
4.				Indicators of hydric soil and	···stland hydrology n	-uot
5.	. ———			be present, unless disturbed		ในธน
6.			-	Definitions of Vegetation S		
7.	· <del></del>	<del></del>		<b>Do</b> llina on 1 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	·uu.	
·		= Total Cove		Tree- Woody plants, excluding	r woody vinee	
Herb Stratum (Plot size:)	J	- 10(4) 0010	71	approximately 20 ft (6m) or mo		(7.6
1. Lemna spp.	90	yes	OBL	cm) or larger in diameter at bro		(,,,
Alternanthera philoxeroides	2	no	OBL	Sapling- Woody plants, exclude		
Panicum repens	2	no	FACW	approximately 20 ft (6m) or mo		than 3
Cyperus spp.	2	no	FACW	in. (7.6 cm) DBH.	//o in noight and less	liidi. C
Oyperus spp.     Muridannia nudiflora	2	no	FAC	Shrub- Woody plants, excludi	na woody vines	
Scoparia dulcis	2	no	FAC	approximately 3 to 20 ft (1 to 6		
7. Sacciolepis striata	2	no	OBL	• • • • • • • • • • • • • • • • • • • •	-	
8.			ODL	Herb- All herbaceous (non-wo herbaceous vines, regardless	• • • • • • • • • • • • • • • • • • • •	NAV.
9.				plants, except woody vines, le		
10.				m) in height.	33 tiluit approximate.,	,
11.				Woody vine- All woody vines,	regardless of height	
12.				Woody Villo- All Woody Villos,	regardless of neight.	
12.	102	= Total Cove		4		
Mandy Vina Stratum (Blot size:	102	- Total Cove	<i>‡</i> 1			
Woody Vine Stratum (Plot size:	)					
11.				-		
2.						
3.				ł., , , ,,		
4.				Hydrophytic	/ / N-	
5.				Vegetation Present?	′es <u>   √       </u> No	<del></del>
Daniel de la Company de l'action a contra	0	= Total Cove	<b>∍r</b>	<u> </u>	<u> </u>	
Remarks: (If observed, list morph Percent cover estimates based or			roader coi	mmunity		

County/soil: P	olk- Pomona

	scription: (Describe	to the dep	th needed to doc			confirm the abs	sence of indicators	5.)
Depth	Matrix	<del></del> .	Color (moist)	Redox I	Features Type <sup>1</sup>	Loc²	Texture	Remarks
(inches)	Color (moist)		Color (moist)	70	туре		Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
		. —	<del></del>					
Type: C=C	Concentration, D=Dep	letion, RM=	Reduced Matrix, 0	S=Covere	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
•	I Indicators:							Indicators for Problematic Hydric Soils 3:
Histol						rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					89) <b>(LRR S, T, L</b>		2 cm Muck (A10) (LRR S)
Black I	Histic (A3)			Loam	y Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A
	gen Sulfide (A4)				y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S,
	ed Layers (A5)				ted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organi	ic Bodies (A6) (LRR F	P, T, U)		Redox	Dark Surface	e (F6)		(MLRA 153B)
5 cm N	/lucky Mineral (A7) (LI	RR P,T,U)		Deple	ted Dark Surfa	ace (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR			Redox	Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T,
1 cm N	Muck (A9) (LRR P,T)			Marl (	F10) (LRR U)			Other (Explain in Remarks)
Deplet	ed Below Dark Surfac	ce (A11)		Deple	ted Orchric (F	11) (MLRA 151)		
	Dark Surface (A12)	. ,		Iron-N	tanganese Ma	sses (F12) (LRF	R O, P,T)	31-41-4
	Prairie Redox (A16) (	MI DA 150	Δ)		-	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
								problematic.
Sandy	Mucky Mineral (S1) (I	LRR O, S)			Orchric (F17)			problematic.
Sandy	Gleyed Matrix (S4)				ced Vertic (F18		•	
Sandy Sandy	Gleyed Matrix (S4) Redox (S5)			Piedm	ont Floodplair	Soils (F19) (ML	-RA 149A)	
Sandy Sandy	Gleyed Matrix (S4)			Piedm	ont Floodplair	Soils (F19) (ML	•	C, 153D)
Sandy Sandy Strippe	Gleyed Matrix (S4) Redox (S5)	S, T, U)		Piedm	ont Floodplair	Soils (F19) (ML	-RA 149A)	C, 153D)
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed)			Piedm	ont Floodplair	Soils (F19) (ML	-RA 149A)	C, 153D)
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed)			Piedm	ont Floodplair	Soils (F19) (ML	-RA 149A)	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	
Sandy Sandy Strippe Dark S Restrictive	Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, Se Layer (If observed) Type:			Piedm	ont Floodplair	Soils (F19) (ML	RA 149A) ) (MLRA 149A, 153	

Applicant/Owner: Progress Energy Florida, Inc.    State:   Fl.   Sampling Point: 74A/74B	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		_Sampling Date:	10/8/09	
Local relief (concave, convex, none): _none	Applicant/Owner: Progress Energy Florida, Inc.	State:FL		Sampling Point:	74A/74B		
Local relief (concave, convex, none): _none	Investigator(s): Mike Arrants, Lianne Ramo	s-Mofienski	Section, Township, Range: <u>30 27\$ 23E/ 29 27\$ 23 E</u>				
Soil Map Unit Name: Pomona fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?	Landform (hillslope, terrace, etc.):N/A	1	Local relief (concave, con-	vex, none): none	sı	ope (%):	
Are climatic / hydrologic conditions on the site typical for this time of year?  Are vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13)  Water Marks (B1) Drainage Patterns (B10)  Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trin Lines (B16)  Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trin Lines (B16)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes No Depth (inches): 0  Wetland Hydrology  Present? Yes No Depth (inches): 0  Wetland Hydrology  Present? Yes No Depth (inches): 0  Wetland Hydrology  Present? Yes No Depth (inches): 0  Present? Yes No Depth (inches)	Subregion (LRR or MLRA): LRR U	Lat: 28.103429	D Long: <u>-82.0</u>	39366	Da	atum: WGS84	
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes / No naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes / No   Is the Sampled Area within a Wetland? Yes / No   Wetland Hydrology Present? Yes / No   Is the Sampled Area within a Wetland? Yes / No   Wetland Hydrology Indicators:  **Primary Indicators (minimum of one is required; check all that apply)	Soil Map Unit Name: Pomona fine sand			NWI classification	: <u>NA</u>		
Are Vegetation	Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes _ ✓	_ No	(If no, explain in	Remarks)	
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrocyviic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present?  Wetland Hydrology Indicators:  HYDROLOGY  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  High Water Table (A2) Aquatic Fauna (B13)  Water-Stained Leaves (B9) Surface Water (A1) Water-Stained Leaves (B9) Surface Water (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present?	Are Vegetation, Soit,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Ye	esNo	
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrocyviic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present?  Wetland Hydrology Indicators:  HYDROLOGY  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  High Water Table (A2) Aquatic Fauna (B13)  Water-Stained Leaves (B9) Surface Water (A1) Water-Stained Leaves (B9) Surface Water (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Wetland Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present? Yes ✓ No Depth (inches): D Hydrology Present?	Are Vegetation, Soil	or Hydrology	_naturally problematic?	(If needed, explain	any answers in F	Remarks)	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Wetland Hydrology Indicators:  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Wetland Hydrogen Sulfide Odor (C1) Drainage Patterns (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Crayfish Burrows (C8) Drift Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Field Observations:  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydrology Present?  Ves _ No _ Depth (inches): _ D.14  Wetland Hydr				ransects, impo	rtant feature	s, etc.	
Wetland Hydrology Present?         Yes ✓ No           HYDROLOGY           Wetland Hydrology Indicators:           Secondary Indicators (minimum of two required)           Primary Indicators (minimum of one is required; check all that apply)         Surface Soil Cracks (B6)           ✓ Surface Water (A1)         Water-Stained Leaves (B9)         Sparsely Vegetated Concave Surface (B8)           High Water Table (A2)         Aquatic Fauna (B13)         Drainage Patterns (B10)           ✓ Saturation (A3)         Marf Deposits (B15) (LRR U)         Moss Trim Lines (B16)           Water Marks (B1)         Hydrogen Sulfide Odor (C1)         Dry-Season Water Table (C2)           Sediment Deposits (B2)         Oxidized Rhizospheres on Living Roots (C3)         Cray/ish Burrows (C8)           Drift Deposits (B3)         Presence of Reduced Iron (C4)         Saturation Visible on Aerial Imagery (C9)           Algal Mat or Crust (B4)         Recent Iron Reduction in Tilled Soils (C6)         Geomorphic Position (D2)           Iron Deposits (B5)         Thin Muck Surface (C7)         Shallow Aquitard (D3)           Inundation Visible on Aerial Imagery (B7)         Other (Explain in Remarks)         FAC Neutral Test (D5)           Field Observations:           Surface Water Present?         Yes ✓ No Depth (inches): 0         Wettand Hydrology <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td></tr<>							
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)	Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland? YesNo				
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9) — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2) — Aquatic Fauna (B13) — Drainage Patterns (B10) — Saturation (A3) — Marl Deposits (B15) (LRR U) — Moss Trim Lines (B16) — Water Marks (B1) — Hydrogen Sulfide Odor (C1) — Dry-Season Water Table (C2) — Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Drift Deposits (B3) — Presence of Reduced Iron (C4) — Saturation Visible on Aerial Imagery (C9) — Iron Deposits (B5) — Thin Muck Surface (C7) — Inundation Visible on Aerial Imagery (B7) — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Yes ✓ No Present?  Wetland Hydrology Present?  Yes ✓ No Present?	Wetland Hydrology Present?	Yes No					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)      Surface Soil Cracks (B6)         ✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)	Remarks:		•				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)      Surface Soil Cracks (B6)         ✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)							
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes  No Depth (inches): 0  Water Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B10)				Secondary Indicat	ore /minimum of t	wo required)	
✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)		chack all that apply)				wo required)	
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Attraction (C1)		<del>-</del>	DO)		` '	Surface (PP)	
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes✓ No Depth (inches):0         Wetland Hydrology         Wetland Hydrology         Fresent?       Yes✓ No      Depth (inches):0	<del></del>		59)		_	Surface (DO)	
Water Marks (B1)	<del></del>		DD 11)				
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Shallow Aquitard (D2)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D5)	· '		-	· <del></del>	` '		
Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches): 0  Water Table Present? Yes No Depth (inches): 0  Saturation Present? Yes No Depth (inches): 0  Hydrology  Present? Yes No No Present? Yes No No No No No No No No No	· '						
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)Thin Muck Surface (C7)Shallow Aquitard (D3)TAC Neutral Test (D5)TEAC Neutral Test (D5)TEAC Neutral Test (D5)	<u> </u>	<del></del>	- , ,	•	, ,	2000; (CO)	
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)		' <del></del>	, ,			lagery (C9)	
✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)   Field Observations: Surface Water Present? Yes _ ✓ No Depth (inches):	<del></del>	<del></del>	, ,				
Field Observations:           Surface Water Present?         Yes _ ✓ No Depth (inches):	<del></del>						
Surface Water Present?       Yes _ ✓ No Depth (inches):		Other (Explain in Remai	iksj	FAC Neutral	rest (D5)		
Water Table Present?  Yes _		Yes V No	Donth (inches): 0.14				
Saturation Present? Yes _ ✓ No _ Depth (inches): _ 0 Hydrology  (includes capillary fringe) Present? Yes _ ✓ No				1			
(includes capillary fringe) Present? Yes <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a< td=""><td></td><td>Yes / No</td><td>Depth (inches): 0</td><td></td><td></td><td></td></a<>		Yes / No	Depth (inches): 0				
		100100	_ Depth (inches)		Von / N	_	
		ring well aerial photos previous	inspections) if available:	Fresentr	res_vN	0	
	Remarks:						
Demorts:	iveniaris.						
Remarks:							
Remarks:							
Remarks:							
Remarks:							
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Remarks:							
Remarks:							
Remarks:							
Remarks:							
Remarks:							

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	74A/74B
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(A)
2.				That Are OBL, FACW, or FAC:	(A)
3.	,			Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.	,			Percent of Dominant Species	22 (A/D)
6.				That Are OBL, FACW, or FAC:	<u>00</u> (A/B)
7.	,	•		Prevalance Index worksheet:	
	0	= Total Cove	er	Total % Cover of: Multiply	by:
Sapling Stratum (Plot size:	)			OBL species x1=	
1.				FACW species x2=	<del></del>
2.	· <del></del>			FAC species x3=	
3.			•	FACU species x4=	
4.				UPL species x5=	
5.			•	Column Totals: (A)	—— <sub>(B)</sub>
6.			-		· · ·
7.			-	Prevalance Index = B/A =	
	0	= Total Cove	,r	Hydrophytic Vegetation Indicators:	······································
Shrub Stratum (Plot size:			•	✓ Dominance Test is 50%	
1.	_/			Prevalence Index is ≤3.0¹	
2.	•			Problematic Hydrophytic Vegetation <sup>1</sup>	(Explain)
3.				1 Toblomado Hyaropinyao Togotanon	(L//p/)
4.				Indicators of hydric soil and wetland hydrok	nav must
<del>4.</del> 5.	. ——			be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	,
7.		<del></del>			
		= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	ŭ	10101 0010		approximately 20 ft (6m) or more in height and	3 in. (7.6
Juncus effusus	50	yes	FACW	cm) or larger in diameter at breast height (DBH	
Paspalum notatum	10	no	FACU	Sapling- Woody plants, excluding woody vines	
Lemna spp.	5	no	OBL	approximately 20 ft (6m) or more in height and	
Muridannia nudiflora	5	no	FAC	in. (7.6 cm) DBH.	
Diodia virginiana	5	no	FACW	Shrub- Woody plants, excluding woody vines,	
Cyperus spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Alternanthera philoxeroides	2	no	OBL		dina
Scoparia dulcis	2	no	FAC	Herb- All herbaceous (non-woody)plants, inclu herbaceous vines, regardless of size. Includes	
Scopana ducis     Hydrocotyle spp.	2	no	OBL	plants, except woody vines, less than approxim	•
10. Eleocharis spp.	2	no	OBL	m) in height.	idiony on the
11. Centella asiatica	2	no	FACW	Woody vine- All woody vines, regardless of he	eight
12. Azola spp.	2		OBL	TWOODY VIIIE- All Woody Villes, regardless of the	agin.
12. Azula spp.	89	= Total Cove			
Woody Vine Stratum (Plot size:	١	- 10tai 00v0	<i>i</i> 1		
l. '					
<u>1.</u> 2.				· · · · · · · · · · · · · · · · · · ·	
3.					
4.				Lindranhydia	
5.				Hydrophytic Vegetation Present? Yes <u>√</u> N	lo .
J		= Total Cove	·	vegetation Fresentr	···
Remarks: (If observed, list morph			7		
Percent cover estimates based or	•	· · · · · · · · · · · · · · · · · · ·	roader cor	mmunity Grazed	

	l: Polk- Pomona							
SOIL								Sampling Point: 74A/74
	scription: (Describe t	o the dep	oth needed to docu			confirm the abs	ence of indicators.)	
Depth	Matrix				Features			
(inches)	Color (moist)	%	Color (moist)	<u> </u>	Type <sup>1</sup>	Loc²	Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1		<del></del>					light gray fine sand
29-33	N 5/0			—				gray sandy clay loam
33-80	N 5/0							gray sandy clay
	11 0/0							gray sainty ordy
			<del></del>					
						-		
Type: C=0	Concentration, D=Depl	etion, RM	Reduced Matrix, C	S=Cover	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric So	il Indicators:						li	ndicators for Problematic Hydric Soils <sup>3</sup> :
Histol	(A1)		_	Polyv	alue Below Sur	face (S8) (LRR S	S, T, U) _	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)		_	Thin i	Dark Surface (S	9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
Black	Histic (A3)		_	Loam	y Mucky Minera	al (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	gen Sulfide (A4)		_	Loam	y Gleyed Matrix	(F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratif	ied Layers (A5)			Deple	ted Matrix (F3)	` '	_	Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	, T, U)	_	Redo	x Dark Surface	(F6)	_	(MLRA 153B)
5 cm l	Mucky Mineral (A7) (LF	R P.T.II		Deple	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR (		•		x Depressions	, ,	-	Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	••	^		(F10) (LRR U)	(, 0)	-	Other (Explain in Remarks)
			-			A 44 DA 454	=	Other (Explain in Nemarks)
	ted Below Dark Surfac	e (A11)			•	1) (MLRA 151)		
Thick	Dark Surface (A12)		-		-	sses (F12) (LRR	(O, P,T) 3	Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (F	MLRA 150	)A) .	Umbi	ic Surface (F13	) (LRR P, T, U)	h	ydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (L	RR O, S)		Delta	Orchric (F17) (	MLRA 151)	p	roblematic.
	Gleyed Matrix (S4)			Redu	ced Vertic (F18	) (MLRA 150A,	150B)	
	Redox (S5)		•			Soils (F19) (ML		
^	ed Matrix (S6)				•		(MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P, S	s. T. UI	•		•	, , ,		•
	e Layer (If observed):		<u> </u>				<u> </u>	
	Type:							
	Depth (inches):						Hydric Soil Present	? Yes <u></u> ✓ No
Remarks:	oopan (mendo):		7				jyu	·

Project/Site: Levy Nuclear Plant - Transmission Lin	es	City/County: Polk		Sampling Date: 10/8/09	
Applicant/Owner: Progress Energy Florida, Inc.	State: FL		Sampling Point: 74C		
Investigator(s): Mike Arrants, Lianne Ramos-	Mofienski	_Section, Township, Range	: 30 27S 23E/29	27S 23 E	
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none	Sk	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.10370</u> 7	7 Long: <u>-82.0</u>	39371	Da	atum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typic	al for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	s normal? Ye	.s✓No
Are Vegetation Soil,			(If needed, explain	n any answers in F	Remarks)
SUMMARY OF FINDINGS - Attach site			•	•	-
Hydrophytic Vegetation Present?	Yes <u> ✓</u> No	1	, <u>, , , , , , , , , , , , , , , , , , </u>	,	
Hydric Soil Present?	Yes <u>√</u> No	Is the Sampled Area w	ithin a Wetland?	Yes✓No	·
Wetland Hydrology Present?	Yes ✓ No	1			
Remarks:		<b>-1</b>			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of t	wo required)
Primary Indicators (minimum of one is required; che	eck all that anniv)		Surface Soil		wo required;
✓ Surface Water (A1)	Water-Stained Leaves	(R9)		getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	(00)	Drainage Pa	•	ouriace (Bo)
✓ Saturation (A3)	Marl Deposits (B15) (LF	DD 111	Moss Trim L		
<del></del>		•		, ,	
Water Marks (B1)	Hydrogen Sulfide Odor	` ′	-	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Bur		(00)
Drift Deposits (B3)	Presence of Reduced I	, ,		isible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i			Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	- 7	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	irks)	FAC Neutral	Test (D5)	
Field Observations:	V ( )				
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No		Wetland	•	
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓ No</u>	<u> </u>
Describe Recorded Data (stream gauge, monitoring	g well, aenal photos, previous i	nspections), if available:			
Remarks:					
		•			

VEGETATION - Use scientific na	mes of plants			Sampling Point:	74C
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
·	00101	opedies:	Olulus	Number of Dominant Species	
1.	<u> </u>			That Are OBL, FACW, or FAC:	(A)
2.				4	
3.	· ——			Total Number of Dominant	(B)
4.				Species Across All Strata:	` ,
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	(,,,,
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL speciesx1=	
1.				FACW species x2=	_
2.				FAC species x3=	_
3.				FACU species x4=	_
4.	-			UPL species x5=	_
5.	· · · · · · · · · · · · · · · · · · ·			Column Totals: (A)	— (B)
6.				(, ,	(-,
7.				Prevalance Index = B/A =	
		= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:				✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	nlain)
3.				Froblematic Hydrophytic Vegetation (Ex	piaiii)
4.				Indicators of hydric soil and wetland hydrology	must
5.	<del></del>			be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
lite to Otroit on (Blatter or	0	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	. (7.6
1. Juncus effusus	50	yes	FACW	cm) or larger in diameter at breast height (DBH).	
Paspalum notatum	10	no	FACU	Sapling- Woody plants, excluding woody vines,	
3. Lemna spp.	5	no	OBL	approximately 20 ft (6m) or more in height and less	than 3
Muridannia nudiflora	5	no	FAC	in. (7.6 cm) DBH.	
5. Diodia virginiana	5	no	FACW	Shrub- Woody plants, excluding woody vines,	
<ol><li>Cyperus spp.</li></ol>	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
<ol><li>Alternanthera philoxeroides</li></ol>	2	no	OBL	Herb- All herbaceous (non-woody)plants, including	J
Scoparia dulcis	2	no	FAC	herbaceous vines, regardless of size. Includes wo	ody
<ol><li>Hydrocotyle spp.</li></ol>	2	no	OBL	plants, except woody vines, less than approximatel	y 3 ft (1
10. Eleocharis spp.	2	no	OBL	m) in height.	
11. Centella asiatica	2	no	FACW	Woody vine- All woody vines, regardless of height	
12. Azola spp.	2	no	OBL		
	89	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.					
2.	<del></del>			1	
3.	<del></del>				
4.				Hydrophytic	
5.		<del></del>		Vegetation Present? YesNo	
		= Total Cove		10900000111000111111000	<u>.</u>
Remarks: (If observed, list morph				<u> </u>	-
Percent cover estimates based o	-		roader cor	mmunity.Grazed.	

County/soil:	DAIL	Domona

SOIL								Sampling Point:74C
Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the abs	sence of indicators.	)
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
				_				
	Concentration, D=Dep	etion, RM=	Reduced Matrix, (	CS=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Por	
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol						rface (S8) (LRR:		1 cm Muck (a9) (LRR O)
	Epidon (A2)			Thin l	Dark Surface (	S9) (LRR S, T, U	l)	2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR F	r, T, U)			x Dark Surface			(MLRA 153B)
5 cm	Mucky Mineral (A7) (LI	RR P,T,U)		Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
✓ Muck	Presence (A8) (LRR	U)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	•		Marl	(F10) (LRR U)			Other (Explain in Remarks)
Deple	ted Below Dark Surfac	e (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
	Dark Surface (A12)	- (,		Iron-N	Manganese Ma	sses (F12) (LRR	O. P.T)	·
	Prairie Redox (A16) (	MI RA 150	Δ)		-	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (I		^,		Orchric (F17)			problematic.
		LKK (), ()			, ,	B) (MLRA 150A,		•
	Gleyed Matrix (S4)							
	Redox (S5)					n Soils (F19) (ML	(MLRA 149A, 153C	1520)
	ed Matrix (S6) Surface (S7) (LRR P, S	C T 111		Anon	ialous Bright L	barny Solis (F20)	(WILKA 149A, 153C	, 1930)
							I	
1	e Layer (If observed)	:						
	Type:						Hydric Soil Presen	42 Van / Na
Remarks:	Depth (inches):						Hydric Soll Presen	t? Yes ✓ No
								,
-								

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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		Sampling Date:	10/8/09
Applicant/Owner: Progress Energy Florida, Inc.				Sampling Point:	
Investigator(s): Mike Arrants, Lianne Ramos					
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	/ex, none): none	Slop	e (%):
Subregion (LRR or MLRA): LRR U		•			um: <u>WGS84</u>
Soil Map Unit Name: Pomona fine sand			NWI classification		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes ✓		_ (If no, explain in R	emarks)
	or Hydrology		Are circumstance:		No
	or Hydrology			n any answers in Rei	
SUMMARY OF FINDINGS - Attach sit			•	•	•
Hydrophytic Vegetation Present?	YesNo		ranocoto, impe	ortant reatures,	0.0.
Hydric Soil Present?	Yes_ ✓ No	Is the Sampled Area w	ithin a Wetland?	Yes ✓ No	
Wetland Hydrology Present?	Yes_ ✓ No	1 .			
Remarks:		-l	······································		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of two	o required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	l Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish But	• •	
Drift Deposits (B3)	Presence of Reduced I			/isible on Aerial Imag	nery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	` '		Position (D2)	gery (OO)
<del></del>		• •			
Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7	,	Shallow Aqu	• •	
, , , , , , , , , , , , , , , , , , ,	Other (Explain in Rema	irks)	FAC Neutra	ir rest (D5)	
Field Observations:	V /				
Surface Water Present?	Yes No		1		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>/</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			
Remarks:					
•					

VEGETATION - Use scientific na	Absolute %	Dominant	Indicator	Dominance Test Workshee	<u></u>	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Specie	s .	
2.				That Are OBL, FACW, or FA		(A)
3.				Total Number of Dominant		
<u>4</u> .				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Specie	e	
<u>5.</u> 6.				That Are OBL, FACW, or FA		(A/B)
<u>o.</u> 7.	. ———			Prevalance Index workshe		
		= Total Cove	ır .	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	_	- 10(2) 00.0	•	OBL species	x1=	
	/		I	FACW species	x2=	_
<u>1.</u> 2.				FAC species	x2	_
<u>2.                                    </u>				<u> </u>	x3= x4=	
	- ——			FACU species		_
4.		<del></del>		UPL species	x5=	- <sub>/5\</sub>
5.				Column Totals:	(A)	— <sup>(B)</sup>
6.				l <u></u>		
7.				Prevalance Index = B/A		
	0	= Total Cove	r '	Hydrophytic Vegetation Inc		
Shrub Stratum (Plot size:	)		ļ	✓ Dominance Test is 50		
1.				Prevalence Index is ≤	£3.0 <sup>1</sup>	
2.				Problematic Hydroph	ytic Vegetation <sup>1</sup> (Exp	plain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and	wetland hydrology r	nust
5.				be present, unless disturbed		
6.				Definitions of Vegetation S		
7.				1		
· ·		= Total Cove	·r	Tree- Woody plants, excluding	a woodv vines,	
Herb Stratum (Plot size:)			•	approximately 20 ft (6m) or mo		. (7.6
Ludwigia peruviana	15	yes	OBL	cm) or larger in diameter at br		
Juncus effusus	10	ves	FACW	Sapling- Woody plants, exclu		
Alternanthera philoxeroides	5	no	OBL	approximately 20 ft (6m) or mo		than 3
Sacciolepis striata	5	no	OBL	in. (7.6 cm) DBH.	no in noight and lead	u
5.		110	OBL	Shrub- Woody plants, excludi	ing woody vines	
5. 6.				approximately 3 to 20 ft (1 to 6	•	
o. 7.	- —			<b>-</b>		
				Herb- All herbaceous (non-wo		
8.				herbaceous vines, regardless plants, except woody vines, le		-
9.	<i></i>			m) in height.	5S than approximately	/ 3 11 (1
10.	-			4		
11.				Woody vine- All woody vines,	regardless of height.	
12.				1		
	35	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)		I	1		
1.				]		
2.				]		
3.						
4.	) 4 <del>,000</del>			Hydrophytic		
5.					res <u> </u>	
<u></u>		= Total Cove	·r	1		
		- 10ka 0000	. <b>I</b> .			

SOIL Profile De	escription: (Describe	to the der	th peeded to doc	umant th	e indicator or	confirm the abo	ence of indicators	Sampling Point:
Depth	Matrix	to the dep	our needed to doc		Features	commit use abs	serice of malcators.	
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
_	40.70.04							black would be a said
-6	10 YR 2/1 10 YR 7/1							black mucky fine sand
-29 9-33	N 5/0							light gray fine sand
3-80	N 5/0							gray sandy clay loam gray sandy clay
3-00	- N 3/0	_						gray sarray clay
	Concentration, D=Depl	etion, RM	=Reduced Matrix, (	CS=Cover	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histol Histic Black				Thin l	Dark Surface (\$	face (S8) (LRR 59) (LRR S, T, U al (F1) (LRR O) x (F2)	S, T, U) _ J) _	1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B) Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratif	fied Layers (A5) nic Bodies (A6) (LRR F	P, T, U)		Deple	eted Matrix (F3) x Dark Surface	. ,	-	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	Mucky Mineral (A7) (LI			—— Deple	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR		'		x Depressions		•	Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	<b>0</b> ,			(F10) (LRR U)	(, 0)	•	Other (Explain in Remarks)
							•	Outer (Explain in Normanio)
	ted Below Dark Surfac	æ (A11)				(11) (MLRA 151)		
	Dark Surface (A12)				-	sses (F12) (LRF		Indicators of hydrophytic vegetation and wetland
Coast	t Prairie Redox (A16) (i	MLRA 150	DA)			3) (LRR P, T, U)	•	hydrology must be present, unless disturbed or
Sand	y Mucky Mineral (S1) (I	LRR O, S)	•	Delta	Orchric (F17)	MLRA 151)	ı	problematic.
	y Gleyed Matrix (S4)				•	3) (MLRA 150A,	•	
	y Redox (S5)				,	Soils (F19) (ML	•	
	ed Matrix (S6)			Anon	nalous Bright Lo	amy Soils (F20)	(MLRA 149A, 153C	, 153D)
	Surface (S7) (LRR P,							
Restrictiv	e Layer (If observed)	:						
	Type: Depth (inches):		<del></del>				Hydric Soil Presen	t? Yes _ ✓ No
Remarks:	Deptit (inches).						Inyuric Soil Freseii	tr res v No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		Sampling Date: 10/8/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	Sampling Point: 76		
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range	: 31 27S 23E/ 32 2	27S 23 E	
Landform (hillslope, terrace, etc.):N/A	·	Local relief (concave, conv	ex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.097867	57 Long: <u>-82.039729</u> Datum: W			
Soil Map Unit Name: Wauchula fine sand			NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil	or Hydrology			normal? Yes_ / No	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>			ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	is the Sampled Area w	rithin a Wetland?	Yes No	
Wetland Hydrology Present?	YesNo				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)	
Primary Indicators (minimum of one is required; of	hack all that annly)				
Surface Water (A1)	Water-Stained Leaves (F	Surface Soil Cracks (B6)			
High Water Table (A2)	Aquatic Fauna (B13)	39)	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)Moss Trim Lines (B16)Dry-Season Water Table (C2)Crayfish Burrows (C8)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	D III			
Water Marks (B1)	Hydrogen Sulfide Odor (	•			
Sediment Deposits (B2)	Oxidized Rhizospheres of	·			
Drift Deposits (B3)	Presence of Reduced Iro	-		sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic	• • • •	
Iron Deposits (B5)	Thin Muck Surface (C7)	Tilled Jolis (Co)	Shallow Aqui	•	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ke)	FAC Neutral		
Field Observations:	Other (Explain in Neman	кој	TAG Neutral	1001 (00)	
Surface Water Present?	Yes No	Denth (inches):			
Water Table Present?	Yes No/				
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)	110	Doptii (inches)	Hydrology Present?	Yes ✓ No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections) if available	Fresents	res <u>v</u> No	
(					
Remarks:					

VEGETATION - Use scientific nar	mes of plants				Sampling Point:	76
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spe		(A)
2.				That Are OBL, FACW, or	r FAC:	(/-)
3.				Total Number of Domina	nt <u>3</u>	(B)
4.				Species Across All Strata	a: 2	(B)
5.				Percent of Dominant Spe	ecies 400 00	(A (D)
6.				That Are OBL, FACW, or		(A/B)
7.				Prevalance Index works	sheet:	
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	— <sub>(B)</sub>
6.				-		_`-'
7.				Prevalance Index =	B/A =	
		= Total Cove		Hydrophytic Vegetation		
Shrub Stratum (Plot size:				✓ Dominance Test i		
1.	<b>_</b> /			Prevalence Index		
2.					ophytic Vegetation <sup>1</sup> (Ex	nlain)
3.	·			1	sprijas regelader (Ex	<b>P</b> ,
4.		<del></del>		¹Indicators of hydric soil a	and wetland hydrology	muet
5.				be present, unless distur		iiust
6.	·			Definitions of Vegetation		
7.				1		
		= Total Cove		Tree- Woody plants, exclu	iding woody vines	
Herb Stratum (Plot size:)	ŭ	rota, core	•	approximately 20 ft (6m) o		(7.6
Pistia stratiotes	40	yes	OBL	cm) or larger in diameter a		. (
Ludwigia peruviana	25	yes	OBL	Sapling- Woody plants, ex		
Bacopa spp.	20	yes	OBL	approximately 20 ft (6m) o		than 3
Cyperus spp.	2	no	FACW	in. (7.6 cm) DBH.	· ····	
Panicum hemitomon	2	no	OBL	Shrub- Woody plants, exc	luding woody vines	
Diodia virginiana	2	no	FACW	approximately 3 to 20 ft (1		
7. Scleria spp.	2	no	FACW	Herb- All herbaceous (nor	· -	
8. Panicum repens	2	no	FACW	herbaceous vines, regardle	37.	
9. Juncus effusus	2	no	FACW	plants, except woody vines		•
10. Alternanthera philoxeroides	2	no	OBL	m) in height.	-, · ······	,
11. Cyperus surinamensis	2	no	FACW	Woody vine- All woody vii	nes renardless of height	
12. Eupatorium capillifolium	2	no	FACU	1	noo, rogaraicoo oi noigin	•
12. Eupatorium capilillolium	103	= Total Cove				
Woody Vine Stratum (Plot size:	103	- Total Cove	:1			
· · · · · · · · · · · · · · · · · · ·	······································					
1.				-		
2.	- ——					
3.				   Lhuduo mbudi c		
<u>4.</u> 5.				Hydrophytic	Yes ✓ No	
<del>                                    </del>		= Total Cove		Vegetation Present?	Yes <u>√</u> No_	<del></del>
Remarks: (If observed, list morph			ii	<u> </u>		
Percent cover estimates based or		•	roader co	mmunity.		

SOIL								Sampling Point:
	scription: (Describe t	o the dep	oth needed to doc			confirm the ab	sence of indicato	rs.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	%	Features Type <sup>1</sup>	Loc²	Texture	Remarks
inches/	Color (moist)		Color (moist)		1,700		Texture	Remarks
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0			_				gray sandy clay
Type: C=	Concentration, D=Depl	etion, RM	Reduced Matrix, (	CS=Cove	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=F	Pore Lining, M=Matrix.
•	il Indicators:			_				Indicators for Problematic Hydric Soils 3:
Histol						rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					S9) (LRR S, T,	•	2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4) ied Layers (A5)				ny Gleyed Matr eted Matrix (F3			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	nic Bodies (A6) (LRR P	. T. U)			x Dark Surface			Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	Mucky Mineral (A7) (LF			 Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR L			Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)	•		Marl	(F10) (LRR U)			Other (Explain in Remarks)
Deple	ted Below Dark Surfac	e (A11)		Deple	eted Orchric (F	11) (MLRA 151	)	
Thick	Dark Surface (A12)			Iron-	Manganese Ma	sses (F12) (LR	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	/LRA 150	)A)	Umb	ric Surface (F1	3) (LRR P, T, U	)	hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (L	RR O. S		Delta	Orchric (F17)	(MLRA 151)		problematic.
	Gleyed Matrix (S4)				ced Vertic (F1	8) (MLRA 150A	, 150B)	
	Redox (S5)					Soils (F19) (M		
Stripp	ed Matrix (S6)			Anon	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 15	3C, 153D)
Dark \$	Surface (S7) (LRR P, S	S, T, U)						
Restrictiv	e Layer (If observed):							
	Туре:							
	Depth (inches):						Hydric Soil Pres	sent? Yes No
Remarks:								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk	Sa	mpling Date: 10/8/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	Sa	Sampling Point: 77	
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	_Section, Township, Range	e: 31 27S 23E/ 32 27S	23 E	
Landform (hillslope, terrace, etc.): N/A	·	Local relief (concave, con	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.096902	2 Long: <u>-82.</u>	39724	Datum: WGS84	
Soil Map Unit Name: Wauchula fine sand			NWI classification: N	Α	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No (if	no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances no	rmal? Yes <u>✓</u> No	
Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed, explain any	y answers in Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	te map showing sampli	ing point locations,	ransects, importa	nt features, etc.	
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	YesNo	Is the Sampled Area v	vithin a Wetland? Ye	esNo	
Wetland Hydrology Present?	Yes No				
HYDROLOGY					
Wetland Hydrology Indicators:	barah ali disah ara 2.2			(minimum of two required)	
Primary Indicators (minimum of one is required; of		(7.0)	Surface Soil Cra		
Surface Water (A1)	Water-Stained Leaves (	(89)		ited Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterr		
✓ Saturation (A3)	Mart Deposits (B15) (LF	•	Moss Trim Lines	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Wat	• •	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burrows	•	
Drift Deposits (B3)	Presence of Reduced Ir	, ,		e on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	• •	Geomorphic Pos	, ,	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard	•	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral Tes	St (U5)	
Field Observations:	v No ./	David Carland		•	
Surface Water Present?	Yes No Yes No		-		
Water Table Present?			Wetland	•	
Saturation Present?	Yes/ No	_ Depth (Inches): U-6	Hydrology		
(includes capillary fringe)	ing well periol photos, previous	inenactions) if available:	Present? Ye	es <u>- No</u>	
Describe Recorded Data (stream gauge, monitor Remarks:Hydrology disturbed by off line ditch.	ing well, aerial photos, previous	s inspections), if available:			
Remarks:Hydrology disturbed by off line ditch.					

<b>VEGETATION</b> - Use scientific na	ames of plants			Sa	ampling Point:	7
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshee	t:	
1.		·		Number of Dominant Species That Are OBL, FACW, or FA		(A)
3. 4.				Total Number of Dominant Species Across All Strata:	<u>7</u>	(B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FA	/ 1 4.5	(A/B)
7.				Prevalance Index workshee	et:	
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	
2.				FAC species	x3=	
3.				FACU species	x4=	
4.	- <del></del>			UPL species	x5=	
5.				Column Totals:	(A)	— <sub>(B)</sub>
6.				]		
7.				Prevalance Index = B/A	=	
		= Total Cove	er	Hydrophytic Vegetation Ind	licators:	
Shrub Stratum (Plot size:	) .			✓ Dominance Test is 50	%	
1.				Prevalence Index is ≤	3.0 <sup>1</sup>	
2.	- <del></del>			Problematic Hydrophy	rtic Vegetation¹ (Ex	xplain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and	wetland hydrology	must
5.				be present, unless disturbed		
6.				Definitions of Vegetation S	trata:	
7.				1		
Herb Stratum (Plot size:)		= Total Cove	er	Tree- Woody plants, excluding approximately 20 ft (6m) or mo		n. (7.6
1. Cyperus spp.	15	yes	FACW	cm) or larger in diameter at bre		•
2 Ludwigia peruviana	15	ves	OBL	Santing- Woody plants, exclud	ling woody vines	

1.				_Prevalance index works	ileet.
Cooling Stratum (Dist size)	0	= Total Cove	r	Total % Cover of:	Multiply by:
Sapling Stratum (Plot size:	)			OBL species	x1=
1.				FACW species	x2=
2.				FAC species	x3=
3.				FACU species	x4=
4.				UPL species	x5=
5.				Column Totals:	(A)(B)
6.					
7.				Prevalance Index = B	
	0	= Total Cove	r	Hydrophytic Vegetation	
Shrub Stratum (Plot size:	) .			✓ Dominance Test is	
1.				Prevalence Index is	
2.				Problematic Hydro	ohytic Vegetation¹ (Explain)
3.					
4.				」¹Indicators of hydric soil ar	nd wetland hydrology must
5.				be present, unless disturb	
6.				Definitions of Vegetation	n Strata:
7.				7	
	0	= Total Cove	r	Tree- Woody plants, exclud	ing woody vines,
Herb Stratum (Plot size:)					more in height and 3 in. (7.6
1. Cyperus spp.	15	yes	FACW	cm) or larger in diameter at	breast height (DBH).
Ludwigia peruviana	15	yes	OBL	Sapling- Woody plants, exc	cludina woody vines.
Phyllanthus urinaria	15	yes	FAC		more in height and less than 3
Eupatorium capillifolium	15	yes	FACU	in. (7.6 cm) DBH.	_
5. Scoparia dulcis	15	yes	FAC	Shrub- Woody plants, exclu	iding woody vines.
Carex albolutescens	15	yes	FAC	approximately 3 to 20 ft (1 to	
7. Digitaria sp.	15	yes	FACU	Herb- All herbaceous (non-	woody)plants including
8.				herbaceous vines, regardles	37.
9.					less than approximately 3 ft (1
10.	· ——			m) in height.	
11.	-			Woody vine- All woody vine	es, regardless of height.
12.				1 1	, 3
	105	= Total Cove		┪	
Woody Vine Stratum (Plot size:		rotar cove	•		
1.	/				
2.	· ——			┥	
3.					
4.				Hudronbytic	•
5.				Hydrophytic	Yes <u>✓ No</u> .
J.		= Total Cove		Vegetation Present?	169 <u>v</u> 110 <u>.</u>
Domorko: (If observed list			!	1	
Remarks: (If observed, list morph					
Percent cover estimates based or	n meandering s	survey of the b	roader co	ommunity.	

ofile Description: (Describe to the de				Sampling Point:
and Manager	pth needed to docu		firm the absence of indica	tors.)
pth Matrix ches) Color (moist) %	Color (moist)	Redox Features % Type¹	Loc <sup>2</sup> Texture	Remarks
color (moist) %	Color (moist)			Remarks
10 YR 2/1				black mucky fine sand
10 YR 7/1				light gray fine sand
N 5/0			<del></del>	gray sandy clay loam
80 N 5/0				gray sandy clay
pe: C=Concentration, D=Depletion, RM	I=Reduced Matrix, C	S=Covered or Coated Sand	Grains. Location: PL	=Pore Lining, M=Matrix.
ric Soil Indicators:		D.1 1 . D.1 0 . f	(00) (1 DD 0 T 10)	Indicators for Problematic Hydric Soils 3:
_Histol (A1)	-	Polyvalue Below Surface		1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)	-	Thin Dark Surface (S9)		2 cm Muck (A10) (LRR S)
_Black Histic (A3)	-	Loamy Mucky Mineral (F		Reduced Vertic (F18) (outside MLRA 150A, E
_Hydrogen Sulfide (A4)	-	Loamy Gleyed Matrix (F	2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)	-	Depleted Matrix (F3) Redox Dark Surface (F6	1	Anomalous Bright Loamy Soils (F20)
	-		•	(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U	) -	Depleted Dark Surface (	•	Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)	-	Redox Depressions (F8)	<b>+</b>	Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (LRR P,T)	-	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)		Depleted Orchric (F11)	MLRA 151)	
Thick Dark Surface (A12)	_	Iron-Manganese Masse	•	3
Coast Prairie Redox (A16) (MLRA 15	·0A)	Umbric Surface (F13) (L		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
• • • • • • • • • • • • • • • • • • • •	-			hydrology must be present, unless disturbed or problematic.
_Sandy Mucky Mineral (S1) (LRR O, S	) -	Delta Orchric (F17) (ML	-	problematic.
_Sandy Gleyed Matrix (S4)	-	Reduced Vertic (F18) (N		
_Sandy Redox (S5)	-	Piedmont Floodplain So		
_Stripped Matrix (S6)	-	Anomalous Bright Loam	y Soils (F20) (MLRA 149A,	153C, 153D)
_Dark Surface (S7) (LRR P, S, T, U)				
strictive Layer (If observed):				
Туре:				
Depth (inches):			Hydric Soil Pr	resent? Yes <u>√</u> No
narks:				
				•
•				
•				
•				
•				
•				

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk	_Sampling Date:10/8/09		
Applicant/Owner: Progress Energy Florida, Inc.			Sampling Poi	nt: <u>78</u>	
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range: <u>31 27S 23E/ 32 27S 23 E</u>			
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.096483</u>	Long: <u>-82.0</u>	39544		Datum: WGS84
Soil Map Unit Name: Wauchula fine sand			NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	YesNo
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers ir	n Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant featur	es, etc.
Hydrophytic Vegetation Present?	Yes No	]			
Hydric Soil Present?	YesNo	Is the Sampled Area w	rithin a Wetland?	Yes✓	No
Wetland Hydrology Present?	Yes No				
Remarks:					
				,	<del></del>
HYDROLOGY					
Wetland Hydrology Indicators:	***************************************		Secondary Indicato	rs (minimum_c	f two required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil (	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	etated Concav	re Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patt	terns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor (	·		Vater Table (C	2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burro	ows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro			Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	` '	Geomorphic F		
Iron Deposits (B5)	Thin Muck Surface (C7)	` '	Shallow Aquit		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar			utral Test (D5)	
Field Observations:	<del></del>				
Surface Water Present?	YesNo✓	_ Depth (inches):			
Water Table Present?	Yes No	_ Depth (inches):			
Saturation Present?	Yes ✓ No	· · · · · · · · · · · · · · · · · · ·	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u></u> ✓	No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	•		
Remarks:					
:					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	78
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Thee Stratum (Flot size:)	00101	opcoics:	Otatas	Number of Dominant Species	
2				That Are OBL, FACW, or FAC:	(A)
2.				<b>!</b>	
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	
5.				Percent of Dominant Species 85.71	(A/B)
6.				That Are OBL, FACVV, or FAC:	
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by	<u>y:</u>
Sapling Stratum (Plot size:	)			OBL speciesx1=	
1.				FACW species x2=	
2.				FAC species x3=	
3.				FACU species x4=	
4.	- —			UPL species x5=	—
5.				Column Totals: (A)	(B)
6.	- —			( ,	(
7.	- —			Prevalance Index = B/A =	
<del></del>		= Total Cove	<del></del>	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:		10101 0010	•	✓ Dominance Test is 50%	,
l	_/			Prevalence Index is ≤3.0 <sup>1</sup>	
1. 2.					Cambrin
	-			Problematic Hydrophytic Vegetation <sup>1</sup> (E	=xpiain)
3.	•			1	
4.				Indicators of hydric soil and wetland hydrolog	y must
5.				be present, unless disturbed or problematic.	
6.	-			Definitions of Vegetation Strata:	
7.					
	0	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3	
Paspalum notatum	20	yes	FACU	cm) or larger in diameter at breast height (DBH).	
2. Scleria spp.	15	yes	FACW	Sapling- Woody plants, excluding woody vines,	
3. Euthamia spp.	15	yes	FAC	approximately 20 ft (6m) or more in height and le	ess than 3
4. Panicum hemitomon	10	yes	OBL	in. (7.6 cm) DBH.	
5. Alternanthera philoxeroides	10	yes	OBL	Shrub- Woody plants, excluding woody vines,	
6. Rhyncospora spp.	10	yes	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Juncus effusus	10	yes	FACW	Herb- All herbaceous (non-woody)plants, includi	ina
8. Diodia virginiana	5	no	FACW	herbaceous vines, regardless of size. Includes v	
9. Cyperus spp.	5	no	FACW	plants, except woody vines, less than approxima	
10. Sacciolepis striata	2	no	OBL	m) in height.	` `
11.	· ——			Woody vine- All woody vines, regardless of heig	ıht .
12.	- ——			1	,
12.	102	= Total Cove		1	
Mandy Vine Stratum (Blot size:	102	- Total Cove	;1		
Woody Vine Stratum (Plot size:	/				
1.					
2.					
3.				1	
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	<del>-</del>
	0	= Total Cove	er		
Remarks: (If observed, list morph	-				
Percent cover estimates based or	n meandering s	survey of the b	roader co	mmunity.	

County/soil:	Dolk	Marichila

SOIL								Sampling Point:
Profile Des	scription: (Describe	to the dep	th needed to doc	ument th	ne indicator or	confirm the ab:	sence of indicators.)	•
Depth	Matrix	•			Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
(	Soloi (moist)		Color (moist)		.,,,,		TOXIGIO	Homans
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1	. ——					<del></del>	light gray fine sand
		. —						
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
							-	
Type: C=C	Concentration, D=Dep	letion RM=	Reduced Matrix (	:S=Cove	red or Coated S	Sand Grains	<sup>2</sup> Location: PL=Pore	e Lining M=Matrix
	I Indicators:	iouori, ruir	Troudoud Waller,	30 0010	TOU OF COURTS	Daria Oramo.		Indicators for Problematic Hydric Soils 3:
Histol				Doha	valua Balaw Su	rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					S9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organi	ic Bodies (A6) (LRR F	P, T, U)		Redo	ox Dark Surface	e (F6)		(MLRA 153B)
5 cm N	Mucky Mineral (A7) (L	RR P.T.III		Dept	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
_	Presence (A8) (LRR				ox Depressions		•	Very Shallow Dark Surface (TF12) (LRR T, U)
		U)			•	• •	•	
1 cm N	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)		•	Other (Explain in Remarks)
Denlet	ed Below Dark Surfac	·ρ (Δ11)		Den	eted Orchric (F	11) (MLRA 151)		
		λ (Λ11)						
- Inick	Dark Surface (A12)				-	isses (F12) (LRF		Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 150	A)	Umb	oric Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandu	Mucky Mineral (S1) (	1 DD () S)		Delta	a Orchric (F17)	(MLRA 151)	ı	problematic.
		LRR 0, 3)			. ,		•	
	Gleyed Matrix (S4)					8) (MLRA 150A,		
	Redox (S5)					n Soils (F19) (ML		
Strippe	ed Matrix (S6)			Anor	malous Bright L	oamy Soils (F20)	) (MLRA 149A, 153C	, 153D)
Dark S	Surface (S7) (LRR P,	S. T. U)						
	Layer (If observed)						1	
		•						
	Type:							
	Depth (inches):						Hydric Soil Presen	t? Yes <u>√</u> No
Remarks:								
i								
1								
1								
1								
1								
1								
I								

Project/Site: Levy Nuclear Plant - Transmission	City/County: Polk Sampling Date:			e: <u>10/12/09</u>	
Applicant/Owner: Progress Energy Florida, Inc.	Σ	State:FL		Sampling Point: 79	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 31 27S 23E/ 32 27S 23 E			
	/A	Local relief (concave, con			
Subregion (LRR or MLRA): LRR U	Lat: 28.088036	6 Long: <u>-82.</u>	039971		Datum: WGS84
Soil Map Unit Name: Eaton mucky fine sand, d			_NWI classification		
Are climatic / hydrologic conditions on the site t	ypical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstances	s normal?	YesNo
Are Vegetation, Soil	or Hydrology	_naturally problematic?	(If needed, explain	any answers ii	n Remarks)
<b>SUMMARY OF FINDINGS - Attach s</b>	ite map showing sampli	ing point locations,	transects, impo	rtant featui	es, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area	within a Wetland?	Yes✓	No
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum c	of two required)
Primary Indicators (minimum of one is required	; check all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concav	re Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor			Water Table (C	:2)
Sediment Deposits (B2)	on Living Roots (C3)	Crayfish Bur	•	_,	
Drift Deposits (B3)	ron (C4) Saturation Visible on Aerial Imag			Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i				
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7	· ·	•	FAC Neutral	, ,	
Field Observations:	/Other (Explain in reside	1113)	T	1100(100)	***
Surface Water Present?	Yes No	Denth (inches): 0-6			
Water Table Present?	Yes No		┪		
	Yes✓ No		- Wetland		
Saturation Present?	No	_ Depth (Inches):u	Hydrology	<b>W</b> (	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monit	evine well posial abotac accordance	n inamantiana) if available.	Present?	Yes <u>√</u>	No
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous	s inspections), it available.			
Remarks:					
		;			

VEGETATION - Use scientific na	mes of plants				mpling Point:	79
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet	:	
1. 2. 3.	<del>-</del>			Number of Dominant Species That Are OBL, FACW, or FAC		(A)
3.				Total Number of Dominant	•	<b>(5</b> )
4.	-		-	Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species	100.00	(A (D)
6.				That Are OBL, FACW, or FAC	: <u>100.00</u>	(A/B)
7.				Prevalance Index worksheet	t:	
Sapling Stratum (Plot size:		= Total Cove	r	Total % Cover of: OBL species	Multiply by: _x1=	
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	— <sub>(D)</sub>
5.				Column Totals:	(A)	_(B)
6.				Bravialanaa laday - B/A -	_	
7.		= Total Cove		Prevalance Index = B/A = Hydrophytic Vegetation Indi		
Shrub Stratum (Plot size:	•	- Total Cove	l	✓ Dominance Test is 50%		
•	/			Prevalence Index is ≤3		
<u>1.</u> 2.	<del> </del>			Problematic Hydrophyt		nlain)
3.				1 Toblematic Hydrophyt	ic vegetation (Ex	ріанту
4.	-			Indicators of hydric soil and w	vetland hydrology r	muet
5.				be present, unless disturbed of		iiust
6.	-			Definitions of Vegetation St		
7.				1		
		= Total Cove	r	Tree- Woody plants, excluding v	woody vines.	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Bacopa spp.	20	yes	OBL	cm) or larger in diameter at brea	ast height (DBH).	
Ludwigia repens	15	yes	OBL	Sapling- Woody plants, excludi	ng woody vines,	
3. Panicum repens	10	no	FACW	approximately 20 ft (6m) or more		than 3
4. Cyperus spp.	10	no	FACW	in. (7.6 cm) DBH.		
<ol><li>Polygonum punctatum</li></ol>	5	no	FACW	Shrub- Woody plants, excluding	g woody vines,	
<ol><li>Eichhornia sp.</li></ol>	5	no	OBL	approximately 3 to 20 ft (1 to 6 r	n) in height.	
7.				Herb- All herbaceous (non-wood	dy)plants, including	
8.				herbaceous vines, regardless of		
9.				plants, except woody vines, less	than approximatel	y 3 ft (1
10.			<del> </del>	m) in height.		
11.				Woody vine- All woody vines, re	egardless of height.	
12.				]		
Woody Vine Stratum (Plot size:_	65 )	= Total Cove	r			
1.				1		
2.						
3.				4		
4.				Hydrophytic	,	
5.				Vegetation Present? Ye	sNo	<u>.</u>
	Λ	= Total Cove	r			

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region-Interim Version

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community. Grazed.

Texture	dicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)
ocation: PL=Pore	black mucky fine sand light gray fine sand gray sandy clay loam gray sandy clay  Lining, M=Matrix. dicators for Problematic Hydric Soils <sup>3</sup> :1 cm Muck (a9) (LRR O)2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2)
ocation: PL=Pore	black mucky fine sand light gray fine sand gray sandy clay loam gray sandy clay  Lining, M=Matrix. dicators for Problematic Hydric Soils <sup>3</sup> :1 cm Muck (a9) (LRR O)2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2)
In	light gray fine sand gray sandy clay loam gray sandy clay loam gray sandy clay  Lining, M=Matrix. dicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2)
In	light gray fine sand gray sandy clay loam gray sandy clay loam gray sandy clay  Lining, M=Matrix. dicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2)
In	gray sandy clay loam gray sandy clay  Lining, M=Matrix.  dicators for Problematic Hydric Soils <sup>3</sup> :  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)
In	gray sandy clay  Lining, M=Matrix.  dicators for Problematic Hydric Soils <sup>3</sup> :  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)
In	Lining, M=Matrix.  dicators for Problematic Hydric Soils <sup>3</sup> :  _1 cm Muck (a9) (LRR O)  _2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)
In	dicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)
In	dicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)
In	dicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)
	1 cm Muck (a9) (LRR 0)2 cm Muck (A10) (LRR 5)Reduced Vertic (F18) (outside MLRA 150A, BPiedmont Floodplain Soils (F19) (LRR P, S, T)Anomalous Bright Loamy Soils (F20)(MLRA 153B)Red Parent Material (TF2)
	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2)
- - - -	Reduced Vertic (F18) (outside MLRA 150A, B Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2)
- - - -	Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2)
- - -	Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2)
- - -	(MLRA 153B) Red Parent Material (TF2)
_	Red Parent Material (TF2)
	<del></del> -
_	
	Very Shallow Dark Surface (TF12) (LRR T, U)
_	Other (Explain in Remarks)
P,T) 31.	
	ndicators of hydrophytic vegetation and wetland ydrology must be present, unless disturbed or
	roblematic.
IB)	
•	
	153D)
LRA 149A, 155C,	1990)
dric Sail Bracant	? Yes ✓ No .
aric Son Present	r tes v No .
•	
) L	hy

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk		Sampling Date: 10/12/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: 80
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: 6 28S 23E	
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con-	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U		Long:82.0	41001	Datum: WGS84
Soil Map Unit Name: Pomona fine sand			NWI classification:	NA
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes No		· · · · ·	
Hydric Soil Present?	Yes No	is the Sampled Area v	vithin a Wetland?	YesNo
Wetland Hydrology Present?	Yes No			
Remarks:		1		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	rs (minimum of two required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil (	Cracks (B6)
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season V	Vater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	ows (C8)
Drift Deposits (B3)	rift Deposits (B3)Presence of Reduced I			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	tard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	·ks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No	Depth (inches): 0-6	_	
Water Table Present?	Yes No		]	
Saturation Present?	Yes✓ No		Wetland	
(includes capillary fringe)	· · · · · · · · · · · · · · · · · · ·		Hydrology Present?	Yes ✓ No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	1	
		, , , , , , , , , , , , , , , , , , ,		
Remarks:				

VEGETATION - Use scientific na	ames of plants			Sampling Po	oint:	80
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species	2	۱۸۱
2.		***************************************		That Are OBL, FACW, or FAC:	<u>2</u>	(A)
3.				Total Number of Dominant	•	(D)
4.				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species	400.00	(A (D)
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
Sapling Stratum (Plot size:		= Total Cove	r	<u>Total % Cover of:</u> <u>Mu</u> OBL species x1=	ultiply by:	
1.				FACW species x2=		- 1
2.				FAC species x3=		-
3.				FACU species x4=		-
4.				UPL species x5=		-
5.		<del></del>		Column Totals: (A)		- <sub>(B)</sub>
6.						<del>-</del> `-'
7.				Prevalance Index = B/A =		
		= Total Cove	r	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	)		-	✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Vegeta	ation <sup>1</sup> (Expl	lain)
3.				Toble in a second and a second	~ \p.	,
4.				<sup>1</sup> Indicators of hydric soil and wetland h	vdrology m	uet
5.				be present, unless disturbed or problem		1431
6.				Definitions of Vegetation Strata:		
7.				1		
Herb Stratum (Plot size:)	0	= Total Cove		Tree- Woody plants, excluding woody vir approximately 20 ft (6m) or more in heigh cm) or larger in diameter at breast height	nt and 3 in. (	(7.6
Micranthemum spp.	30	yes	OBL	•		
2. Cyperus spp.		yes	FACW	Sapling- Woody plants, excluding woody		
3. Eichhornia sp.	5	no	OBL	approximately 20 ft (6m) or more in height in. (7.6 cm) DBH.	nt and less t	nan 3
4.				4	• • • •	
5.	<del></del>			Shrub- Woody plants, excluding woody vapproximately 3 to 20 ft (1 to 6 m) in heigh		
6. 7.				1		
8.	<del></del>			Herb- All herbaceous (non-woody)plants		
				herbaceous vines, regardless of size. In plants, except woody vines, less than ap		
9.		<del></del>		m) in height.	proximatery	311 (1
10.			<del></del>	Woody vine- All woody vines, regardless	n of hoight	
11.	<del>-</del>			1	s or neight.	
12.				4		
Woody Vine Stratum (Plot size:_	)	= Total Cove	Γ			
1.				4		
2.				-		
3.				4		
4.	<del></del>			Hydrophytic		
5.				Vegetatión Present? Yes <u>√</u>	No	<u> </u>
	0	= Total Cove	<u>r                                      </u>	I		
Remarks: (If observed, list morp		-				
Percent cover estimates based	on meandering s	survey of the b	roader coi	mmunity.Grazed.		

Histol (A1)	e sand lay loam lay  trix.  Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture    Color (moist) % Color (moist) % Type¹ Loc² Texture	r fine sand e sand clay loam clay  trix.  Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Delication   Del	r fine sand e sand clay loam clay  trix.  Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   Location: PL=Pore Lining, M=Matheria Soil Indicators:   Indicators for F	e sand lay loam lay  trix.  Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   PL=Pore Lining, M=Mathydric Soil Indicators:   Indicators for FH   Histol (A1)   Polyvalue Below Surface (S8) (LRR S, T, U)   1 cm Muck   Histic Epidon (A2)   Thin Dark Surface (S9) (LRR S, T, U)   2 cm Muck   Histic Epidon (A2)   Loamy Mucky Mineral (F1) (LRR O)   Reduced V   Hydrogen Suffide (A4)   Loamy Gleyed Matrix (F2)   Piedmont F   Stratified Layers (A5)   Depleted Matrix (F3)   Anomalous   Organic Bodies (A6) (LRR P, T, U)   Redox Dark Surface (F6)   Muck Presence (A8) (LRR P, T, U)   Depleted Dark Surface (F7)   Red Parent   Muck Presence (A8) (LRR P, T)   Mart (F10) (LRR U)   Depleted Orbric (F11) (MLRA 151)   Depleted Below Dark Surface (A11)   Depleted Orbric (F11) (MLRA 151)   This Port Surface (A11)   Depleted Orbric (F11) (MLRA 151)   Item Managanere Managanere Managanere (F12) (LRR D, T)   Item Managanere Managanere Managanere (F12) (LRR D, T)   Item Managanere Managanere Managanere Managanere (F12) (LRR D, T)   Item Managanere Mana	e sand lay loam lay  trix.  Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
29-33 N 5/0 gray sandy c  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck Histor Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced V Loamy Mucky Mineral (F1) (LRR O) Piedmont F Stratified Layers (A5) Depleted Matrix (F2) Piedmont F Stratified Layers (A5) Cram Muck Mineral (A7) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 15)  5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent  Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallo 1 cm Muck (A9) (LRR P, T) Mand (F10) (LRR U) Depleted Below Dark Surface (A11)  This Port Surface (A12)	clay loam clay  trix.  Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S)  fertic (F18) (outside MLRA 150A, B)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Pepleted Matrix (F3)  Redox Dark Surface (F6)  (MLRA 15  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F7)  Red Parent  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallo  Other (Expl  Depleted Below Dark Surface (A11)  Thist Port Surface (A12)	trix. Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Bopeleted Dark Surface (F1)  Muck Presence (A8) (LRR P,T)  Mand (F10) (LRR U)  Depleted Order (F1) (LRR A151)  This Dark Surface (F3)  Loamy Mucky Mineral (F1) (LRR P, T, U)  Redox Dark Surface (F6)  Mand (F10) (LRR U)  Depleted Below Dark Surface (A11)  This Dark Surface (A11)  Depleted Order (F11) (MLRA 151)  Item Mandanese Masses (F12) (LRR D, T)  Indicators  Location: PL=Pore Lining, M=Math  Location: Plane Location: Plane Location: Plane Location: Plane Location: Plane Location: Plane Location: Plane Location: Plane Location:	trix. Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Histol (A3)  Black Histic Epidon (A2)  Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Tom Muck Mineral (A7) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F1)  Muck (A9) (LRR P, T, U)  Mard (F10) (LRR U)  Depleted Below Dark Surface (A11)  Depleted Orchric (F11) (MLRA 151)  Loamy Gleyed Matrix (F2)  Piedmont F  Anomalous  (MLRA 15  Redox Dark Surface (F6)  Mard (F10) (LRR U)  Depleted Below Dark Surface (A11)  Depleted Orchric (F11) (MLRA 151)  Loam Marganere Massers (F12) (LRR D, T)  Loam Marganere Massers (F12) (LRR D, T)  Loam Marganere Massers (F12) (LRR D, T)	Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Elistol (A3)  Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Depleted Matrix (F3)  For Mucky Mineral (A7) (LRR P, T, U)  Beleted Dark Surface (F6)  Muck Presence (A8) (LRR U)  Tom Muck (A9) (LRR P, T)  Depleted Below Surface (A11)  Indicators for F  Indicators for F  Loamy Gleyed Matrix (F2)  Preduced Vi  Loamy Mucky Mineral (F1) (LRR O)  Preduced Vi  Pr	Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Elistol (A3)  Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Depleted Matrix (F3)  For Mucky Mineral (A7) (LRR P, T, U)  Beleted Dark Surface (F6)  Muck Presence (A8) (LRR U)  Tom Muck (A9) (LRR P, T)  Depleted Below Surface (A11)  Indicators for F  Indicators for F  Loamy Gleyed Matrix (F2)  Preduced Vi  Loamy Mucky Mineral (F1) (LRR O)  Preduced Vi  Pr	Problematic Hydric Soils <sup>3</sup> : (a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Histol (A1)	(a9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A, B)
Histic Epidon (A2)  Black Histic (A3)  Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (F1) (LRR O)  Reduced Vi  Piedmont F  Depleted Matrix (F2)  Redox Dark Surface (F6)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Pepleted Dark Surface (F7)  Red Parent  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Depleted Orario (F11) (MLRA 151)  Thist Dark Surface (A11)	(A10) (LRR S) Yertic (F18) (outside MLRA 150A, B)
Black Histic (A3)  Hydrogen Suffide (A4)  Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Dark Surface (F7)  Mari (F10) (LRR U)  Depleted Below Dark Surface (A11)  Depleted Orchroir (F11) (MLRA 151)  Thist Dark Surface (A12)	/ertic (F18) (outside MLRA 150A, B)
Hydrogen Suffide (A4) Stratified Layers (A5) Depleted Matrix (F2) Depleted Matrix (F3) Anomalous (MLRA 15 5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR U) Redox Dark Surface (F7) Red Parent Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallo Lor Muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) This Park Surface (A12)	
Stratified Layers (À5) Depleted Matrix (F3) Anomalous Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 15  5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Red Parent  Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallo  1 cm Muck (A9) (LRR P,T) Mari (F10) (LRR U) Other (Expl  Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151)  This Dark Surface (A12)	
Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 15  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Log Managere Manager (E12) (LRR D, T)  Log Managere Manager (E12) (LRR D, T)	Floodplain Soils (F19) (LRR P, S, T)
5 cm Mucky Mineral (A7) (LRR P,T,U)  — Depleted Dark Surface (F7)  — Red Parent  — Muck Presence (A8) (LRR U)  — 1 cm Muck (A9) (LRR P,T)  — Depleted Below Depressions (F8)  — Mari (F10) (LRR U)  — Depleted Below Dark Surface (A11)  — Depleted Orchric (F11) (MLRA 151)  — Thick Port Surface (A12)  — Iron Management Management Management (F12) (LRR Q P,T)	Bright Loamy Soils (F20)
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Port Surface (A12)  Lon Managener Masses (E12) (LRR D, D, D, D, D, D, D, D, D, D, D, D, D,	•
1 cm Muck (A9) (LRR P,T)	` '
Depleted Below Dark Surface (A11)	ow Dark Surface (TF12) (LRR T, U)
Thick Dark Surface (A12)	lain in Remarks)
Thick Dark Surface (A12)Iron-Manganese Masses (F12) (LRR O, P,T) 3Indicators of hy	
indicators of ny	ada a da da da da da da da da da da da d
	ydrophytic vegetation and wetland be present, unless disturbed or
	be present, unless disturbed of
Sandy whickly willieral (31) (ERR 0, 3)	
Sandy Gleyed Matrix (S4)	
Stripped Matrix (S6) ——Predition Floodplant Soils (F15) (MLRA 149A, 153C, 153D)	
<del></del>	
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (If observed):	
Type: Depth (inches): Hydric Soil Present? Yes	s ✓ No .
Depth (inches): Hydric Soil Present? Yes	s v No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk Sampling Date: 10/12/0				
Applicant/Owner: <u>Progress Energy Florida, Inc.</u>		State: FL Sampling Point: 81			nt: <u>81</u>	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 6 28S 23E				
Landform (hillslope, terrace, etc.):N/A	<u> </u>	Local relief (concave, con-	vex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.082662</u>	2 Long:82.0	046225	<del></del>	Datum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification	: <u>NA</u>		
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal?	Yes/No	
Are Vegetation, Soil,			(If needed, explain	n any answers in	ı Remarks)	
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ing point locations, t	transects, impo	rtant featur	es, etc.	
Hydrophytic Vegetation Present?	Yes✓ No					
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes✓	No	
Wetland Hydrology Present?	]					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum o	f two required)	
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	getated Concav	e Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)		
✓ Saturation (A3)	RR U)	Moss Trim L	ines (B16)			
Water Marks (B1)	(C1)		Water Table (C	2)		
Sediment Deposits (B2)	on Living Roots (C3)Crayfish Burrows (C8)			-,		
Drift Deposits (B3)	Iron (C4)Saturation Visible on Aerial Imagery (C			Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in				g, (5-,	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutral			
Field Observations:		(NO)	1	1100 (50)		
Surface Water Present?	Yes No	Denth (inches): 0-8				
Water Table Present?	Yes No		7			
	YesNo		Wetland			
Saturation Present?	162 NO	_ Deptit (iliches)	Hydrology	Yes /	<b>41</b>	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ing well serial photos previous	inspections) if available:	Present?	Yes <u>✓</u>	No	
Describe Necolded Data (Stream gauge, monitor	ing well, acrial prioros, previous	ilispections), il available.				
Remarks:						
1						

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	81
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(A)
2.				That Are OBL, FACW, or FAC: <sup>∠</sup>	(,,)
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	(6)
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	(745)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.				FACW species x2=	
2.				FAC species x3=	
3.	·			FACU species x4=	
4				UPL species x5=	_
<u> </u>	· ———			Column Totals: (A)	— (B)
5. 6	<del></del>			(A)	(D)
4. 5. 6. 7.	·			Prevalance Index = B/A =	
· · · · · · · · · · · · · · · · · · ·		= Total Cove		Hydrophytic Vegetation Indicators:	
Oharib Oharbara (Districe)		- Total Cove	I		
Shrub Stratum (Plot size:	_)			Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.					
4.				Indicators of hydric soil and wetland hydrology i	must
5. 6.				be present, unless disturbed or problematic.	
				Definitions of Vegetation Strata:	
7.					
	0	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	. (7.6
Hydrocotyle spp.	30	yes	OBL	cm) or larger in diameter at breast height (DBH).	
2. Cyperus spp.	15	yes	FACW	Sapling- Woody plants, excluding woody vines,	
3. Ludwigia spp.	10	no	OBL	approximately 20 ft (6m) or more in height and less	than 3
4	·			in. (7.6 cm) DBH.	
4. 5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.			<del></del>	<b> </b> ``	
8.	<del></del>			Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes wo	
9.				plants, except woody vines, less than approximatel	
10.	· ——			m) in height.	,
11.				'	
				Woody vine- All woody vines, regardless of height	
12.	· ——				
	55	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.	. <u> </u>				
2. 3.					
3.					
4.				Hydrophytic	
5.			•	Vegetation Present? Yes <u>✓ No</u>	
	0	= Total Cove	r		
Remarks: (If observed, list morph	ological adapta	tions below).		<del></del>	
Percent cover estimates based or	_	-	roader cor	mmunity. Grazed.	

Description: (Describe to the depth needed to document the indicator or h Matrix Redox Features		dure Remark	ks
es) Color (moist) % Color (moist) % Type <sup>1</sup> 10 YR 2/1  10 YR 7/1  N 5/0	Loc <sup>z</sup> Te	<del></del>	ks
10 YR 2/1 10 YR 7/1 3 N 5/0	Loc 1e	<del></del>	KS
10 YR 7/1 3 N 5/0			
10 YR 7/1 3 N 5/0		black mucky fine sand	
3 N 5/0	·	light gray fine sand	
		gray sandy clay loam	
		gray sandy clay	
e: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated S	Sand Grains. <sup>2</sup> Locati	n: PL=Pore Lining, M=Matrix.	
ic Soil Indicators:		Indicators for Problematic Hyd	ric Soils 3:
Histol (A1)Polyvalue Below Su	urface (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)	
Histic Epidon (A2)Thin Dark Surface (	(S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)	
Black Histic (A3)Loamy Mucky Mine	eral (F1) (LRR O)	Reduced Vertic (F18) (outside	de MLRA 150A, E
Hydrogen Sulfide (A4) Loamy Gleyed Matr	rix (F2)	Piedmont Floodplain Soils (F	19) (LRR P. S. T)
Stratified Layers (A5)Depleted Matrix (F3		Anomalous Bright Loamy So	
Organic Bodies (A6) (LRR P, T, U)Redox Dark Surface		(MLRA 153B)	
		Red Parent Material (TF2)	
== .	• •	Very Shallow Dark Surface (	TC12\
Muck Presence (A8) (LRR U)Redox Depressions	` '		1 F 12) (LKK 1, U)
1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)	)	Other (Explain in Remarks)	
Depleted Below Dark Surface (A11)Depleted Orchric (F	F11) (MLRA 151)		
Thick Dark Surface (A12)Iron-Manganese Ma	asses (F12) (LRR O, P,T)	3	
Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F1		<sup>3</sup> Indicators of hydrophytic vegetat	
		hydrology must be present, unles	s disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17)		problematic.	
Sandy Gleyed Matrix (S4)Reduced Vertic (F1	18) (MLRA 150A, 150B)		
Sandy Redox (S5)Piedmont Floodplain	in Soils (F19) <b>(MLRA 149A</b>		
Stripped Matrix (S6)Anomalous Bright L	Loamy Soils (F20) (MLRA	49A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)			
rictive Layer (If observed):			
Type:			
Depth (inches):	Hydric 5	oil Present? Yes ✓ No	
arks:	Injune	10310	<del></del> -
,			
		•	

Lines	City/County: Polk		Sampling Date:_	10/12/09
	State: FL		Sampling Point:	82
	Section, Township, Range	: 6 28S 23E		
Α	Local relief (concave, conv	/ex, none): none	Slo	pe (%):
Lat: 28.082662	Long:82.0	46225	Da	tum: WGS84
		NWI classification:	NA	
pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in	Remarks)
or Hydrology	significantly disturbed?	Are circumstances	normal? Ye	sNo
or Hydrology	_naturally problematic?	(If needed, explain	any answers in R	emarks)
ite map showing sampli	ng point locations, t	ransects, impo	rtant features	, etc.
Yes No		***		
YesNo	is the Sampled Area w	ithin a Wetland?	YesNo	
Yes No				
	<del></del>			
		Secondary Indicate	ers (minimum of ty	vo required)
check all that apply)		"		
	B9)	•	, ,	
	,			` ,
	(R U)		ines (B16)	
		<del></del>		
	•	<del></del>	· •	
	- · · · · · · · · · · · · · · · · · · ·			
	· · · · · · · · · · · · · · · · · · ·			
		•	• •	
Yes No	Depth (inches): 0-36	_		
Yes No	Depth (inches):0			
Yes No	Depth (inches): 0	1		
		Present?	Yes _ No	·
ring well, aerial photos, previous	inspections), if available:			
	pical for this time of year? or Hydrology	State: FL Section, Township, Range Local relief (concave, conv Lat: 28.082662 Long:82.0  pical for this time of year? Yes/	State: FL   Section, Township, Range: 6 28S 23E   Local relief (concave, convex, none): none   Lat: 28.082662   Long: -82.046225   NWI classification: pical for this time of year?   Yes _ ✓ _ No _ or Hydrology _ significantly disturbed?   Are circumstances or Hydrology _ naturally problematic? (If needed, explain ite map showing sampling point locations, transects, impo   Yes _ ✓ _ No	State: FL Sampling Point: Section, Township, Range: 6 28S 23E  A Local relief (concave, convex, none): none State: 28 082662 Long: -82.046225 Da NWI classification: NA pical for this time of year? Yes / No

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	82
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.	00461	орсоюз:	Otatas	Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
				Species Across All Strata:	(B)
4.	· · · · · · · · · · · · · · · · · · ·			4 '	
5.				Percent of Dominant Species 50.00	(A/B)
6.				That Are OBL, FACW, or FAC:	
7.				Prevalance Index worksheet:	İ
Sapling Stratum (Plot size:	)	= Total Cove	er	Total % Cover of: Multiply by OBL species x1=	
1.				FACW speciesx2=	
2.				FAC speciesx3=	
3.				FACU speciesx4=	
4.				UPL species x5=	
5.				Column Totals: (A)	(B)
6.					
7.				Prevalance Index = B/A =	
	0	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (E	xplain)
3.	· — · — —				' '
4.				Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	must
6.				Definitions of Vegetation Strata:	
7.			•	<b>3</b>	
Herb Stratum (Plot size:)	0	= Total Cove	er	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 i	n. (7.6
1. Lindernia sp.	20	yes	OBL	cm) or larger in diameter at breast height (DBH).	
2. Paspalum notatum	20	yes	FACU	Sapling- Woody plants, excluding woody vines,	
Polygonum punctatum	15	no	FACW	approximately 20 ft (6m) or more in height and les	s than 3
Ludwigia repens	10	no	OBL	in. (7.6 cm) DBH.	
Cyperus spp.	10	no	FACW	Shrub- Woody plants, excluding woody vines,	
Hydrocotyle spp.	5	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, includin	a
8.				herbaceous vines, regardless of size. Includes w	
9.				plants, except woody vines, less than approximate	
10.				m) in height.	• ,
11.				Woody vine- All woody vines, regardless of heigh	ıt.
12.				,	
	80	= Total Cove		1	
Woody Vine Stratum (Plot size:	)	- Total Gove	,ı		
1.				1	
2.	·			<u> </u>	
3.	· ——			l., , , , ,	
4.				Hydrophytic	
5.				Vegetation Present? YesNo_	<del></del>
	0	= Total Cove	er		
Remarks: (If observed, list morph Percent cover estimates based or	-		roader co	mmunity.Grazed.	

County/soil:	DAIL	Domono

SOIL								Sampling Point:
Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the ab	sence of indicators.	)
Depth	Matrix	•			Features			•
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture	Remarks
(money)		<u> </u>	- Color (molot)					
0-6	10 YR 2/1							black mucky fine sand
6-29	10 YR 7/1							light gray fine sand
								<u> </u>
29-33	N 5/0							gray sandy clay loam
33-80	N 5/0							gray sandy clay
Type: C=0	Concentration, D=Dep	letion. RM:	Reduced Matrix. (	S=Cove	red or Coated	Sand Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol				Poho	ishia Balow Si	rface (S8) (LRR	S T III	1 cm Muck (a9) (LRR O)
	, ,		•			(S9) (LRR S, T, I		2 cm Muck (A10) (LRR S)
	Epidon (A2)						•	<del></del>
	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Mati			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR I	P, T, U)		Redo	ox Dark Surfac	e (F6)		(MLRA 153B)
5 cm l	Mucky Mineral (A7) (L	RR P.T.UI		Depl	eted Dark Surf	ace (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR		•		x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
		υ,	•		•			
1 cm l	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)	1		Other (Explain in Remarks)
Denle	ed Below Dark Surfac	re (Δ11)		Denl	eted Orchric (F	11) (MLRA 151)	1	
		æ (A11)	•					
I nick	Dark Surface (A12)				•	asses (F12) (LRI		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	<b>MLRA 150</b>	)A)	Umb	ric Surface (F1	(13) (LRR P, T, U	)	hydrology must be present, unless disturbed or
			•	Dolla	Orchric (F17)	(M) DA 151\		problematic.
	Mucky Mineral (S1) (	LRR (J, S)	•			•		F1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0-1-0
Sandy	Gleyed Matrix (S4)					8) (MLRA 150A,		
Sandy	Redox (S5)			Pied	mont Floodplai	n Soils (F19) (MI	LRA 149A)	
Stripp	ed Matrix (S6)			Anor	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)
Dorle 9	Surface (S7) (LRR P,	C T III						
							1	
	e Layer (If observed)	):	•					
	Туре:							
	Depth (inches):						Hydric Soil Preser	nt? Yes <u>√</u> No
Remarks:								
								•
					•			
					,			
						•		

Project/Site: Levy Nuclear Plant - Transmission L	nes	City/County: Polk Samplin			10/12/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FLSampli			:83	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 6 28S 23E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): none	s	lope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.082560	Long: <u>-82.0</u>	55970	D	atum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	NA		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain ir	n Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		esNo	
Are Vegetation, Soil			(If needed, explain	any answers in I	Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant feature	s, etc.	
Hydrophytic Vegetation Present?	Yes✓No		<u> </u>			
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes <u>✓</u> N	lo	
Wetland Hydrology Present?	YesNo	]			•	
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato		two required)	
Primary Indicators (minimum of one is required; of			Surface Soil (	` '		
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg		Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat			
✓ Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim Li			
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season \	Nater Table (C2	)	
Sediment Deposits (B2)	Oxidized Rhizospheres	<del> </del>				
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vi	sible on Aerial Ir	magery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No/		-			
Water Table Present?	Yes No/		- Wetland			
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology			
(includes capillary fringe)			Present?	Yes <u> </u>	lo	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	s inspections), if available:				
Remarks:						

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Po	oint:	83
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.		·		Number of Dominant Species	_	
2. 3.				That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.				Total Number of Dominant	_	
4.	-			Species Across All Strata:	<u>3</u>	(B)
5.			*****	Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cove			ultiply by:	
Sapling Stratum (Plot size:	_	- Total Cove	'	OBL species x1=	ARIDIY DY.	
1.	/			FACW species x2=		_
2.						-
2.				FACILIANS X3=		
3. 4.				FACU speciesx4=		_
<u> </u>				UPL speciesx5=(A)		<b>-</b>
5. 6.				Column Totals:(A)		– <sup>(B)</sup>
0.						
7.				Prevalance Index = B/A =		
		= Total Cove	r	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0¹		
2.				Problematic Hydrophytic Vegeta	ation' (Exp	olain)
3.						
4				<sup>1</sup> Indicators of hydric soil and wetland h		nust
5.				be present, unless disturbed or probler	natic.	
6.				Definitions of Vegetation Strata:		
7.				]		
Utanh Chartum (Diataina)	0	= Total Cove	r	Tree- Woody plants, excluding woody vir		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in heigh		(7.6
Panicum repens	40	yes	FACW	cm) or larger in diameter at breast height	(DBH).	
Setaria spp.	20	yes	FAC	Sapling- Woody plants, excluding woody		
<ol><li>Cyperus spp.</li></ol>	20	yes	FACW	approximately 20 ft (6m) or more in heigh	it and less	than 3
<ol><li>Hydrocotyle spp.</li></ol>	10	no	OBL	in. (7.6 cm) DBH.		
<ol><li>Ludwigia repens</li></ol>	5	no	OBL	Shrub- Woody plants, excluding woody v		
6. Phyla nodiflora	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in heig	ht.	
7.				Herb- All herbaceous (non-woody)plants,	, including	
8.				herbaceous vines, regardless of size. Inc	cludes woo	dy
9.				plants, except woody vines, less than app	oroximately	/ 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, regardless	of height.	
12.						
Woody Vine Stratum (Plot size:	97	= Total Cove	7			
1.						
2.			-			
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes <u>✓</u>	No	
		= Total Cove	Γ			
Remarks: (If observed, list morpho						
Percent cover estimates based on			oader cor	mmunity.		

SOIL	l: Polk- Pomona						Sampling Point:		
	•	to the dep	th needed to doc	ument the indicator o	r confirm the abs	ence of indicators.			
Depth	Matrix			Redox Features	1 2	<b>-</b> .			
(inches)	Color (moist)	<u> </u>	Color (moist)	% Type'	Loc <sup>2</sup>	Texture	Remarks		
0-6	10 YR 2/1						black mucky fine sand		
6-29	10 YR 7/1						light gray fine sand		
29-33	N 5/0						gray sandy clay loam		
33-80	N 5/0		-				gray sandy clay		
		letion, RM	Reduced Matrix, (	CS=Covered or Coated	Sand Grains.		e Lining, M=Matrix.		
•	il Indicators:						Indicators for Problematic Hydric Soils 3:		
Histol				Polyvalue Below S			1 cm Muck (a9) (LRR O)		
	Epidon (A2)			Thin Dark Surface		)	2 cm Muck (A10) (LRR S)		
	Histic (A3)			Loamy Mucky Mine			Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4) ied Layers (A5)			Loamy Gleyed Mar Depleted Matrix (F			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ied Layers (AS) nic Bodies (A6) (LRR F	P. T. UI		Redox Dark Surface			Anomalous Bright Loamy Soils (F20) (MLRA 153B)		
	, , ,			Depleted Dark Sur	` '		Red Parent Material (TF2)		
	Mucky Mineral (A7) (L				• •		Very Shallow Dark Surface (TF12) (LRR T, U)		
	Presence (A8) (LRR	U)		Redox Depression	, ,				
1 cm l	Muck (A9) (LRR P,T)			Marl (F10) (LRR U	)		Other (Explain in Remarks)		
Deple	ted Below Dark Surfac	æ (A11)		Depleted Orchric (	F11) (MLRA 151)				
Thick	Dark Surface (A12)			Iron-Manganese M	lasses (F12) (LRR	O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
Coast	Prairie Redox (A16) (	MLRA 150	A)	Umbric Surface (F	13) (LRR P, T, U)		hydrology must be present, unless disturbed or		
			-	Delta Orchric (F17	(MI DA 151)		problematic.		
	Mucky Mineral (S1) (I	LKK U, S)		Reduced Vertic (F			F		
	Gleyed Matrix (S4) Redox (S5)			Piedmont Floodpla		•			
	ed Matrix (S6)					(MLRA 149A, 153C	1530)		
		- <b>-</b>		Alomaious Bright	Loanly Jons (1 20)	(11110) 1437, 1330	, 1000)		
	Surface (\$7) (LRR P,					r			
	e Layer (if observed)	:							
	Type: Depth (inches):					Hydric Soil Preser	nt? Yes ✓ No .		
Remarks:	Deptit (inches).					nyuric Soil Preser	itr res v No		
rtemarks.									
ı	r								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ugh	_Sampling Da	te: 10/12/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Po	int: <u>84</u>	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 1 28S 22E				
Landform (hillslope, terrace, etc.):N/A	<u> </u>	Local relief (concave, con-	vex, none): none		_Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.082534	Long:82.0	056116		Datum: WGS84	
Soil Map Unit Name: Myakka fine sand			NWI classification:	NA		
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		Yes/No	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers	n Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featu	res, etc.	
Hydrophytic Vegetation Present?	Yes✓ No					
Hydric Soil Present?	Yes No	is the Sampled Area v	vithin a Wetland?	Yes✓	No	
Wetland Hydrology Present?	Yes✓ No					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ore (minimum	of two required)	
Primary Indicators (minimum of one is required; c	theck all that apply)		Surface Soil		or two required)	
✓ Surface Water (A1)	Water-Stained Leaves (I	R9)		. ,	ve Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	50,	Drainage Pat		vo canace (Bo)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	, ,		
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (	C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	<del></del>			,	
Drift Deposits (B3)	Presence of Reduced Iro			sible on Aeria	Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	• ,	Geomorphic			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral			
Field Observations:		<u> </u>	1			
Surface Water Present?	Yes No	Depth (inches): 0-6				
Water Table Present?	Yes No	Depth (inches): 0	.1			
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)			Present?	Yes _<	No	
Describe Recorded Data (stream gauge, monitor Remarks:	ing well, aerial photos, previous	inspections), if available:				

VEGETATION - Use scientific na	mes of plants				Sampling Poir	nt:	84
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:		
Tree Stratum (Plot size:)	Cover	Species?	Status				
1.				Number of Dominant Spe	ecies	2	<b>(A)</b>
2.				That Are OBL, FACW, or	FAC:	<u>2</u>	(A)
3.			-	Total Number of Domina	nt	^	(D)
4.				Species Across All Strata	a:	2	(B)
5.	-	-		Percent of Dominant Spe	ocioc		
6.	<del></del>			That Are OBL, FACW, or		00.00	(A/B)
7.				Prevalance Index works			
		= Total Cove	er	Total % Cover of:		iply by:	
Sapling Stratum (Plot size:	)	,		OBL species	x1=		
1.				FACW species	x2=		-
2.			-	FAC species	x3=		-
3.			-	FACU species	x4=		-
4.	<del> </del>			UPL species	x5=		-
5.				-			- /D\
	·			Column Totals:	(A)		_(B)
6.				Durandan and Indian	D/A -		
7.		T-1-10		Prevalance Index =			
	, 0	= Total Cove	er	Hydrophytic Vegetation			
Shrub Stratum (Plot size:	)			✓ Dominance Test i			
1.				Prevalence Index			
2.				Problematic Hydr	ophytic Vegetati	ion' (Exp	ılain)
3.				<u> </u>			
4.				Indicators of hydric soil			านรt
5. 6.				be present, unless distur		atic.	
6.				Definitions of Vegetation	on Strata:		
7.							
	0	= Total Cove	er	Tree- Woody plants, exclւ	iding woody vine	s,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) o	r more in height	and 3 in.	(7.6
1. Panicum repens	50	yes	FACW	cm) or larger in diameter a	it breast height (I	DBH).	
2. Cyperus spp.	20	yes	FACW	Sapling- Woody plants, e	xcluding woody v	rines,	
3. Ludwigia repens	15	no	OBL	approximately 20 ft (6m) o			than 3
Hydrocotyle spp.     Eupatorium capillifolium	10	no	OBL	in. (7.6 cm) DBH.			
5. Eupatorium capillifolium	2	no	FACU	Shrub- Woody plants, exc	luding woody vir	nes,	
6.				approximately 3 to 20 ft (1			
7.				Herb- All herbaceous (nor	n-woody)nlants i	ncludina	
8.	- <del> </del>			herbaceous vines, regard			dv
9.				plants, except woody vine			
10.	· — — —			m) in height.		•	•
11.	-			Woody vine- All woody vi	nes regardless o	of height	
12.				1	,ga.a	g	
12.	97	= Total Cove		1			
   Woody Vine Stratum (Plot size:	) ,	- Total Gove	<b>.</b>				
1.	/						
2.	·			1			
3.							
4.				 			
4. 5.				Hydrophytic	Voc.	Al-	
J.		= Total Carr		Vegetation Present?	Yes <u>√</u>	No	<del></del>
Domarka: (If observed list manuf	0	= Total Cove	=1				
Remarks: (If observed, list morph Percent cover estimates based o			rnader co	mmunity			

h Matrix	to the depth need		x Features	ommin the ab					
es) Color (moist)	% Color	r (moist) %	Type <sup>1</sup>	Loc <sup>z</sup>	Texture		Remarks		
10 YR 3/1						very dark gray fi	ne sand		
10 YR 6/1						gray fine sand	no dana		
5 YR 5/1		<del></del>				black fine sand			
371(3/1		<del></del>	<del></del>		common medium	Didok fine Sand			
6 7.5 YR 3/2	10 YR	2/1			masses	dark brown fine	hnes		
7.0 111 0.2					maddad	dant brown into			
e: C=Concentration, D=Depl	etion, RM=Reduc	ed Matrix, CS=Cove	ered or Coated Sa	nd Grains.	<sup>2</sup> Location: PL=Pore				
ic Soil Indicators:							blematic Hydric Soils 3:		
Histol (A1)			yvalue Below Surfa			1 cm Muck (a9			
Histic Epidon (A2)			n Dark Surface (S9			2 cm Muck (A1			
Black Histic (A3)			ımy Mucky Mineral		-		c (F18) (outside MLRA 150A, I		
Hydrogen Sulfide (A4)			my Gleyed Matrix	(F2)	-	Piedmont Floo	dplain Soils (F19) (LRR P, S, T		
Stratified Layers (A5)			oleted Matrix (F3)	<b>-</b> 00	_		ght Loamy Soils (F20)		
Organic Bodies (A6) (LRR P	, 1, 0)		dox Dark Surface (	-		(MLRA 153B			
5 cm Mucky Mineral (A7) (Lf			oleted Dark Surface	• •	-	Red Parent Ma	• •		
Muck Presence (A8) (LRR (	j)	Rec	dox Depressions (F	<sup>-</sup> 8)	-		oark Surface (TF12) (LRR T, U)		
cm Muck (A9) (LRR P,T)		Mar	rl (F10) (LRR U)		-	Other (Explain	in Remarks)		
Depleted Below Dark Surfac	e (A11)	Dep	oleted Orchric (F11	) (MLRA 151)	1				
Thick Dark Surface (A12)	, ,	Iron	-Manganese Mass	es (F12) (LRI	R O, P,T) 3	3			
Coast Prairie Redox (A16) (	MI DA 150A)		bric Surface (F13)	(LRR P. T. U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or			
	•			•		problematic.			
Sandy Mucky Mineral (S1) (L	.RR (), S)		ta Orchric (F17) (N		•	orobiomano.			
Sandy Gleyed Matrix (S4)			duced Vertic (F18)	•	•				
Sandy Redox (S5)			dmont Floodplain S		-RA 149A) ) (MLRA 149A, 153C,	153D)			
Stripped Matrix (S6)		And	maious brigin Loa	iny Sons (F20	) (WILKA 149A, 153C,	1530)			
Dark Surface (S7) (LRR P, S	· · · · · · · · · · · · · · · · · · ·				T				
rictive Layer (If observed):									
Type: Depth (inches):					Hydric Soil Present	? Yes	✓ No .		
arks:					Invalic Son Fresein	ir res_	, NO		
ano.									

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date:			e: <u>10/12/09</u>	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point:			nt:85	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 1 28S 22E				
Landform (hillslope, terrace, etc.): N/A	·	Local relief (concave, con	vex, none): <u>none</u>		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.082802	Long: <u>-82.</u>	056244		Datum: WGS84	
Soil Map Unit Name: Basinger fine sand			NWI classification			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	_ (If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal?	YesNo	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in	Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>			transects, impo	ortant featur	es, etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes	No	
Wetland Hydrology Present?	Yes No	]				
Remarks:						
		,				
HYDROLOGY					<del></del>	
Wetland Hydrology Indicators:			Secondary Indicat		f two required)	
Primary Indicators (minimum of one is required; of			Surface Soil	• •		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)		getated Concav	e Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)		
✓ Saturation (A3)	RR U)	Moss Trim L	ines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C	2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rrows (C8)		
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	isible on Aerial	Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction is	n Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	1	Shallow Aqu	uitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutra	l Test (D5)	<del>,</del>	
Field Observations:						
Surface Water Present?	Yes No		_{			
Water Table Present?	Yes No	_ Depth (inches):0	- Wetland			
Saturation Present?	Yes No	_ Depth (inches):0	- Hydrology			
(includes capillary fringe)			Present?	Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:				
Remarks:						
:						

VEGETATION - Use scientific na	mes of plants			··-	pling Point:	85
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	- <del></del>	
1.				Number of Dominant Species	<u>2</u>	(A)
2.				That Are OBL, FACW, or FAC:	₹	(A)
3.				Total Number of Dominant	<u>3</u>	(B)
4.				Species Across All Strata:	2	(6)
5.				Percent of Dominant Species	<u>66.67</u>	(A/B)
6.				That Are OBL, FACW, or FAC:	<u>00.07</u>	(A/D)
7.				Prevalance Index worksheet:	*	
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	_
2.				FAC species	x3=	
3.	-			FACU species	x4=	_
4.	- <del> </del>			UPL species	x5=	
5.				Column Totals:	(A)	(B)
6.				1	_ ` ′	<b>-</b> ` ′
7.	-			Prevalance Index = B/A =		
		= Total Cove	ſ	Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.	<del></del> ·			Prevalence Index is ≤3.	0 <sup>1</sup>	
2.	-			Problematic Hydrophytic		olain)
3.				<u> </u>		•
4.				<sup>1</sup> Indicators of hydric soil and we	etland hydrology n	nust
5.		-		be present, unless disturbed or		
6.				Definitions of Vegetation Stra		
7.				1		
Herb Stratum (Plot size:)	0	= Total Cove	r	Tree- Woody plants, excluding wapproximately 20 ft (6m) or more		<i>(</i> 7.6
•	40	voe	FACU	cm) or larger in diameter at breas		(1.0
Paspalum notatum     Micranthemum spp.	- <del>40</del> 30		OBL	4		
	20	yes	OBL	Sapling- Woody plants, excludin approximately 20 ft (6m) or more		than 3
<ol> <li>Ludwigia spp.</li> <li>4.</li> </ol>		yes	OBL	in. (7.6 cm) DBH.	in neight and less	ulali 3
5.				Shrub- Woody plants, excluding	woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m	) in height.	
7.				Herb- All herbaceous (non-wood	y)plants, including	
8.				herbaceous vines, regardless of	-	dy
9.				plants, except woody vines, less	than approximately	/ 3 ft (1
10.				m) in height.		
11.	· ———			Woody vine- All woody vines, re	gardless of height.	
12.				1		
Woody Vine Stratum (Plot size:_ 1.	90	= Total Cover	r			
2.				1		
3.						
4.				Hydrophytic		
<u>.</u>				Variation Business Var	. / No	

0 = Total Cover

Percent cover estimates based on meandering survey of the broader community. Grazed.

Adapted from U.S. Army Corps of Engineers

Atlantic and Gulf Coastal Plain Region-Interim Version

Remarks: (If observed, list morphological adaptations below).

-	il: Polk-Basinger											amalia	a Doints	
SOIL	(D						F:4:41					ampini	g Point:	
	escription: (Describe	to the dep	oth needed to doc			confirm the aps	ence of indicators.)	į						
Depth	Matrix				Features						_			
(inches)	Color (moist)	%	Color (moist)	%_	Type <sup>1</sup>	Loc²	Texture				Rem	narks		
^ 0	40 VD 2/4							block mu	lu fino	annd				
0-6	10 YR 2/1 10 YR 7/1							black mu						
6-29				. —				light gray						
29-33	N 5/0	- —						gray sand		ioam				
33-80	N 5/0							gray sand	dy clay					
		- ——												
	Concentration, D=Dep	letion, RM=	=Reduced Matrix, (	CS=Cover	red or Coated S	3and Grains.	<sup>2</sup> Location: PL=Pore							
	oil Indicators:			5.1		:= 0: 0 BB		Indicators f				ydric a	3oils ":	
Histol						rface (S8) (LRR S		1 cm M						
	Epidon (A2)					(S9) (LRR S, T, U	) .	2 cm M						
	Histic (A3)					ral (F1) (LRR O)							VILRA 150A, E	
	ogen Sulfide (A4)				ny Gleyed Matri								(LRR P, S, T)	)
	fied Layers (A5)				eted Matrix (F3			Anomai			amy	Soils (F	F20)	
Organ	nic Bodies (A6) (LRR F	<i>?</i> , T, U)			ox Dark Surface				A 153B)					
5 cm	Mucky Mineral (A7) (LI	RR P,T,U)	<b>)</b>	Depl	leted Dark Surfa	ace (F7)		Red Pa	rent Ma	iterial (	(TF2)	)		
	Presence (A8) (LRR			Redo	ox Depressions	(F8)		Very Sh	nallow D	ark S	urfac	e (TF1	2) (LRR T, U)	١.
_	, ,,	5,			(F10) (LRR U)	` '	-	Other (I				•	L) (L ,	
	Muck (A9) (LRR P,T)			_	. , , ,		-	Outer \.	Expla	III No.	Hans	<i>i)</i>		
Deple	eted Below Dark Surface	ce (A11)		Deple	eted Orchric (F	11) (MLRA 151)								
Thick	Dark Surface (A12)			Iron-	Manganese Ma	asses (F12) (LRR	(O, P,T)	31 - diaptore (	- f hudro	-hadin		tation.	tland	
	t Prairie Redox (A16) (	/MI DΔ 15(					"Indicators o hydrology m					and wetland		
	, ,,	•	•				,	nygrology m problematic.		)[ESG	II, Um	655 ui.	Sturbeu oi	
	y Mucky Mineral (S1) (I	LRR O, S)	)		a Orchric (F17)	•		рговістівно.						
	y Gleyed Matrix (S4)					8) (MLRA 150A,								
	y Redox (S5)					n Soils (F19) (MLI								
Stripp	oed Matrix (S6)			Anon	nalous Bright L	oamy Soils (F20)	(MLRA 149A, 153C,	, 153D)						
Dark !	Surface (S7) (LRR P,	S. T. U)												
	e Layer (If observed)					7								
	Type:					,	ĺ							
	Depth (inches):				•	1	Hydric Soil Present	17	Yes _	✓_	_ No			
Remarks:							,	<del></del>						
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nes	City/County: Hillsborou	igh	_Sampling Date: 10/12/09			
	State:FL		Sampling Poi	nt: <u>86</u>		
	Section, Township, Range: 1 28S 22E					
	Local relief (concave, conv	/ex, none): none		Slope (%):		
Subregion (LRR or MLRA): LRR U Lat: 28.082678				Datum: WGS84		
		NWI classification:	. <u>NA</u>			
ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain	in Remarks)		
or Hydrology	significantly disturbed?			YesNo		
or Hydrology	_naturally problematic?	(If needed, explain	any answers i	n Remarks)		
e map showing sampli	ng point locations, t	ransects, impo	rtant featu	res, etc.		
Yes No						
Yes/No	is the Sampled Area w	ithin a Wetland?	Yes	No		
Yes/ No	]					
		Secondary Indicate	ors (minimum o	of two required)		
heck all that apply)		<del></del>				
	B9)		getated Concave Surface (B8)			
Aquatic Fauna (B13)	•		-			
Marl Deposits (B15) (LR	R U)	Moss Trim Li	ines (B16)			
		Dry-Season	Water Table (0	(2)		
	•		rrows (C8)			
Presence of Reduced in	on (C4)	Saturation V	Visible on Aerial Imagery (C9)			
Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)			
Algal Mat or Crust (B4)Recent Iron Reduction in Iron Deposits (B5)Thin Muck Surface (C7)						
Other (Explain in Remar	·ks)	FAC Neutral	FAC Neutral Test (D5)			
Yes No	Depth (inches): 0-36	1				
Yes No	Depth (inches): 0	l				
		1				
		Present?	Yes _	No		
ng well, aenal photos, previous	inspections), if available:					
	ical for this time of year? or Hydrology e map showing sampli Yes  No Yes  No Yes  No  Heck all that apply) Water-Stained Leaves ( Aquatic Fauna (B13) Marl Deposits (B15) (LR Hydrogen Sulfide Odor ( Oxidized Rhizospheres Presence of Reduced In Recent Iron Reduction in Thin Muck Surface (C7) Other (Explain in Reman	State: FL Section, Township, Range Local relief (concave, conv Lat: 28.082678 Long:82.0  ical for this time of year? Yes/ or Hydrology significantly disturbed? or Hydrology naturally problematic?  e map showing sampling point locations, toward to the sampled Area we heck all that apply)  Water-Stained Leaves (B9)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)	State: FL Section, Township, Range: 1_28S_22E Local relief (concave, convex, none): _none Lat: 28.082678	State: FL Sampling Poil Section, Township, Range: 1 28S 22E Local relief (concave, convex, none): none  Lat: 28.082678		

VEGETATION - Use scientific na	mes of plants				Sampling Point:	86	
	Absolute %	Dominant	Indicator	Dominance Test Works	neet:		
Tree Stratum (Plot size:)	Cover	Species?	Status				
1.				Number of Dominant Spe		(A)	
2.				That Are OBL, FACW, or	FAC.	. ,	
3.				Total Number of Dominar	• ,	(B)	
4.				Species Across All Strata	: =	(-)	
5.				Percent of Dominant Spe	111111111	(A/B)	
6.				That Are OBL, FACW, or	FAC:	(,,,,,	
7.	-			Prevalance Index works	heet:		
		= Total Cove	er	Total % Cover of:	Multiply by:		
Sapling Stratum (Plot size:	)			OBL species _	x1=		
1.				FACW species	x2=	_	
2.				FAC species	x3=		
3.				FACU species	x4=		
4.				UPL species	x5=		
5.				Column Totals:	(A)	(B)	
6.							
7.				Prevalance Index = E			
	0	= Total Cove	er	Hydrophytic Vegetation	Indicators:		
Shrub Stratum (Plot size:	)			✓ Dominance Test is	50%		
1.				Prevalence Index i	s ≤3.0 <sup>1</sup>		
2.				Problematic Hydro	phytic Vegetation <sup>1</sup> (Ex	plain)	
3.							
4.				Indicators of hydric soil a	nd wetland hydrology r	nust	
5.				be present, unless disturb			
6.				Definitions of Vegetation	n Strata:		
7.	-						
	0	= Total Cove	er	Tree- Woody plants, exclud	ding woody vines,		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or	more in height and 3 in	(7.6	
Nuphar luteum	40	yes	OBL	cm) or larger in diameter at	breast height (DBH).		
2. Bacopa spp.	30	yes	OBL	Sapling- Woody plants, ex	cluding woody vines,		
3. Hydrocotyle spp.	5	no	OBL	approximately 20 ft (6m) or more in height and less			
Panicum repens	5	no	FACW	in. (7.6 cm) DBH.			
5. Ludwigia repens	5	no	OBL	Shrub- Woody plants, excluding woody vines,			
6. Cyperus spp.	2	no	FACW	approximately 3 to 20 ft (1 t	o 6 m) in height.		
7. Eupatorium capillifolium	2	no	FACU	Herb- All herbaceous (non-	-woody)plants, including		
8.				herbaceous vines, regardle			
9.	·			plants, except woody vines	, less than approximatel	y 3 ft (1	
10.	·			m) in height.			
11.				Woody vine- All woody vin	es, regardless of height	•	
12.							
	89	= Total Cove	r				
Woody Vine Stratum (Plot size:	)						
1.							
2.		C <sub>100</sub>		1			
3.					<del> </del>		
4.				Hydrophytic			
5.	-			Vegetation Present?	Yes✓No		
		= Total Cove	er	J			
Remarks: (If observed, list morph	ological adapta				<del></del>		
Percent cover estimates based or	-	•	roader cor	mmunity. Grazed.			

County/soil: Hillsborough-Myakka	
SOIL	

SOIL Drofile De	carintian /Decaribe	to the dee	th pooded to doe	ımant th	o indicator or	confirm the abo	ance of indicators \	Sampling Politit. 60
	scription: (Describe	to the dep	tn needed to doc		e indicator or Features	confirm the abs	sence of indicators.)	
Depth (inches)	Matrix Color (moist)		Color (moist)	%	Type	Loc²	Texture	Remarks
(IIICHES)	Color (moist)		Color (moist)		Турс		Texture	Nemaks
0-5	10 YR 3/1							very dark gray fine sand
5-20	10 YR 6/1							gray fine sand
20-25	N 2/0							black fine sand
25-30	5 YR 3/3							dark reddish brown fine sand
				—				
Type: C=0	Concentration, D=Depl	etion, RM=	Reduced Matrix, C	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric So	il Indicators:						1	ndicators for Problematic Hydric Soils 3:
Histol	(A1)			Poly	value Below Sur	face (S8) (LRR	S, T, U) _	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (\$	69) (LRR S, T, L	J) _	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loar	ny Mucky Miner	al (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				eted Matrix (F3)		_	Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	', T, U)		Red	ox Dark Surface	(F6)		(MLRA 153B)
5 cm l	Mucky Mineral (A7) (LI	RR P,T,U)		Depl	eted Dark Surfa	ce (F7)	_	Red Parent Material (TF2)
Muck	Presence (A8) (LRR I	J)		Red	ox Depressions	(F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
		- (044)	•			11) (MLRA 151)	_	
	ted Below Dark Surfac	e (A11)	•		-			
	Dark Surface (A12)				_	sses (F12) (LRF		Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	MLRA 150	A) .	Umb	ric Surface (F1	3) (LRR P, T, U)	•	hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (I	RR O, S)		Delta	Orchric (F17)	(MLRA 151)	t	problematic.
	Gleyed Matrix (S4)			Red	uced Vertic (F18	) (MLRA 150A,	150B)	
	Redox (S5)			Pied	mont Floodplain	Soils (F19) (ML	.RA 149A)	
Stripp	ed Matrix (S6)			Anor	nalous Bright Lo	amy Soils (F20)	(MLRA 149A, 153C,	153D)
Dark S	Surface (S7) (LRR P, S	S. T. U)						
	e Layer (If observed)							
	Туре:							
	Depth (inches):						Hydric Soil Present	? Yes ✓ No .
Remarks:		<del>````</del>					1 7	
}								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	e: <u>10/13/09</u>			
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 87				
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range				
Landform (hillslope, terrace, etc.): N/A	4	Local relief (concave, con	vex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.08248</u> ′	1 Long: <u>-82.(</u>	057318		Datum: WGS84	
Soil Map Unit Name: Myakka fine sand		<del></del>	NWI classification	n: <u>NA</u>		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstance		YesNo	
	or Hydrology		(If needed, explain	n any answers ir	Remarks)	
SUMMARY OF FINDINGS - Attach sit				•		
Hydrophytic Vegetation Present?	Yes <u> ✓ No</u>					
Hydric Soil Present?	Yes✓ No	Is the Sampled Area v	within a Wetland?	Yes <u></u> ✓	No	
Wetland Hydrology Present?	Yes No	]				
Remarks:		<del>2</del>	<u> </u>			
HYDDOLOGY						
HYDROLOGY				· - (!alasas a		
Wetland Hydrology Indicators:		•	Secondary Indicat		two required)	
Primary Indicators (minimum of one is required; o			Surface Soil		- ( ma)	
Surface Water (A1)	Water-Stained Leaves (	(B9)		Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)				
Drift Deposits (B3)	Presence of Reduced Ir	ron (C4)	Saturation V	/isible on Aerial	Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic	c Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	uitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	ırks)	FAC Neutra	ıl Test (D5)		
Field Observations:			T			
Surface Water Present?	Yes No	_ Depth (inches):				
Water Table Present?	Yes No		-			
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)		_ Deput (mones)	- Hydrology Present?	Yes <u></u> ✓	No	
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous	s inspections), if available:	Fiesent:	169 7	NO	
Describe (Good Bala (Good Sange)	mg won, donar priotos, prasina	s mapoonomoj, ii avanaz				
Remarks:						
1						
	•					

VEGETATION - Use scientific na	<del></del>			· · · · · · · · · · · · · · · · · · ·	g Point:	87
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u>	(A)
	· ——					
3.				Total Number of Dominant	<u>3</u>	(B)
4. ·				Species Across All Strata:		
5.				Percent of Dominant Species	<u>66.67</u>	(A/B)
6.				That Are OBL, FACW, or FAC:		
7.				Prevalance Index worksheet:		
Sapling Stratum (Plot size:	)	= Total Cove	r	Total % Cover of: OBL speciesx1	Multiply by: =	
1.				FACW speciesx2	= .	
2.	·			FAC species x3	=	_
3.				FACU species x4		
4.	-		·	UPL species x5	=	_
5.				Column Totals: (A	)	— <sub>(B)</sub>
6.				`	·	<b>-</b> ` ′
7.				Prevalance Index = B/A =		
		= Total Cove	r	Hydrophytic Vegetation Indicato	rs:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1	·····			Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Ve	getation <sup>1</sup> (Ex	plain)
3.					3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4.				<sup>1</sup> Indicators of hydric soil and wetlar	nd hydrology r	must
5.				be present, unless disturbed or pro		
6.				Definitions of Vegetation Strata:		
7.				1		
		= Total Cove		Tree- Woody plants, excluding wood	v vines	
Herb Stratum (Plot size:)	-			approximately 20 ft (6m) or more in h		. (7.6
1. Cyperus spp.	50	yes	FACW	cm) or larger in diameter at breast he		`
Eupatorium capillifolium	20	yes	FACU	Sapling- Woody plants, excluding we	ondy vines	
Hydrocotyle spp.	20	yes	OBL	approximately 20 ft (6m) or more in h		than 3
4. Rhexia spp.	2	no	FACW	in. (7.6 cm) DBH.	J	
5. Juncus effusus	2	no	FACW	Shrub- Woody plants, excluding woo	dv vines.	
Ludwigia repens	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in		
7.				Herb- All herbaceous (non-woody)pla	ants, including	ı
8.				herbaceous vines, regardless of size	. Includes woo	ody
9.	-			plants, except woody vines, less thar	approximately	y 3 ft (1
10.	-			m) in height.		
11.				Woody vine- All woody vines, regard	lless of height.	
12.				1		
Woody Vine Stratum (Plot size:	96	= Total Cove	r			
2.	•					
3.						
4.	- <u> </u>			Hydrophytic		
5.				Vegetation Present? Yes	<u>√</u> No	<u>.</u>

Percent cover estimates based on meandering survey of the broader community.Grazed.

epth	scription: (Describe t Matrix	o die depi	in needed to doc		eatures	Ommin die abs	ence of indicators.,	
ches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc²	Texture	Remarks
	10 YR 3/1							very dark gray fine sand
	10 YR 6/1							gray fine sand
5	N 2/0						-	black fine sand
0	5 YR 3/3							dark reddish brown fine sand
	Concentration, D=Deple	etion, RM=	Reduced Matrix, (	S=Covere	ed or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Pore	
	I Indicators:							ndicators for Problematic Hydric Soils 3:
_Histol						ace (S8) (LRR S		1 cm Muck (a9) (LRR O)
	Epidon (A2)					9) (LRR S, T, U	) _	2 cm Muck (A10) (LRR S)
_Black	Histic (A3)			Loam	y Mucky Minera	l (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, E
	gen Sulfide (A4)				y Gleyed Matrix	(F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				ted Matrix (F3)		_	Anomalous Bright Loamy Soils (F20)
_Organ	ic Bodies (A6) (LRR P	, T, U)		Redox	Dark Surface	(F6)		(MLRA 153B)
5 cm M	/lucky Mineral (A7) (LF	R P.T.UI		Deple	ted Dark Surfac	e (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR L		•		Depressions (		-	Very Shallow Dark Surface (TF12) (LRR T, U)
	/luck (A9) (LRR P,T)	.,	•		F10) (LRR U)	, <del>-</del> ,	-	Other (Explain in Remarks)
	ed Below Dark Surface	- (Δ11)	•		ted Orchric (F1	1) (MLRA 151)	-	
		. (, , , , ,	•			ses (F12) (LRR	OPT)	
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)				-	. , .		Indicators of hydrophytic vegetation and wetland	
		Α) .		ic Surface (F13)			nydrology must be present, unless disturbed or problematic.	
	Mucky Mineral (S1) (L	.RR O, S)			Orchric (F17) (I	•		diobiematic.
	Gleyed Matrix (S4)					(MLRA 150A,		
_Sandy	Redox (S5)					Soils (F19) (MLI		
_Strippe	ed Matrix (S6)			Anom	alous Bright Lo	amy Soils (F20)	(MLRA 149A, 153C,	, 153D)
	Surface (S7) (LRR P, S							
	e Layer (If observed):							
	Туре:							
	Depth (inches):						Hydric Soil Present	t? Yes <u>√</u> No
narks:			•					
					•			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/13/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: 89		
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: 1 28S 22E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): none	Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.082343	Long: <u>-82.0</u>	59477	Datum: WGS84		
Soil Map Unit Name: Myakka fine sand			NWI classification:	Freshwater Emergent Wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances			
		naturally problematic?	(If needed, explain	any answers in Remarks)		
SUMMARY OF FINDINGS - Attach sit		ng point locations, t	ransects, impo	rtant features, etc.		
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes/No	Is the Sampled Area within a Wetland? YesNo				
Wetland Hydrology Present?	Yes/ No					
Remarks:		•				
HYDROLOGY						
Wetland Hydrology Indicators:				ors (minimum of two required)		
Primary Indicators (minimum of one is required; c			Surface Soil	, ,		
Surface Water (A1)	Water-Stained Leaves (I	B9)		etated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	•		
Saturation (A3)	Marl Deposits (B15) (LR	-	Moss Trim Li	, ,		
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burn			
Drift Deposits (B3)	Presence of Reduced Iro	, ,		sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic	• •		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	, ,		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)		
Field Observations:	v No /	5 4 7 1 3	-			
Surface Water Present?	YesNo		·			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	Yes No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				

VEGETATION - Use scientific na	mes of plants			Sampli	ng Point:	89
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	E	(4)
2.	-		**************	That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.				Total Number of Dominant	•	<b></b>
4.	•	-		Species Across All Strata:	<u>6</u>	(B)
5.				Percent of Dominant Species		
6.	- —			That Are OBL, FACW, or FAC:	<u>83.33</u>	(A/B)
7.		-		Prevalance Index worksheet:		
· ·		= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	- Total Gov	<b>-</b> 1	la	1=	
1. Salix spp.	30	yes	FACW	FACW species x	2=	
2. Acer rubrum	5	no	OBL		3=	_
3.				<del></del>	4=	_
4.	-			<del></del>	5=	_
5.	- ——			<del> </del>	A)	- (В)
6.	<u></u>			Coldinii Fotals.		_(0)
		-		Bravalanas Indov - B/A -		
7.		T-t-I Co		Prevalance Index = B/A =		
0. 10	35	= Total Cove	er	Hydrophytic Vegetation Indicat	ors:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Baccharis sp.	30	yes	FAC	Prevalence Index is ≤3.0¹		
Sambucus canadensis	30	yes	FACW	Problematic Hydrophytic V	′egetation¹ (Exp	olain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and wetla	and hydrology m	nust
5.				be present, unless disturbed or pr	roblematic.	
6.				Definitions of Vegetation Strata	1:	
7.	- ——					
	60	= Total Cov		Tree- Woody plants, excluding woo	dy vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in	height and 3 in.	(7.6
Ludwigia peruviana	10	yes	OBL	cm) or larger in diameter at breast t	neight (DBH).	
Urena lobata	10	ves	FACU	Sapling- Woody plants, excluding v	woody vines.	
3.				approximately 20 ft (6m) or more in		than 3
4.				in. (7.6 cm) DBH.	<b>3</b>	
5.	- ——			Shrub- Woody plants, excluding wo	nody vines	
6.				approximately 3 to 20 ft (1 to 6 m) in		
7.				1	_	
8.				Herb- All herbaceous (non-woody)		
	- ——			herbaceous vines, regardless of siz plants, except woody vines, less that		
9.				m) in height.	an approximately	/ 3 11 (1
10.				_		
11.				Woody vine- All woody vines, rega	raiess of neight.	
12.				<u>'</u>		
	20	= Total Cov	er			
Woody Vine Stratum (Plot size:	)					
Mikania scandens	10	yes	FACW			
2.	-			1		
3.						
4.				Hydrophytic		
5.	- ——			Vegetation Present?   Yes _	√ No	
	10	= Total Cov	er	1	-	
Remarks: (If observed, list morph						
Percent cover estimates based o			oroader co	mmunity.		
		,		· · · · · · · · · · · · · · · · · · ·		

County/soil: Hillsborough-Myakka
SOIL

SOIL						Sampling Point: 89
		the depth needed	to document the indicator	or confirm the abs	ence of indicators.)	
Depth	Matrix		Redox Features			
(inches)	Color (moist)	% Color (m	oist) % Type	Loc²	Texture	Remarks
0-5	10 YR 3/1					very dark gray fine sand
5-20	10 YR 6/1			<del></del> -		gray fine sand
20-25	N 2/0		<del></del>	<del>-</del>		black fine sand
25-30	5 YR 3/3					dark reddish brown fine sand
				:		
		ion, RM=Reduced M	latrix, CS=Covered or Coate	Sand Grains.	<sup>2</sup> Location: PL=Pore	
	il Indicators:		Debeselve Detess	Surface (00) (LDD 6		ndicators for Problematic Hydric Soils 3:
Histol	Epidon (A2)			Surface (S8) (LRR \$ e (S9) (LRR S, T, U)		1 cm Muck (a9) (LRR 0) 2 cm Muck (A10) (LRR S)
	Histic (A3)			eral (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		Loamy Gleyed Ma		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)		Depleted Matrix (I		-	Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P,	T, U)	Redox Dark Surfa	ice (F6)	-	(MLRA 153B)
5 cm l	Mucky Mineral (A7) (LRF	R P,T,U)	Depleted Dark Su	rface (F7)	_	Red Parent Material (TF2)
✓ Muck	Presence (A8) (LRR U)	,	Redox Depression	ns (F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm /	Muck (A9) (LRR P,T)		Marl (F10) (LRR I	J)		Other (Explain in Remarks)
	ed Below Dark Surface	(844)		(F11) (MLRA 151)	•	
	Dark Surface (A12)	(A11)		Masses (F12) (LRR	O D T1	
_		D4 4504)	-			Indicators of hydrophytic vegetation and wetland
i	Prairie Redox (A16) (MI			F13) (LRR P, T, U)		nydrology must be present, unless disturbed or
	Mucky Mineral (S1) (LR	R O, S)	Delta Orchric (F1)			problematic.
	Gleyed Matrix (\$4)			18) (MLRA 150A, 1		
	Redox (S5)			ain Soils (F19) (MLF	•	
1	ed Matrix (S6)		Anomalous Bright	Loamy Soils (F20)	MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P, S,	T, U)				
	Layer (if observed):					
	Type: Depth (inches):				Hydric Soil Present	2 Yes √ No
Remarks:	Depart (inches).				nyunc Son Freseni	!? Yes <u>√ No</u>
i cinario.						
1						
İ						·
					_	
						j
						1

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ugh	_Sampling Date:	10/13/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 90				
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	e: 1 28S 22E			
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, con-	vex, none): none	Slop	pe (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.082387</u>	Long: <u>-82.0</u>	060032	Date	um: <u>WGS84</u>	
Soil Map Unit Name: Myakka fine sand			NWI classification	: Freshwater Emer	rgent Wetland	
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes	No	_ (If no, explain in R	lemarks)	
Are Vegetation, Soil,		_significantly disturbed?	Are circumstances	s normal? Yes	:No	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Re	emarks)	
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	transects, impo	ortant features,	, etc	
Hydrophytic Vegetation Present?	Yes No		-			
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	YesNo		
Wetland Hydrology Present?	Yes No	]				
Remarks:	· · · · · · · · · · · · · · · · · · ·					
L	· · · · · · · · · · · · · · · · · · ·					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two	o required)	
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (I	(B9)	Sparsely Ve	getated Concave Si	urface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	•	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	, ,		
Drift Deposits (B3)	Presence of Reduced Iro	. ,	<del></del>	isible on Aerial Ima	aerv (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	` ,	Geomorphic		90., (2-,	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutral	, ,		
Field Observations:			T	, , , , , , , , , , , , , , , , , , , ,		
Surface Water Present?	Yes No	Depth (inches): 0-36				
Water Table Present?	Yes No		7			
Saturation Present?	Yes_ ✓ No		Wetland			
(includes capillary fringe)		_ Dopar (mones)	Hydrology Present?	Yes <u>✓</u> No		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	Fiesent.	100 7 100		
200,100	mg from across posterior, posterior					
Remarks:						
1						
1						
1						

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	90
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.	·			Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	10101 0010	•	OBL species x1=	
1.				FACW species x2=	-
2.				FAC species x3=	-
3.				FACU species x4=	_
4.				UPL species x5=	-
<del>4.</del> 5.				Column Totals: (A)	— (В)
6.				Column Totals. (A)	~ <sup>(b)</sup>
7.				Prevalance Index = B/A =	
1.		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plat siza:		- Total Cove	T.	✓ Dominance Test is 50%	
Shrub Stratum (Plot size:	/			Prevalence Index is ≤3.0¹	
1.					اددنداد
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.				<b>1</b>	
4.				Indicators of hydric soil and wetland hydrology n	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
Hart Chart or (District or )	0	= Total Cove	r	Tree- Woody plants, excluding woody vines,	<i>(</i> 7.0
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in.	(7.6
Panicum repens	30	yes	FACW	cm) or larger in diameter at breast height (DBH).	
2. Cyperus spp.	20	yes	FACW	Sapling- Woody plants, excluding woody vines,	
3. Ludwigia spp.	10	no	OBL	approximately 20 ft (6m) or more in height and less	than 3
Hydrocotyle spp.	55	no	OBL	in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	
9.				plants, except woody vines, less than approximately	y 3 π (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	,
12.					
	65	= Total Cove	r.		
Woody Vine Stratum (Plot size:	)			, ,	
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	
	0	= Total Cove	r	<u> </u>	
Remarks: (If observed, list morph	ological adapta	tions below).	-		
Percent cover estimates based or	n meandering s	urvey of the b	roader cor	mmunity.	

-	l: Hillsborough-Myakk	a						Sampling Point:
OIL								
	•	to the dep	oth needed to doc			confirm the ab	sence of indicators.)	· ·
pth ches)	Matrix		Color (maint)	Redox F	Type Type	Loc²	Texture	Remarks
nes)	Color (moist)		Color (moist)	<u> </u>	туре		TEXTUTE	- Iverilains
	10 YR 3/1							very dark gray fine sand
<del></del>	10 YR 6/1							gray fine sand
25	N 2/0							black fine sand
30	5 YR 3/3							dark reddish brown fine sand
						-		The state of the s
pe: C=0	Concentration, D=Dep	letion, RM	=Reduced Matrix, (	S=Covere	d or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
iric So	il Indicators:						1	ndicators for Problematic Hydric Soils 3:
_Histol	(A1)			Polyva	lue Below Su	ırface (S8) (LRR	S, T, U) _	1 cm Muck (a9) (LRR O)
- Histic	Epidon (A2)			Thin D	ark Surface (	S9) (LRR S, T, I	J)	2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				Gleyed Matr		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				ed Matrix (F3		-	Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR I	P, T, U)			Dark Surfac		-	(MLRA 153B)
	Mucky Mineral (A7) (L				ed Dark Surf	• •		Red Parent Material (TF2)
			,		Depressions		-	Very Shallow Dark Surface (TF12) (LRR T, U)
_	Presence (A8) (LRR	U)			•		-	
1 cm	Muck (A9) (LRR P,T)			Marl (F	10) (LRR U)	1	-	Other (Explain in Remarks)
Deple	ted Below Dark Surface	ce (A11)		Deplet	ed Orchric (F	11) (MLRA 151)	)	
	Dark Surface (A12)	` ,		Iron-M	anganese Ma	asses (F12) (LRI	R O, P.T)	
_		NAL DA 1E	0.4.)		-	3) (LRR P, T, U)	Indicators of hydrophytic vegetation and wetland	
Coast Prairie Redox (A16) (MLRA 150A)		•				nydrology must be present, unless disturbed or problematic.		
_Sandy	Mucky Mineral (S1) (	LRR O, S	)	Delta (	Orchric (F17)	(MLRA 151)	ŀ	эгоріетіанс.
_Sandy	Gleyed Matrix (S4)			Reduc	ed Vertic (F1	<ol><li>(MLRA 150A,</li></ol>	, 150B)	
_Sandy	Redox (S5)			Piedme	ont Floodplai	n Soils (F19) (M1	LRA 149A)	
_Stripp	ed Matrix (S6)			Anoma	alous Bright L	oamy Soils (F20	) (MLRA 149A, 153C,	, 153D)
Dark :	Surface (S7) (LRR P,	S, T, U)						
	e Layer (If observed)						1	
	Type:	,.						
	Depth (inches):						Hydric Soil Present	t? Yes✓_ No
marks:	Boput (mono).						1,	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	Sampling Date	:10/13/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point	t: <u>91</u>	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 1 28S 22E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	s	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.082401	Long:82.0	68380		Datum: WGS84	
Soil Map Unit Name: Basinger fine sand			NWI classification;	NA		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in	n Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances normal? YesNo			
Are Vegetation, Soil,	or Hydrology	naturally problematic? (If needed, explain any answers in Remarks)				
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing samplii	ng point locations, t	ransects, impo	rtant feature	es, etc.	
Hydrophytic Vegetation Present?	Yes No	·				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes/	10	
Wetland Hydrology Present?						
Remarks:						
<u> </u>						
HYDROLOGY			·			
Wetland Hydrology Indicators:		<u> </u>	Secondary Indicate	rs (minimum of	two required)	
Primary Indicators (minimum of one is required; c	heck all that apply)	Surface Soil Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves (E	39)	Sparsely Veg	etated Concave	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season \	Vater Table (C2	)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burn	ows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)Saturation Visible on Aerial Imagery			magery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)Geomorphic Position (D				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	uitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No		_			
Water Table Present?	Yes No	Depth (inches): 0	184-411			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology			
(includes capillary fringe)			Present?	Yes 🗸 N	lo	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				
Remarks:						

VEGETATION - Use scientific na	mes of plants			Samplin	g Point:	91
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.	00101	орожов.	Otatao	Number of Dominant Species		
2.				That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.		·		Total Number of Dominant		
4.				Species Across All Strata:	<u>6</u>	(B)
5.				₫ '		
6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>83.33</u>	(A/B)
7.				Prevalance Index worksheet:		
1.		= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	١	- Total Cove	<b>5</b> 1	OBL species x1=		
Salix spp.	/ 10	yes	FACW	FACW species x2=		_
Acer rubrum	2	no	OBL	FAC species x3=		_
3.		110	OBL	FACU species x4=		_
4.	- ——			UPL species x5=		_
5.	<del></del>			Column Totals: (A)		— <sub>(В)</sub>
6.				Coldinii Totais.		— (B)
7.				Drovelence Index = R/A =		
· · ·	12	= Total Cov		Prevalance Index = B/A = Hydrophytic Vegetation Indicator		
Shrub Stratum (Blot nizo:	12	- Total Covi	51	✓ Dominance Test is 50%	5.	
Shrub Stratum (Plot size:	)		ODI	Prevalence Index is ≤3.0 <sup>1</sup>		
Ludwigia peruviana	40	yes	OBL	· <del>L</del>	<b></b> 1 <i>(</i> =	-1-:->
2. Baccharis sp.	15	yes	FAC	Problematic Hydrophytic Ve	getation (Exp	olain)
3.				1,		
4.				<sup>1</sup> Indicators of hydric soil and wetlan		nust
5.			. —	be present, unless disturbed or pro Definitions of Vegetation Strata:	biematic.	
6.				Demilitions of Vegetation Strata.		
7.				<u> </u>		
Herb Stratum (Plot size:)	55	= Total Cov		Tree- Woody plants, excluding woody approximately 20 ft (6m) or more in he	eight and 3 in.	(7.6
Bidens spp.	10	yes	FACW	cm) or larger in diameter at breast he	ight (DBH).	
<ol><li>Andropogon glomeratus</li></ol>	10	yes	FACW	Sapling- Woody plants, excluding wo	-	
Eupatorium capillifolium	10	yes	FACU	approximately 20 ft (6m) or more in he	eight and less	than 3
Cynodon dactylon	2	no	FACU	in. (7.6 cm) DBH.		
<ol><li>Pontederia cordata</li></ol>	2	no	OBL	Shrub- Woody plants, excluding woo		
Panicum hemitomon	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in h	neight.	
7. Juncus effusus	2	no	FACW	Herb- All herbaceous (non-woody)pla		
<ol><li>Hydrocotyle spp.</li></ol>	2	no	OBL	herbaceous vines, regardless of size.		-
9. Phyla nodiflora	2	no	FACW	plants, except woody vines, less than	approximately	y 3 ft (1
10. Woodwardia virginica	2	no	OBL	m) in height.		
11.				Woody vine- All woody vines, regard	less of height.	
12.				]		
	44	= Total Cov	er			
Woody Vine Stratum (Plot size:	)				*	
1.				J		
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	✓No	<u>.</u>
	0	= Total Cov	er			
Remarks: (If observed, list morph	•	•				
Dargant cover actimates based a	n maandaring (	nuncou of the I	broader oo	mmunity		

								Sampling Point:
	scription: (Describe to	o the dep	oth needed to doc			confirm the abs	ence of indicators.	
Depth	Matrix			Redox F			_	
inches)	Color (moist)	%	Color (moist)	<u></u>	Type <sup>1</sup>	Loc²	Texture	Remarks
)-7	10 YR 2/1							black fine sand
<b>7-28</b>	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							
8-42	5/2							brown and grayish brown fine sand
12-80	10 YR 6/2				· · · · · · · · · · · · · · · · · · ·			light brownish gray fine sand
	Concentration, D=Deple	tion, RM	=Reduced Matrix, C	S=Covere	d or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Por	3,
nyarıc So Histol	il Indicators:			Datasa	lua Dalauu Cu	(CO) (I DD (		Indicators for Problematic Hydric Soils 3:
	Epidon (A2)		-			rface (S8) <b>(LRR :</b> S9) <b>(LRR S, T, U</b>		1 cm Muck (a9) (LRR O)
_	Histic (A3)		-			al (F1) (LRR O)	,	2 cm Muck (A10) (LRR S)
	gen Sulfide (A4)		-		Gleyed Matri		•	Reduced Vertic (F18) (outside MLRA 150A, B) Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		-		ed Matrix (F3		•	Pledmont Floodplain Soils (F19) (LRR P, S, T)Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P,	T, U)	-		Dark Surface			(MLRA 153B)
	. , ,		-		ed Dark Surfa	• ,		Red Parent Material (TF2)
				Depressions		•	Very Shallow Dark Surface (TF12) (LRR T, U)	
				10) (LRR U)	(1.0)	•	Other (Explain in Remarks)	
_	1 cm Muck (A9) (LRR P,T)							Other (Explain in Remarks)
	ted Below Dark Surface	(A11)	-	Depleted Orchric (F11) (MLRA 151)Iron-Manganese Masses (F12) (LRR O, P,T)				
	Dark Surface (A12)		-					Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (N	ILRA 150	)A) _	Umbric	Surface (F1	3) (LRR P, T, U)		nydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (L	RR O, S)	_	Delta C				problematic.
Sandy	Gleyed Matrix (S4)		_	Reduce	ed Vertic (F18	B) (MLRA 150A,	150B)	
Sandy	Redox (S5)		_	Piedmo	ont Floodplair	Soils (F19) (ML	RA 149A)	
Stripp	ed Matrix (S6)		_	Anoma	lous Bright Le	oamy Soils (F20)	(MLRA 149A, 153C	, 153D)
Dark S	Surface (S7) (LRR P, S	, T, U)						
Restrictiv	e Layer (If observed):	-						
	Туре:							
	Depth (inches):						Hydric Soil Presen	t? Yes <u>√</u> No
						* *		
						ef. 2		
Remarks:							· Jagar	
							in eye	
							in eye	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date:			10/13/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 92			:92
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 1 28S 22E			
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	/ex, none): none	8	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.082345	i Long: <u>-82.0</u>	69633		atum: WGS84
Soil Map Unit Name: Basinger fine sand			NWI classification		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain i	n Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		′esNo
	or Hydrology		(If needed, explain	any answers in	Remarks)
SUMMARY OF FINDINGS - Attach sit			•	•	*
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	Yes <u>✓</u> N	lo	
Wetland Hydrology Present?	Yes✓No				
Remarks:					
L					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of	two required)
Primary Indicators (minimum of one is required; o	check all that apply)	Surface Soil Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season	Water Table (C2	2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	isible on Aerial I	magery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	in Tilled Soils (C6)Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	7)Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar				
Field Observations:	<u> </u>				
Surface Water Present?	Yes No	Depth (inches): 0-12			
Water Table Present?	Yes No				
Saturation Present?	Yes No	Depth (inches): 0	Wetland		
(includes capillary fringe)	110	_ Bopai (monos)	Hydrology Present?	Yes <u>✓</u>	ło
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	I resence	1631	
, , , , ,	3 / 1 /1	, ,,			
				······································	
Remarks:					•

VEGETATION - Use scientific na	mes of plants				Sampling Po	oint:	92
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:		
Tree Stratum (Plot size:)	Cover	Species?	Status				
1.				Number of Dominant Spe		4	<b>(A</b> )
2.	• ——			That Are OBL, FACW, or	·FAC:	<u>1</u>	(A)
3.				Total Number of Domina	nt	4	(D)
4.				Species Across All Strata	ŧ:	<u>1</u>	(B)
5.				Percent of Dominant Spe	ecies .	400.00	(A (D)
6.			-	That Are OBL, FACW, or		<u>100.00</u>	(A/B)
7.				Prevalance Index works			
		= Total Cove		Total % Cover of:	Mul	tiply by:	
Sapling Stratum (Plot size:				OBL species	x1=		
1.				FACW species	x2=		-
2.	-			FAC species	x3=		-
3.	• ——		-	FACU species	x4=		_
4.	- —			UPL species	x5=		_
5.	<u> </u>			Column Totals:	^~(A)		– (B)
<u>6.</u>				-	(/`)		-(5)
7.	•	<del></del>	-	Prevalance Index =	R/Δ -		
1.		= Total Cove		Hydrophytic Vegetation			
Shrub Stratum (Plot size:	<u>-</u>	- Total Cove	71	✓ Dominance Test is			
· · · · · · · · · · · · · · · · · · ·	/			Prevalence Index	_		
<u>1.</u> 2.						tion <sup>1</sup> (Eve	امنما
				Problematic Hydro	phytic vegetat	'ioii (⊑xb	iain)
3.	- ——			<del> </del>  ,			
4.				Indicators of hydric soil a			iust
5.	- ——			be present, unless distur		atic.	
6.				Definitions of Vegetation	n Strata:		
7.	- —			1			
Hards Chartering (Distains)	0	= Total Cove	er	Tree- Woody plants, exclu			<i>(</i> 7.0
Herb Stratum (Plot size:)				approximately 20 ft (6m) of			(7.6
Panicum hemitomon	50	yes	OBL	cm) or larger in diameter a			
Ludwigia peruviana	15	no	OBL	Sapling- Woody plants, ex			
Juncus effusus	10	no	FACW	approximately 20 ft (6m) of	r more in height	and less t	than 3
Andropogon glomeratus	10	no	FACW	in. (7.6 cm) DBH.			
<ol><li>Hydrocotyle spp.</li></ol>	2	no	OBL	Shrub- Woody plants, exc	,	•	
6. Urena lobata	2	no	FACU	approximately 3 to 20 ft (1	to 6 m) in heigh	īt.	
7. Phyla nodiflora	2	no	FACW	Herb- All herbaceous (non			
Cyperus spp.	2	no	FACW	herbaceous vines, regardle			-
Eupatorium capillifolium	2	no	FACU	plants, except woody vines	, less than appr	oximately	3 H (1
10. Diodia virginiana	2	no	FACW	m) in height.			
11. Sesbania spp.	2	no	FAC	Woody vine- All woody vir	ies, regardless o	of height.	
12.				_			
	99	= Total Cove	er				
Woody Vine Stratum (Plot size:	)						
1.							
2.	. ——			1			
3.							
4.	- —			Hydrophytic			
5.	. ———			Vegetation Present?	Yes ✓	No	
	0	= Total Cove	er	1 ~	<del></del>		
Remarks: (If observed, list morph	ological adapta			•			
Percent cover estimates based of			roader cor	mmunity.			

IL								
		to the dep	th needed to doc			onfirm the abs	sence of indicators.	)
pth _	Matrix			Redox	eatures			
ches)	Color (moist)	%	Color (moist)	%	Type¹	Loc²	Texture	Remarks
	I0 YR 2/1							black fine sand
	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							
	5/2							brown and grayish brown fine sand
80 1	I0 YR 6/2							light brownish gray fine sand
	ncentration, D=Dep	otion DM:	-Poducod Matrix (	S=Cover	od or Coated S	and Grains	21 ocation: Dt -Por	re Lining, M=Matrix.
	ndicators:	euon, mai	-iteduced Matrix, t	JO-00 <b>V</b> 611	ed or Coaled o	and Oranis.		Indicators for Problematic Hydric Soils 3:
Histol (A				Polyv	alue Below Sur	face (S8) (LRR		1 cm Muck (a9) (LRR O)
	oidon (A2)					9) (LRR S, T, L		2 cm Muck (A10) (LRR S)
Black His					•	al (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)
_	n Sulfide (A4)				y Gleyed Matrix			Piedmont Floodplain Soils (F19) (LRR P, S, T)
_ , .	Layers (A5)			_	ted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F	T 10			k Dark Surface			(MLRA 153B)
								•
	cky Mineral (A7) (L				ted Dark Surfa			Red Parent Material (TF2)
_Muck Pr	esence (A8) (LRR	J)		Redo:	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Mu	ick (A9) (LRR P,T)			Marl (	F10) (LRR U)			Other (Explain in Remarks)
- Depleted	Below Dark Surfac	e (A11)		Deple	ted Orchric (F1	1) (MLRA 151)		
		~ (/ \				sses (F12) (LRF	O PT)	_
Thick Dark Surface (A12)Coast Prairie Redox (A16) (MLRA 150A)			-		•	<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
		A)	Umbr	ic Surface (F13	i) (LRR P, T, U)		hydrology must be present, unless disturbed or	
Sandy M	lucky Mineral (S1) (I	LRR O, S)		Delta	Orchric (F17) (	MLRA 151)		problematic.
Sandy G	leyed Matrix (S4)			Redu	ced Vertic (F18	) (MLRA 150A,	150B)	
	edox (S5)			—— Piedn	nont Floodplain	Soils (F19) (ML	.RA 149A)	
	Matrix (S6)						(MLRA 149A, 1530	C, 153D)
	rface (S7) (LRR P.	2 T III		_	· ·			•
	ayer (If observed)	<u> </u>					<b>1</b>	
	pe:	•						
	epth (inches):		<del></del>				Hydric Soil Preser	nt? Yes ✓ No .
marks:	eptit (inches).		<del></del>				Inyunc Son Fleser	itr les v No .
narks.								
	•							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ah	Sampling Date:	10/14/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Po			
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range		Camping Font.	
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv		Sir	nne (%).
Subregion (LRR or MLRA): LRR U		· ·			tum: WGS84
Soil Map Unit Name: Malabar fine sand			NWI classification:		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes ✓	_ No		Remarks)
	or Hydrology		Are circumstances		sNo
	or Hydrology		(If needed, explain		
SUMMARY OF FINDINGS - Attach sit				•	
Hydrophytic Vegetation Present?	Yes <u>√</u> No	<b>9</b>	,,		,
Hydric Soil Present?	YesNo	Is the Sampled Area w	ithin a Wetland?	Yes <u>√</u> No	·
Wetland Hydrology Present?					
Remarks:	Yes✓ No				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of ty	vo required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Secondary Indicators (minimum of two required Surface Soil Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (I	39)		etated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	30,	Drainage Pat		ounded (Bo)
✓ Saturation (A3)	Marl Deposits (B15) (LR	P III	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Vater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	-	Crayfish Burre		
Drift Deposits (B3)	Presence of Reduced Inc	• • • • • • •		sible on Aerial Ima	anery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	· ·			agery (CO)
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,,		, ,	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	Shallow Aquitard (D3)FAC Neutral Test (D5)		
Field Observations:		,	<u></u>	( ,	
Surface Water Present?	Yes No	Depth (inches): 0-24			
Water Table Present?	Yes No		1		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)		! ( - /	Hydrology Present?	Yes <u>√</u> No	•
Describe Recorded Data (stream gauge, monitori Remarks:	ng well, aerial photos, previous	inspections), if available:			:

VEGETATION - Use scientific nar	mes of plants			Sam	pling Point:	93
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species	E	/^>
2.				That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.				Total Number of Dominant	6	(B)
4.				Species Across All Strata:	<u>6</u>	(B)
5.				Percent of Dominant Species	02.22	(A /D)
6.				That Are OBL, FACW, or FAC:	<u>83.33</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1. Salix spp.	5	yes	FACW	FACW species	x2=	_
Quercus nigra	5	yes	FAC	FAC species	x3=	
3.				FACU species	x4=	_
4.				UPL species	x5=	
5.				Column Totals:	(A)	_(B)
6.					-	_
7.				Prevalance Index = B/A =		
	10	= Total Cove	er	Hydrophytic Vegetation Indica	ators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
Callicarpa americana	5	yes	FACU	Prevalence Index is ≤3.0	)1	
2.				Problematic Hydrophytic	Vegetation <sup>1</sup> (Exp	olain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and we	tland hydrology n	nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ta:	
7.						
Herb Stratum (Plot size:)	5	= Total Cove	er	Tree- Woody plants, excluding we approximately 20 ft (6m) or more		(7.6
Panicum hemitomon	30	yes	OBL	cm) or larger in diameter at breas	•	(7.0
Polygonum punctatum	20	ves	FACW	1		
Ludwigia peruviana	15	no	OBL	Sapling- Woody plants, excluding approximately 20 ft (6m) or more	•	than 3
Ludwigia perdylana     Ludwigia alata	10	no	OBL	in. (7.6 cm) DBH.	Holgin and 1000	andir o
5. Juncus effusus	5	no	FACW	Shrub- Woody plants, excluding	woody vines	
6. Myriophyllum brasiliense		no	OBL	approximately 3 to 20 ft (1 to 6 m)		
7.	· ——		<u> </u>	Herb- All herbaceous (non-wood)		
8.				herbaceous vines, regardless of s		odv
9.				plants, except woody vines, less t		-
10.				m) in height.		,
11.	· ——			Woody vine- All woody vines, reg	ardless of height.	
12.	• ———				` `	
	82	= Total Cov	er			
Woody Vine Stratum (Plot size:	)					
Mikania scandens	10	yes	FACW	1		
2.						
3.				1		•
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	<del></del>
	10	= Total Cov	er			
Remarks: (If observed, list morph Percent cover estimates based or		•	oroader cor	mmunity.		

SOIL	il: Hillsborough- Malab	aı						Sampling Point: 93
	scription: (Describe	to the dep	th needed to do	ument th	e indicator or	confirm the abs	sence of indicators.	
Depth	Matrix				Features			,
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0-4	10 YR 4/1							dark gray fine sand
4-12	10 YR 6/2		-					light grayish brown fine sand
12-30	10 YR 6/6							brownish yellow fine sand
30-50	10 YR 6/3							pale brown fine sand
	· •							·
<sup>1</sup> Type: C=	Concentration, D=Dep	etion. RM:	=Reduced Matrix	CS=Cove	red or Coated S	and Grains	2l ocation: PI =Por	e Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol				Poly	value Below Sur	face (S8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)
	Epidon (A2)					69) (LRR S, T, L		2 cm Muck (A10) (LRR S)
	Histic (A3)				ny Mucky Minera		′′	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matrix			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR F	Tin			ox Dark Surface			(MLRA 153B)
						• •		•
	Mucky Mineral (A7) (L				eted Dark Surfa			Red Parent Material (TF2)
Muck	Presence (A8) (LRR I	U)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
Denle	ted Below Dark Surfac	-ρ /Δ11)		Denl	eted Orchric (F1	1) (MI RA 151)		
	Dark Surface (A12)	C (A11)				ses (F12) (LRF	O PT)	
Coast Prairie Redox (A16) (MLRA 150A)								<sup>3</sup> Indicators of hydrophytic vegetation and wetland
			)A)	Umb	ric Surface (F13	) (LRR P, 1, U)		hydrology must be present, unless disturbed or
Sandy	Sandy Mucky Mineral (S1) (LRR O, S)		,	Delta	Orchric (F17) (	MLRA 151)		problematic.
Sandy	Gleved Matrix (S4)	-		Redu	iced Vertic (F18	) (MLRA 150A,	150B)	
Sandy	Redox (S5)				•	Soils (F19) (ML		
Stripp	ed Matrix (S6)			Anor	nalous Bright Lo	amy Soils (F20)	(MLRA 149A, 153C	i, 153D)
	Surface (S7) (LRR P, S	S T 10		_	ŭ	, , ,	,	,
	e Layer (If observed)							
	Type:	•					1	
	Depth (inches):						Undela Call Decas	nt? Yes ✓ No
Remarks:	Deptit (inches).						Hydric Soil Presen	it? Yes ✓ No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling			10/14/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	Sampling Point:	94		
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 2 28S 22E				
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, convex, none): none Slope			ope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.082215</u>				atum: WGS84	
Soil Map Unit Name: Malabar fine sand			NWI classification	: <u>NA</u>		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	_ (If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?				
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in F	Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	te map showing sampli	ing point locations, t	ransects, impo	ortant features	s, etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Is the Sampled Area v	vithin a Wetland?	YesNo			
Wetland Hydrology Present?						
Remarks:						
·						
HYDROLOGY	***					
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of t	wo required)	
Primary Indicators (minimum of one is required; of	check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	getated Concave	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)		
✓ Saturation (A3)	Mart Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)				
Drift Deposits (B3)	Presence of Reduced In	ron (C4)Saturation Visible on Aeriał Imagery (			nagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	)Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)FAC Neutral Test (D5)				
Field Observations:						
Surface Water Present?	Yes No		-		·	
Water Table Present?	Yes No	_ Depth (inches):	- 184-444			
Saturation Present?	Yes No	_ Depth (inches):0	Wetland Hydrology			
(includes capillary fringe)			Present?	Yes <u>✓N</u>	o	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	•			
Remarks:						
, is maine.						
1						

<b>VEGETATION</b> -	Use scientific names	of plants

VEGETATION - Use scientific na	mes of plants			Sampling Pol	nt:	94
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species		
2.	-			That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.				Total Number of Dominant	•	(D)
4.				Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species	00.00	(A (D)
6.				That Are OBL, FACW, or FAC:	00.00	(A/B)
7.	-			Prevalance Index worksheet:		
		= Total Cove	er	Total % Cover of: Multi	iply by:	
Sapling Stratum (Plot size:	)			OBL species x1=		
1.				FACW species x2=		-
2.				FAC species x3=		-
3.	· ———			FACU species x4=		-
4.				UPL species x5=		-
5.				Column Totals: (A)		(B)
6.				<u> </u>		-` ′
7.				Prevalance Index = B/A =		
		= Total Cove	er	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Baccharis sp.	10	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Vegetation	on <sup>1</sup> (Exp	lain)
3.					, ,	Í
4.				<sup>1</sup> Indicators of hydric soil and wetland hyd	Irology m	ust
5.				be present, unless disturbed or problema		
6.				Definitions of Vegetation Strata:		
7.						
Herb Stratum (Plot size:)	10	= Total Cove	er	Tree- Woody plants, excluding woody vines approximately 20 ft (6m) or more in height a		(7.6
1. Panicum hemitomon	80	yes	OBL	cm) or larger in diameter at breast height (E	DBH).	
2. Urena lobata	10	no	FACU	Sapling- Woody plants, excluding woody vi	ines,	
3. Ludwigia peruviana	5	no	OBL	approximately 20 ft (6m) or more in height a		han 3
4.				in. (7.6 cm) DBH.		
5.	·			Shrub- Woody plants, excluding woody vin	es,	
6.	-			approximately 3 to 20 ft (1 to 6 m) in height.		
7.				Herb- All herbaceous (non-woody)plants, in	ncludina	
8.				herbaceous vines, regardless of size. Inclu		yb
9.				plants, except woody vines, less than appro	ximately	3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, regardless o	f height.	
12.				1		
Woody Vine Stratum (Plot size:	95	= Total Cove	er			
Ampelopsis arborea	2	ves	FAC			
2.		<del></del>		1		
3.	·					
4.				Hydrophytic		
5.				Vegetation Present? Yes✓	No	
		= Total Cove	 er			
Remarks: (If observed, list morph			-			
Percent cover estimates based or	-		roader cor	mmunity.		

afile Description: /Describe to the depth needed		Sampling Point:			
• •	to document the indicator or confirm the absence	e of indicators.)			
pth Matrix	Redox Features noist) % Type¹ Loc²	T .			
<u>Color (moist)</u>	noist) % Type¹ Loc²	Texture Remarks  dark gray fine sand			
2 10 YR 6/2	<del></del>	light grayish brown fine sand			
30 10 YR 6/6		brownish yellow fine sand			
50 10 YR 6/3		pale brown fine sand			
10 //( 0/0		pare brown mile data			
pe: C=Concentration, D=Depletion, RM=Reduced Marketic Soil Indicators:	Matrix, CS=Covered or Coated Sand Grains. *Lo	ocation: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :			
Histol (A1)	Polyvalue Below Surface (S8) (LRR S, T,				
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)			
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B			
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)			
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)			
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)			
		· · · · · · · · · · · · · · · · · · ·			
_5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)			
_Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12) (LRR T, U)			
_1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)	Other (Explain in Remarks)			
_Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)				
_Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, I	P,T)  3Indicators of hydrophytic vegetation and wetland			
_Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless di				
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151) problematic.				
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 1508	B)			
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA				
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (ML				
= , /					
Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed):					
Type:					
Depth (inches):	-	dric Soil Present? Yes ✓ No .			
Depar (inches).	Inyc	THE SOIL FRESHILL TES V NO .			
marke:					
marks:					

oint:95  _Slope (%):
Slope (%):
Slope (%):
Datum: WGS84
n in Remarks)
Yes <u>✓</u> No
in Remarks)
res, etc.
_No
of two required)
ive Surface (B8)
(,
C2)
,
I Imagery (C9)
_ No

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	95
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Taxodium distichum	2	yes	OBL	Number of Dominant Species	(A)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	/D\
4.			<del></del>	Species Across All Strata:	(B)
5.				Percent of Dominant Species	(A (D)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	2	= Total Cove	·r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.				FACW species x2=	
2.				FAC species x3=	
3.				FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	— <sub>(B)</sub>
6.				``_	<b>—</b> ` ′
7.				Prevalance Index = B/A =	
	0	= Total Cove	·r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1. Baccharis sp.	80	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
Myrica cerifera	2	no	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (E	xolain)
3.				, variamana rijarapinjara ragatanam (=	.,,
4.				Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	must
6.				Definitions of Vegetation Strata:	
7.				j	
	82	= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	1. (7.6
Eupatorium capillifolium	20	yes	FACU	cm) or larger in diameter at breast height (DBH).	
Hydrocotyle spp.	20	yes	OBL	Sapling- Woody plants, excluding woody vines,	
3. Euthamia spp.	15	yes	FAC	approximately 20 ft (6m) or more in height and les	s than 3
4. Cyperus spp.	10	no	FACW	in. (7.6 cm) DBH.	
Ludwigia peruviana	5	no	OBL	Shrub- Woody plants, excluding woody vines,	
6. Ludwigia alata	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Spermacoce sp.	2	no	FAC	Herb- All herbaceous (non-woody)plants, includin	a İ
8.				herbaceous vines, regardless of size. Includes we	
9.				plants, except woody vines, less than approximate	
10.			-	m) in height.	
11.				Woody vine- All woody vines, regardless of heigh	ıt.
12.					
	74	= Total Cove	 er	1	
Woody Vine Stratum (Plot size:	)				
1.					
2.				1	
3.					
4.				Hydrophytic	
5.				Vegetation Present? YesNo	
		= Total Cove	er		
Remarks: (If observed, list morph			•		
Percent cover estimates based or			roader cor	mmunity	

Drofile Do	scription: (Describe	to the de	nth pooded to dee	umont ti	no indicator or	confirm the ab	canca of indicator	Sampling Point:		
Depth	Matrix	to the de	pui needed to doc		Features	Commin the ab	Sence of mulcators	5.,		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks		
0-4	10 YR 3/1		- Color (molot)					very dark gray fine sand		
4-8	10 YR 2/1							black fine sand		
8-22	10 YR 2/2							very dark brown fine sand		
22-80	10 YR 7/1			=				light gray fine sand		
		_		=						
Type: C=0	Concentration, D=Dep	letion, RM	=Reduced Matrix, (	CS=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.		
	il Indicators:							Indicators for Problematic Hydric Soils 3:		
Histol	. ,					rface (S8) (LRR		1 cm Muck (a9) (LRR O)		
	Epidon (A2)				,	S9) (LRR S, T, U	•	2 cm Muck (A10) (LRR S)		
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)				my Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ied Layers (A5)				leted Matrix (F3 ox Dark Surface	,		Anomalous Bright Loamy Soils (F20)		
	ic Bodies (A6) (LRR F			_		` '		(MLRA 153B)		
	Mucky Mineral (A7) (L		)		leted Dark Surfa			Red Parent Material (TF2)		
Muck	Presence (A8) (LRR	U)		Red	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)		
	Muck (A9) (LRR P,T)				(F10) (LRR U)	44) 481 BB 4641		Other (Explain in Remarks)		
	ted Below Dark Surfac	æ (A11)			•	11) (MLRA 151)				
Thick	Dark Surface (A12)			lron-	-Manganese Ma	sses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
	Prairie Redox (A16) (		•			3) (LRR P, T, U)	1	hydrology must be present, unless disturbed or		
	Mucky Mineral (S1) (	LRR O, S	)		a Orchric (F17)	•		problematic.		
	Gleyed Matrix (S4)				•	B) (MLRA 150A,	•			
	Redox (S5)			Piedmont Floodplain Soils (F19) (MLRA 149A)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)						
	ed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20	) (MLRA 149A, 153	C, 153D)		
	Surface (S7) (LRR P,									
	e Layer (If observed) Type:	:								
	Depth (inches):						Hydric Soil Prese	ent? Yes ✓ No .		
Remarks:	Deptit (inorice).						111,4110 00111 1000	10		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date:	10/14/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	95A
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: 2 28S 22E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slope	e (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.082199	Dong:82.0	82428	Datui	m: <u>WGS84</u>
Soil Map Unit Name: Ona fine sand				NA NA	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Re	marks)
	or Hydrology	_significantly disturbed?	Are circumstances		No
Are Vegetation, Soil,			(If needed, explain	any answers in Ren	narks)
SUMMARY OF FINDINGS - Attach si			ransects, impo	rtant features,	etc.
Hydrophytic Vegetation Present?	YesNo	J ·	· · · · · · · · ·	•	
Hydric Soil Present?	YesNo	Is the Sampled Area w	vithin a Wetland?	Yes <u></u> ✓No_	
Wetland Hydrology Present?	Yes/No				
Remarks:		<del>-</del>			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two	required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Veg	getated Concave Sui	face (B8)
High Water Table (A2)	Aquatic Fauna (B13)	•	Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor		Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	` ,	Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced In			isible on Aerial Imag	erv (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	` '	Geomorphic	., (00)	
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aquitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema		FAC Neutral	,	
Field Observations:	Other (Explaint)) Nema	ikoj	1	1031 (50)	
Surface Water Present?	Yes ✓ No	Denth (inches): 0-6			
Water Table Present?	Yes ✓ No		1		
Saturation Present?	Yes No		Wetland		
	NO	_ Deptif (inches)	Hydrology Present?	Voc. / No.	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ing well serial photos previous	s inspections) if available:	Present	YesNo _	
Describe Necorded Data (Stream gauge, monitor	ing well, deliai protos, previous	s mapeonona,, n available.			
Remarks:					
4					
	•				
				•	

.

Vegetation Present?

Yes <u>√</u>

No

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

0 = Total Cover

=								Sampling Point:		
file Descri th	iption: (Describe to Matrix	the de	oth needed to doc		he indicator oi k Features	r confirm the ab	sence of indicators.)			
nes) —	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks		
	YR 3/1	—						very dark gray fine sand		
10	) YR 2/1							black fine sand		
	) YR 2/2	_						very dark brown fine sand		
10	) YR 7/1							light gray fine sand		
						. ——				
e: C=Con	centration, D=Deple	tion, RM	=Reduced Matrix,	CS=Cove	ered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.		
ric Soil In								ndicators for Problematic Hydric Soils <sup>3</sup> :		
Histol (A1						urface (S8) (LRR		1 cm Muck (a9) (LRR O)		
Histic Epic						(S9) (LRR S, T,		2 cm Muck (A10) (LRR S)		
Black Hist						ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, I		
	Sulfide (A4)				my Gleyed Mat			Piedmont Floodplain Soils (F19) (LRR P, S, T		
•	Layers (A5)	T 113			leted Matrix (F:	•		Anomalous Bright Loamy Soils (F20)		
-	odies (A6) (LRR P,				lox Dark Surfac			(MLRA 153B)		
	ky Mineral (A7) (LR		)		leted Dark Surl	` '	•	Red Parent Material (TF2)		
-	sence (A8) (LRR U	)		_	lox Depressions	. ,	-	Very Shallow Dark Surface (TF12) (LRR T, U)		
	k (A9) (LRR P,T)				l (F10) <b>(LRR U</b>			Other (Explain in Remarks)		
•	Below Dark Surface	(A11)			•	F11) (MLRA 151	•			
Thick Dar	k Surface (A12)				•	asses (F12) (LR		Indicators of hydrophytic vegetation and wetland		
Coast Pra	iirie Redox (A16) (N	ILRA 15	0A)	Uml	bric Surface (F	13) (LRR P, T, U	) 1	hydrology must be present, unless disturbed or		
Sandy Mu	icky Mineral (S1) (L	RR O, S	)	Delt	a Orchric (F17)	(MLRA 151)	1	problematic.		
Sandy Gle	eyed Matrix (S4)			Red	luced Vertic (F1	18) (MLRA 150A	, 150B)			
Sandy Re	dox (S5)			Pied	lmont Floodpla	in Soils (F19) (M	LRA 149A)			
Stripped N	Matrix (S6)			Ano	malous Bright I	oamy Soils (F20	) (MLRA 149A, 153C	153D)		
Dark Surf	ace (S7) (LRR P, S	, T, U)								
trictive La	yer (If observed):									
Тур	e:									
Dep	oth (inches):						Hydric Soil Presen	? Yes <u></u> √ No		
arks:										

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Date:	10/14/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: 96	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: 2 28S 22E		<u> </u>
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): <u>none</u>	s	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.082358	Long:82.0	84355		atum: WGS84
Soil Map Unit Name: Ona fine sand			NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	n Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Y	'es/_No
	or Hydrology	naturally problematic?	(If needed, explain	any answers in	Remarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>	te map showing sampli	ng point locations, t	ransects, impo	rtant feature	es, etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Yes No	is the Sampled Area w	ithin a Wetland?	Yes <u> √</u> N	lo
Wetland Hydrology Present?	YesNo				
Remarks:					
HYDROLOGY		<u>.</u>			
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)		etated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	•	Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	•	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burr		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	sible on Aerial In	magery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqui		itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-6	1		
Water Table Present?	Yes No	Depth (inches): 0	l		
Saturation Present?	Yes✓ No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	YesN	lo
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous	inspections), if available:			
Remarks:					
		•			

VEGETATION - Use scientific na				Sampling	, . o	96
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1 (Flot size)	Cover	opecies:	Olalus	Number of Dominant Species		
1.	- ——			That Are OBL, FACW, or FAC:	<u>2</u>	(A)
2.						
3.				Total Number of Dominant	<u>3</u>	(B)
4.				Species Across All Strata:	_	
5.				Percent of Dominant Species	66.67	(A/B)
6.				That Are OBL, FACW, or FAC:		
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL speciesx1=		_
1.				FACW species x2=		
2.			<u></u>	FAC species x3=		
3.				FACU species x4=		
4.				UPL species x5=		_
5.	· ——			Column Totals: (A)		— <sub>(B)</sub>
6.				(, ,	· · · · = · - · · · · · · · · · · · · ·	_ `-'
7.				Prevalance Index = B/A =		
		= Total Cove		Hydrophytic Vegetation Indicators	2.	
Shrub Stratum (Plot size:	•	- 10tai 00V	<b>-</b> 1	✓ Dominance Test is 50%	•	
		V00	EAC	Prevalence Index is ≤3.0¹		
Baccharis sp.	50	yes	FAC	<del></del>		-1-!>
Myrica cerifera	10	no	FAC	Problematic Hydrophytic Veg	etation (Ex	piain)
3.				4,		
4.				<sup>1</sup> Indicators of hydric soil and wetland		must
5.				be present, unless disturbed or prob	lematic.	
6.				Definitions of Vegetation Strata:		
7.						
	60	= Total Cove	er	Tree- Woody plants, excluding woody		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in he		. (7.6
Polygonum punctatum	30	yes	FACW	cm) or larger in diameter at breast hei	ght (DBH).	
<ol><li>Imperata cylindrica</li></ol>	20	yes	NL	Sapling- Woody plants, excluding wo	ody vines,	
3. Urena lobata	20	yes	FACU	approximately 20 ft (6m) or more in he	ight and less	than 3
4. Eupatorium capillifolium	10	no	FACU	in. (7.6 cm) DBH.		
5. Ageratina sp.	2	no	FACU	Shrub- Woody plants, excluding wood	ly vines,	
6. Hyptis alata		no	OBL	approximately 3 to 20 ft (1 to 6 m) in h		
7.				Herb- All herbaceous (non-woody)pla	nts including	1
8.				herbaceous vines, regardless of size.		
9.				plants, except woody vines, less than		-
10.	-			m) in height.		,
11.				Woody vine- All woody vines, regard	ess of height	
12.				i	ooc or noigne	•
12.		= Total Cove		4		
Manda Vina Chatana (Diataina	, 84	- Total Cove	31			
Woody Vine Stratum (Plot size:_	)					
1.				4		
2.						
3.				1		
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	
<i></i>		<u> </u>		i .		
	0	= Total Cove	er			

Countylooile	Hillsborough- Ona	

SOIL			Sampling Point:96
Profile Description: (Describe to the depth needed to d	ocument the indicator or confirm the ab	sence of indicators	)
Depth Matrix	Redox Features		
(inches) Color (moist) % Color (moist)	% Type¹ Loc²	Texture	Remarks
0-4 10 YR 3/1			very dark gray fine sand
4-8 10 YR 2/1			black fine sand
8-22 10 YR 2/2			very dark brown fine sand
22-80 10 YR 7/1			light gray fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix	c, CS=Covered or Coated Sand Grains.	Location: PL=Po	e Lining, M=Matrix.
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8) (LRR		1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S, T, I		2 cm Muck (A10) (LRR S)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2)		Reduced Vertic (F18) (outside MLRA 150A, B) Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
			•
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)	)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRI	R O. P.T)	•
, ,	Umbric Surface (F13) (LRR P, T, U		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)		,	hydrology must be present, unless disturbed or problematic.
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)		problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A,		
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MI		
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20	) (MLRA 149A, 1530	C, 153D)
D 10 ( (07) (100 0 0 0 11)			
Dark Surface (S7) (LRR P, S, T, U)			
Restrictive Layer (If observed):			
Restrictive Layer (If observed):  Type:			
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>✓</u> No
Restrictive Layer (If observed):  Type:		Hydric Soil Prese	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u></u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>✓</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Presei	nt? Yes <u>✓</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Presei	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Preser	nt? Yes <u>✓</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>✓ No</u>
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes ✓ No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes <u>/</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Prese	nt? Yes ✓ No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Preset	nt? Yes ✓ No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Preset	nt? Yes ✓ No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Preser	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Preser	nt? Yes <u>√</u> No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Presen	nt? Yes _ ✓ No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Preset	nt? Yes ✓ No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Preset	nt? Yes ✓ No
Restrictive Layer (If observed): Type: Depth (inches):		Hydric Soil Preset	nt? Yes <u>✓</u> No

City/County: Hillsborough	Sampling Date: 10/14/09
	Sampling Point: 97
Section, Township, Range: 2	28S 22E
Local relief (concave, convex, r	none): <u>none</u> Slope (%):
Lat: <u>28.082149</u> Long: <u>-82.0862</u> 4	41 Datum: <u>WGS84</u>
NV	VI classification: NA
e of year? Yes No	(If no, explain in Remarks)
significantly disturbed? Are	e circumstances normal? YesNo
naturally problematic? (If r	needed, explain any answers in Remarks)
ving sampling point locations, trans	sects, important features, etc.
	l
No Is the Sampled Area within	n a Wetland? YesNo
No	
	!
Sec	condary Indicators (minimum of two required)
<u></u>	Surface Soil Cracks (B6)
tained Leaves (B9)	Sparsely Vegetated Concave Surface (B8)
Fauna (B13)	Drainage Patterns (B10)
posits (B15) (LRR U)	Moss Trim Lines (B16)
n Sulfide Odor (C1)	Dry-Season Water Table (C2)
Rhizospheres on Living Roots (C3)	Crayfish Burrows (C8)
e of Reduced Iron (C4)	Saturation Visible on Aerial Imagery (C9)
ron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
ck Surface (C7)	Shallow Aquitard (D3)
xplain in Remarks)	FAC Neutral Test (D5)
No Depth (inches):0	etland
No Donth (inches): 0	etiand drology
Pre	esent? YesNo
photos, previous inspections), if available:	<del></del>
	State: FL   Section, Township, Range: 2   Local relief (concave, convex, total content of the property of th

SETATION - Use scientific names of plants	Sampling Point:9

<b>VEGETATION</b> - Use scientific na	mes of plants			Sampling Point:	97		
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
1.		•		Number of Dominant Species	(4)		
2.				That Are OBL, FACW, or FAC:	(A)		
3.	- —			Total Number of Dominant	(0)		
4.	-			Species Across All Strata:	(B)		
5.	- —			Percent of Dominant Species			
6.				That Are OBL, FACW, or FAC:	(A/B)		
7.	-			Prevalance Index worksheet:	,		
		= Total Cove	r	Total % Cover of: Multiply by:			
Sapling Stratum (Plot size:	) .			OBL species x1=			
1.				FACW species x2=			
2.	• ———	-		FAC species x3=	_		
3.	-			FACU species x4=	_		
4.	- —			UPL species x5=	_		
5.	•			Column Totals: (A)	— (B)		
6.			•	,	_``		
7.	- —			Prevalance Index = B/A =	;		
		= Total Cove		Hydrophytic Vegetation Indicators:			
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%			
Myrica cerifera	<del></del> ′ 10	yes	FAC	Prevalence Index is ≤3.0¹			
2. Baccharis sp.	2	no	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	xolain)		
3.			17.0		φ,		
4.	-			Indicators of hydric soil and wetland hydrology	must		
5.				be present, unless disturbed or problematic.	must		
6.	- —			Definitions of Vegetation Strata:			
7.	- —			<b>3</b>			
	12	= Total Cove		Tree- Woody plants, excluding woody vines,			
Herb Stratum (Plot size:)			•	approximately 20 ft (6m) or more in height and 3 in. (7.6			
1. Juncus effusus	50	yes	FACW	cm) or larger in diameter at breast height (DBH).			
Eupatorium capillifolium	15	no	FACU	Sapling- Woody plants, excluding woody vines,			
Coreopsis spp.	10	no	FACW	approximately 20 ft (6m) or more in height and les	s than 3		
4. Hyptis alata	5	no	OBL	in. (7.6 cm) DBH.			
5. Euthamia spp.	- 5	no	FAC	Shrub- Woody plants, excluding woody vines,			
6.			17.0	approximately 3 to 20 ft (1 to 6 m) in height.			
7.	•			Herb- All herbaceous (non-woody)plants, including	<b>a</b>		
8.				herbaceous vines, regardless of size. Includes wo			
9.	- —			plants, except woody vines, less than approximate			
10.				m) in height.	•		
11.	- —			Woody vine- All woody vines, regardless of heigh	it.		
12.	-				-		
12.	85	= Total Cove	r	1			
Woody Vine Stratum (Plot size:		- 100010010	•				
1							
2.	- ——			-			
3.							
4.	- —			11			
5.				Hydrophytic Vegetation Present? Yes <u>✓ No</u>			
5.		= Total Cove		Vegetation Present? YesNo_	<del></del>		
Remarks: (If observed, list morph			4				
•	-						
Percent cover estimates based or	n meanueinig s	urvey or the b	roauei coi	nmunity.			

SOIL								Sampling Point:		
	escription: (Describe	to the dep	th needed to doc			confirm the ab	sence of indicators.	.)		
Depth	Matrix				Features					
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks		
)-4	10 YR 3/1							very dark gray fine sand		
1-8	10 YR 2/1							black fine sand		
3-22	10 YR 2/2							very dark brown fine sand		
22-80	10 YR 7/1							light gray fine sand		
		_		<u> </u>						
	Concentration, D=Depl	letion, RM	Reduced Matrix, (	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Por	re Lining, M=Matrix.		
	oil Indicators:							Indicators for Problematic Hydric Soils 3:		
Histo						face (S8) (LRR		1 cm Muck (a9) (LRR O)		
	Epidon (A2)					89) (LRR <b>S</b> , T, l		2 cm Muck (A10) (LRR S)		
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)		
	ogen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	fied Layers (A5)				eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)		
Orgai	nic Bodies (A6) (LRR F	P, T, U)		Redo	ox Dark Surface	(F6)		(MLRA 153B)		
5 cm	Mucky Mineral (A7) (LI	RR P,T,U)		Dept	eted Dark Surfa	ice (F7)		Red Parent Material (TF2)		
✓ Muck Presence (A8) (LRR U)				Redox Depressions (F8)				Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm	Muck (A9) (LRR P,T)			Marl (F10) (LRR U)				Other (Explain in Remarks)		
Deple	ted Below Dark Surfac	æ (A11)		Depl	eted Orchric (F	11) (MLRA 151)	•			
Thick	Dark Surface (A12)			Iron-Manganese Masses (F12) (LRR O, P,T)			R O, P,T)	3		
Coast Prairie Redox (A16) (MLRA 150A)Sandy Mucky Mineral (S1) (LRR O, S)			A)	Umbric Surface (F13) (LRR P, T, U)			)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
Sand	y Gleyed Matrix (S4)			Redu	uced Vertic (F18	B) (MLRA 150A,	150B)			
Sand	y Redox (S5)			Pied	mont Floodplain	Soils (F19) (MI	LRA 149A)			
Stripp	ed Matrix (S6)			Anor	malous Bright Lo	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)		
	Surface (S7) (LRR P,									
Restrictiv	e Layer (If observed)	:								
	Туре:						1			
	Depth (inches):						Hydric Soil Present? Yes ✓ No			
Remarks:										

Project/Site: <u>Levy Nuclear Plant - Transmission Li</u>	City/County: Hillsborou	gh	Sampling Date:	10/14/09			
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	98		
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range	: 2 28S 22E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	s	ope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.082248	Long: <u>-82.0</u>	87152	D	atum: <u>WGS84</u>		
Soil Map Unit Name: Ona fine sand			NWI classification:	NA			
Are climatic / hydrologic conditions on the site typi	cal for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	Remarks)		
Are Vegetation, Soil,	or Hydrology		Are circumstances		esNo		
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in f	Remarks)		
SUMMARY OF FINDINGS - Attach sit	e map showing samplii	ng point locations, t	ransects, impo	rtant feature	s, etc.		
Hydrophytic Vegetation Present?	Yes No		-				
Hydric Soil Present?	YesNo	Is the Sampled Area within a Wetland? Yes No					
Wetland Hydrology Present?	Yes No						
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of t	wo required)		
Primary Indicators (minimum of one is required; cl	neck all that apply)		Surface Soil	Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (E	39)	Sparsely Veg	etated Concave	Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season \	Vater Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burr	ows (C8)			
Drift Deposits (B3)	on (C4)Saturation Visible on a			agery (C9)			
Algal Mat or Crust (B4)	Tilled Soils (C6)	Geomorphic	Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral				
Field Observations:							
Surface Water Present?	Yes No	Depth (inches): 0-24					
Water Table Present?	Yes ✓ No						
Saturation Present?	Yes No		Wetland				
(includes capillary fringe)			Hydrology Present?	Yes <u>✓ N</u>	_		
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, previous	inspections), if available:	i resent.	103	<u> </u>		
	· · · · · · · · · · · · · · · · · · ·	,,					
December							
Remarks:							
			•				
			*				

VEGETATION - Use scientific nar	nes of plants			San	npling Point:	98	
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:			
Tree Stratum (Plot size:)	Cover	Species?	Status				
1. Quercus virginiana	50	yes	FACU	Number of Dominant Species	•		
2.				That Are OBL, FACW, or FAC.	<u>3</u>	(A)	
3.				Total Number of Dominant			
4.				Species Across All Strata:	<u>4</u>	(B)	
5.				Percent of Dominant Species			
6.				That Are OBL, FACW, or FAC:	<u>75.00</u>	(A/B)	
7.				Prevalance Index worksheet:			
· ·	50	= Total Cove		Total % Cover of:			
Sapling Stratum (Plot size:	)	- Total Cove	1	OBL species	Multiply by: x1=		
1. Salix spp.		yes	FACW	FACW species	x2=	-	
2.				FAC species	x3=	-	
3.				FACU species	x4=	-	
4.				UPL species	x5=	- [	
5.						-,,,,	
				Column Totals:	_(A)	- <sup>(B)</sup>	
6.							
7.	40	T-4-1 O		Prevalance Index = B/A =	_4		
	10	= Total Cove	r	Hydrophytic Vegetation Indicators:			
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%			
1.				Prevalence Index is ≤3.			
2.				Problematic Hydrophytic	c Vegetation' (Exp	lain)	
3.							
<b>4</b> . <b>5</b> .				<sup>1</sup> Indicators of hydric soil and we	etland hydrology m	ust	
			be present, unless disturbed or problematic.				
6.				Definitions of Vegetation Stra	ata:		
7.							
	0	= Total Cove	r	Tree- Woody plants, excluding w	oody vines,		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more	in height and 3 in.	(7.6	
Ludwigia peruviana	25	yes	OBL	cm) or larger in diameter at breas	st height (DBH).		
2. Panicum hemitomon	25	yes	OBL	Sapling- Woody plants, excludin	a woodv vines.		
3.				approximately 20 ft (6m) or more in height and less than			
4.			-	in. (7.6 cm) DBH.	-		
5.				Shrub- Woody plants, excluding	woody vines.		
6.				approximately 3 to 20 ft (1 to 6 m	•		
7.				Herb- All herbaceous (non-wood			
8.				herbaceous vines, regardless of		<sub>dv</sub>	
9				plants, except woody vines, less		-	
10.				m) in height.		`	
11.				Woody vine- All woody vines, re	nardless of height	1	
12.				The say vine 7 in woody vines, le	garaicss of ficigiti.	l	
12.	50	= Total Cove		i		ļ	
Woody Vino Stratum (Blot size:	١ ،	- Total Cove	1	İ		- 1	
Woody Vine Stratum (Plot size:	<i>)</i>						
1.	<del></del>			-			
2.							
3.							
4.				Hydrophytic	,		
5.				Vegetation Present? Yes	sNo	<u>·</u>	
	0	= Total Cove	<u>r</u>	1			
Remarks: (If observed, list morph							
Percent cover estimates based or	n meandering s	urvey of the b	roader cor	mmunity.			

County/soil: Hillsborough- Ona	
SOIL	

Depth	Matrix	o ale depi	ar necaca to ao	Redox Feat		absence of indicators.	,
inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup> Loc <sup>2</sup>	— Texture	Remarks
4	10 YR 3/1		+ ()			_	very dark gray fine sand
8	10 YR 2/1						black fine sand
22	10 YR 2/2						very dark brown fine sand
-80	10 YR 7/1						light gray fine sand
		:					
							T
	Concentration, D=Deple	etion, RM=	Reduced Matrix,	CS=Covered o	r Coated Sand Grains.	*Location: PL=Por	e Lining, M=Matrix.
	il Indicators:			Deberatua	Dalaw Curfage (CD) (I	DD C T III	Indicators for Problematic Hydric Soils 3:
_Histol					Below Surface (S8) (L		1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S)
	Epidon (A2)				Surface (S9) (LRR S,		
	Histic (A3)				icky Mineral (F1) (LRR	(0)	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				eyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
_	ied Layers (A5)				Matrix (F3)		Anomalous Bright Loamy Soils (F20)
_Organ	ic Bodies (A6) (LRR P,	, 1, 0)			rk Surface (F6)		(MLRA 153B)
_5 cm	Mucky Mineral (A7) (LR	≀R P,T,U)		Depleted	Dark Surface (F7)		Red Parent Material (TF2)
Muck	Presence (A8) (LRR U	J)		Redox De	pressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm	Muck (A9) (LRR P,T)			Mart (F10	) (LRR U)		Other (Explain in Remarks)
Deple	ted Below Dark Surface	e (A11)		Depleted	Orchric (F11) (MLRA 1	51)	
Thick	Dark Surface (A12)			Iron-Mang	janese Masses (F12) (I	LRR O, P,T)	31 - 41 - 4
_	Prairie Redox (A16) (N	/I RΔ 150.	Δ)	Umbric S	urface (F13) (LRR P, T	. U)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (L				hric (F17) (MLRA 151)	•	problematic.
		KK (), (3)			Vertic (F18) (MLRA 15		
	Gleyed Matrix (S4)				Floodplain Soils (F19)		
	Redox (S5)						452D)
	ed Matrix (S6)			Anomaiou	is Bright Loamy Solis (F	=20) (MLRA 149A, 1530	, 1630)
	Surface (S7) (LRR P, S						
	e Layer (If observed):						
	Туре:						
	Depth (inches):		<del></del>			Hydric Soil Preser	nt? Yes <u>√</u> No
emarks:							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Polk Sampling Date:			10/14/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: 99		
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 6 28S 23E				
Landform (hillslope, terrace, etc.): N/A	<b>.</b>	Local relief (concave, con-	vex, none): none	s	lope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.082607	Long:82.0	50504	D	atum: WGS84	
Soil Map Unit Name: Pomona fine sand			NWI classification:	NA		
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes	_ No	(If no, explain in	Remarks)	
Are Vegetation, Soil,			Are circumstances		esNo	
Are Vegetation, Soil,		• •	(If needed, explain		Remarks)	
SUMMARY OF FINDINGS - Attach sit						
Hydrophytic Vegetation Present?	YesNo	l point locations, t	autocoto, impo-	turit routuro	o, o.o.	
Hydric Soil Present?	Yes_ ✓ No	Is the Sampled Area v	vithin a Wetland?	Yes ✓ N	o	
Wetland Hydrology Present?	Yes/No	i i				
Remarks:	140	1	<del></del>			
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of	two required)	
Primary Indicators (minimum of one is required; of	check all that apply)					
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	etated Concave	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patt	terns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir	nes (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	·	Dry-Season V	Vater Table (C2	)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burro	•	•	
Drift Deposits (B3)	Presence of Reduced In					
Algal Mat or Crust (B4)	Recent Iron Reduction in	• •	Geomorphic F			
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aquit			
✓ Inundation Visible on Aerial Imagery (B7)	· ·		FAC Neutral			
Field Observations:	Other (Explain in Remai	185)	FAC Neutiai	rest (D3)		
	Yes No	Donth (inches):				
Surface Water Present?	Yes No		-			
Water Table Present?			- Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	YesN	0	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:				
Remarks:						
<i>)</i>						
/						
·						
1						

VEGETATION - Use scientific na		<del></del>	<del></del>		ng Point:	99
Tran Ctratum (Diat aira:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
Tree Stratum (Plot size:) 1.	Covei	Sheries	Status	Number of Dominant Species		
2.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.			····	-		
				Total Number of Dominant	<u>4</u>	(B)
4.				Species Across All Strata:	_	, .
5.				Percent of Dominant Species	<u>75.00</u>	(A/B)
6.				That Are OBL, FACW, or FAC:		
7.				Prevalance Index worksheet:		
O D O D O D	, 0	= Total Cover	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL speciesx1		
1.				FACW speciesx2		_
2.				FAC speciesx3	=	_
3.				FACU speciesx4	=	
4.				UPL speciesx5	,=	
5.				Column Totals: (A	.)	— (B)
6.	-			1	·	` '
7.	-			Prevalance Index = B/A =		
	0	= Total Cover	r	Hydrophytic Vegetation Indicato	rs:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	, , ,	
1.	/			Prevalence Index is ≤3.0¹		
2.				Problematic Hydrophytic Ve	tation1 /Evr	-lain)
3.	-	·		Problematic Hydrophytic vo	getation (LA	Diam)
<u>4.</u>		<del></del> ·		4		
5.		·		Indicators of hydric soil and wetlar		nust
				be present, unless disturbed or pro		
6.				Definitions of Vegetation Strata:		
7.				1		
	0	= Total Cover	r	Tree- Woody plants, excluding wood		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in h	_	. (7.6
Andropogon glomeratus	30	yes	FACW	cm) or larger in diameter at breast he	⊧ight (DBH).	
<ol><li>Ludwigia peruviana</li></ol>	30	yes	OBL	Sapling- Woody plants, excluding wo		
3. Bidens spp.	20	yes	FACW	approximately 20 ft (6m) or more in h	eight and less	than 3
Eupatorium capillifolium	20	yes	FACU	in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding woo	ody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in		
7.				Herb- All herbaceous (non-woody)pla	ants including	
8.	-		-	herbaceous vines, regardless of size		
9.				plants, except woody vines, less than		
10.				m) in height.	~F.	, -
11.				Woody vine- All woody vines, regard	lless of height.	
12.	-			1		
12.	100	= Total Cover		1		
Woody Vine Stratum (Plot size:	100	- Total Cover	!			
· · · · —	<i>)</i>		!			
1.						
2.		<u> </u>				
3.			!			
4			!	Hydrophytic		
5.	· —			Vegetation Present? Yes	✓No	
	0	= Total Cover	<del></del> ,	1 -		

Percent cover estimates based on meandering survey of the broader community.

-	il: Polk- Pomona										_
SOIL										Samplin	g Point: 9
	escription: (Describe	to the dep	th needed to doc			confirm the abs	sence of indicators.	.)			
Depth	Matrix				Features						
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type'	Loc²	Texture			Remarks	
0-6	10 YR 2/1							black mucky fin			
6-29	10 YR 7/1							light gray fine s			
29-33	N 5/0							gray sandy clay			
33-80	N 5/0							gray sandy clay	<u> </u>		
	Concentration, D=Dep	letion, RM=	Reduced Matrix, (	JS=Cover	red or Coated S	and Grains.		e Lining, M=Matrix			
	oil Indicators:							Indicators for Pro			Soils *:
Histol						rface (S8) (LRR		1 cm Muck (a			
	Epidon (A2)					S9) (LRR S, T, L	•	2 cm Muck (A			
	Histic (A3)					al (F1) (LRR O)			•		VILRA 150A, B)
	ogen Sulfide (A4)				ny Gleyed Matrix				•		(LRR P, S, T)
	fied Layers (A5)				leted Matrix (F3)			Anomalous B		amy Soils (I	F20)
Orgar	nic Bodies (A6) (LRR I	P, T, U)		Redo	ox Dark Surface	∍(F6)		(MLRA 1538	3)		
5 cm	Mucky Mineral (A7) (L	.RR P,T,U)		Depl	leted Dark Surfa	ice (F7)		Red Parent M	laterial	(TF2)	
✓ Muck	Presence (A8) (LRR	U)		Redr	ox Depressions	(F8)		Very Shallow	Dark S	urface (TF1	2) (LRR T, U)
	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain	n in Rer	marks)	
					. , ,	11) (MLRA 151)		,	•	,,,	
ı— ·	eted Below Dark Surface	ce (A11)			•						
Thick	Dark Surface (A12)				-	isses (F12) (LRF		<sup>3</sup> Indicators of hydr	ophytic	vegetation	and wetland
Coast	t Prairie Redox (A16) (	(MLRA 150	/A)	Umb	ric Surface (F13	3) (LRR P, T, U)	)	hydrology must be			
Sand	y Mucky Mineral (S1) (	(I RR (), S)		Delta	a Orchric (F17) (	(MLRA 151)		problematic.			
	y Gleyed Matrix (S4)	Little C, C,		Reduced Vertic (F18) (MLRA 150A, 150B)							
	y Redox (S5)				•	n Soils (F19) (ML					
	ped Matrix (S6)						) (MLRA 149A, 1530	153D)			
	• •	~			naioas biigii. 23	July 55115 (1 25)	) (ME101 1-021, 1-1-1	, 1002,			
	Surface (S7) (LRR P,										
Restrictiv	e Layer (If observed	):									
	Type:						l		,		
	Depth (inches):						Hydric Soil Preser	nt? Yes		_ No	·
Remarks:											
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Da			10/15/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	100	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 3 28S 22E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	/ex, none): none	Slo	pe (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.082122	Long: <u>-82.0</u>	94120	Dat	um: <u>WGS84</u>	
Soil Map Unit Name: Basinger fine sand			NWI classification:	Shrub Wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in F	Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		s_ ✓ _No	
		naturally problematic?	(If needed, explain	any answers in Re	emarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>		ng point locations, t	ransects, impo	rtant features	, etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	Yes/_No			
Wetland Hydrology Present?	Yes No					
Remarks:						
HVDDOL GOV						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate Surface Soil		o required)	
Primary Indicators (minimum of one is required; of						
Surface Water (A1)	Water-Stained Leaves (F	39)		getated Concave S	urface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa			
Saturation (A3)	Mart Deposits (B15) (LR	· ·	Moss Trim Li			
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres of					
Drift Deposits (B3)	Presence of Reduced Iro	ron (C4)Saturation Visible on Aerial Imagery				
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	itard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	Test (D5)			
Field Observations:						
Surface Water Present?	Yes No					
Water Table Present?	Yes No	Depth (inches):				
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology			
(includes capillary fringe)			Present?	Yes <u>√</u> No		
Describe Recorded Data (stream gauge, monitor	ng well, aerial photos, previous	inspections), if available:	•			
Remarks:						
Remarks.						

VEGETATION - Use scientific na	mes of plants			Samı	oling Point:	100
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.		·		Number of Dominant Species	_	(4)
2.				That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.				Total Number of Dominant	_	
4.				Species Across All Strata:	<u>6</u>	(B)
5.	·		····	Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>83.33</u>	(A/B)
7.	· ——			Prevalance Index worksheet:		
7.		= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	) ,	- Total Cove	:1	OBL species	x1=	_
Acer rubrum	30	yes	OBL	FACW species	x2=	
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	
5.				Column Totals:	(A)	– (B)
6.					. ( )	_ \- /
7.	-	<del></del>		Prevalance Index = B/A =		
	30	= Total Cove	r	Hydrophytic Vegetation Indica	ators:	
Shrub Stratum (Plot size:	)	- 10101 0010		✓ Dominance Test is 50%	11013.	
	<del>-</del> /·	V00	EAC	Prevalence Index is ≤3.0	,1	
<ol> <li>Myrica cerifera</li> <li>Baccharis sp.</li> </ol>	20 20	yes	FAC FAC	<u> </u>		Jain)
,		yes	FAC	Problematic Hydrophytic	vegetation (Exp	nairi)
3.	<del></del>		<del></del>	4 <u> </u>		
<b>4</b> . <b>5</b> .				Indicators of hydric soil and we		nust
6.				be present, unless disturbed or Definitions of Vegetation Stra		
	<del></del>			The initions of vegetation Stra	la.	
7.				<b>-</b>		:
Herb Stratum (Plot size:)	40	= Total Cove	:I	Tree- Woody plants, excluding we approximately 20 ft (6m) or more	•	/7 G
	20	V/00	OBI	cm) or larger in diameter at breas		(7.0
Panicum hemitomon		yes	OBL	4		
Eupatorium capillifolium		yes	FACU	Sapling- Woody plants, excluding		4h a n 2
Ludwigia peruviana	15	yes	OBL	approximately 20 ft (6m) or more in. (7.6 cm) DBH.	in neight and less	man 3
4. Rhexia spp.	2	no	FACW	<b>.</b> ' '		
5.				Shrub- Woody plants, excluding approximately 3 to 20 ft (1 to 6 m)		
6.			-	<b>┧</b> ```		
7.				Herb- All herbaceous (non-wood)		al
8. 9.	· ——			herbaceous vines, regardless of splants, except woody vines, less t		
				m) in height.	man approximately	311(1
10.				J ' -		
11.				Woody vine- All woody vines, reg	jardiess of neight.	
12.				4		
Manda Vinc Charles (Diet sies)	67	= Total Cove	er			
Woody Vine Stratum (Plot size:	) ·					
1.	- ——			4		
2.						······································
3.				4		
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	<del></del>
	0	= Total Cove	er			
Remarks: (If observed, list morph						
Percent cover estimates based o	n meandering s	survey of the b	roader co	mmunity.		

SOIL					<del></del>			<u> </u>	100		
Profile De Depth	scription: (Describe t	o the dep	oth needed to doc		he indicator or k Features	confirm the ab	sence of indicators.)				
(inches)	Matrix Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks			
0-7	10 YR 2/1		Color (moist)		Турс		Texture	black fine sand	_		
7-28	10 YR 6/1							gray fine sand	_		
	10 YR 5/3; 10 YR					. ——		gray into band	_		
28-42	5/2							brown and grayish brown fine sand			
42-80	10 YR 6/2							light brownish gray fine sand			
									_		
									_		
¹Type: C=0	Concentration, D=Depl	etion, RM	=Reduced Matrix, (	CS=Cove	red or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix.			
, ,	il Indicators:							Indicators for Problematic Hydric Soils 3:			
Histol	• •					ırface (S8) (LRR		1 cm Muck (a9) (LRR O)			
Histic Epidon (A2)Thin Dark Surface (S9) (LRR S, T,						2 cm Muck (A10) (LRR S)					
_	Histic (A3)					ral (F1) (LRR O)	١.	Reduced Vertic (F18) (outside MLRA 150A, B)			
	gen Sutfide (A4)				my Gleyed Matr	, ,		Piedmont Floodplain Soils (F19) (LRR P, S, T)			
Stratified Layers (A5)Depleted Matrix (F3)						,	Anomalous Bright Loamy Soils (F20)				
Organ	ic Bodies (A6) (LRR P	, T, U)		Red	ox Dark Surface	e (F6)	(MLRA 153B)				
5 cm l	5 cm Mucky Mineral (A7) (LRR P,T,U)Depleted Dark Surface (F7)						Red Parent Material (TF2)				
Muck Presence (A8) (LRR U)Redox Depressions (F8)						Very Shallow Dark Surface (TF12) (LRR T, U)					
1 cm l	1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)						Other (Explain in Remarks)				
		- (0.44)									
	oleted Below Dark Surface (A11)Depleted Orchric (F11) (MLRA 151)										
	Dark Surface (A12)				-	asses (F12) <b>(LRI</b>		Indicators of hydrophytic vegetation and wetland			
Coast	Prairie Redox (A16) (	VLRA 150	JA) .	Umb	oric Surface (F1	13) (LRR P, T, U	) 1	hydrology must be present, unless disturbed or			
Sandy	Mucky Mineral (S1) (L	.RR O. S)	ı	Delt	a Orchric (F17)	(MLRA 151)	1	problematic.			
	Gleyed Matrix (S4)			Red	uced Vertic (F1	8) (MLRA 150A,	, 150B)				
	Redox (S5)		•	Pied	imont Floodplai	n Soils (F19) (MI	LRA 149A)				
Stripp	ed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20	) (MLRA 149A, 153C	, 153D)			
	Surface (S7) (LRR P, S	: T II									
	e Layer (If observed):						1		_		
	Type:										
	Depth (inches):						Hydric Soil Presen	t? Yes ✓ No .			
Remarks:							1.9				
						•					
							•				
1											
1											
1											

Project/Site: Levy Nuclear Plant - Transmission Li	nes	City/County: Hillsborough Sampling Date: 10/1			10/15/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 101			101	
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 3 28S 22E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): <u>none</u>	SI	ope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.082120</u>	Long: <u>-82.0</u>	194521	Da	atum: WGS84	
Soil Map Unit Name: Basinger fine sand			NWI classification	n: Shrub Wetland		
Are climatic / hydrologic conditions on the site typi	ical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	es normal?	esNo	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in F	≀emarks)	
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	ortant feature:	s, etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes <u>✓</u> No	o	
Wetland Hydrology Present?	Yes No					
Remarks:				<u> </u>		
HYDROLOGY						
Wetland Hydrology Indicators:	· · · · · · · · · · · · · · · · · · ·	<del></del>	Secondary Indica	tors (minimum of t	wo required)	
Primary Indicators (minimum of one is required; c	hook all that anniv)			il Cracks (B6)	WO required;	
✓ Surface Water (A1)	<u>meck all mat арру)</u> Water-Stained Leaves (I	ממ		egetated Concave	Surface (R8)	
<del></del>	Aquatic Fauna (B13)	D9)	<del></del> ; ;	atterns (B10)	Surface (EG)	
High Water Table (A2)		DD 11)				
✓ Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim I			
Water Marks (B1)	Hydrogen Sulfide Odor (	r (C1)Dry-Season Water Table (C2) s on Living Roots (C3)Crayfish Burrows (C8)				
Sediment Deposits (B2)		- · · · · · · · · · · · · · · · · · · ·				
Drift Deposits (B3)	Presence of Reduced In					
Algal Mat or Crust (B4)	Recent Iron Reduction in					
Iron Deposits (B5)	Thin Muck Surface (C7)	· · · · · · · · · · · · · · · · · · ·				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	iks)	FAC Neutra	al Test (D5)	W-100-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-	
Field Observations:	V / N.	= # # 1> - 00				
Surface Water Present?	Yes No		4			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)	period photos provinces	in a social series in a social series	Present?	Yes <u>✓</u> N	0	
Describe Recorded Data (stream gauge, monitori	ng well, aerial priotos, previous	inspections), ir available.				
Remarks:						

Tree Stratum (Plot size:	VEGETATION - Use scientific na				·	ing Point:	101
That Are OBL, FACW, or FAC:   S (A)	Tree Stratum (Plot size:)				Dominance Test Worksheet:		
Species Across All Stratax   Species   Species Across All Stratax   Species   Species Across All Stratax   Species   Species Across All Stratax   Species   Stratax						6	<b>(A</b> )
Species Across All Stratax   Species   Species Across All Stratax   Species   Species Across All Stratax   Species   Species Across All Stratax   Species   Stratax	2.				That Are OBL, FACW, or FAC:	×	(17)
Species Across Art Status   Percent of Dominant Species   100.00 (A/B)	3.					6	(B)
That Are OBL, FACW, or FAC:	4.				<b>,                                    </b>	<u>=</u>	(0)
Saping Stratum (Plot size:	5.					100.00	(A/B)
Sapling Stratum (Plot size:	6.				<del></del>	100.00	(, 55,
Sapling Stratum (Plot size:)	7.				+		
FAC species   x3   x4   x4   x4   x4   x4   x4   x4			= Total Cove	er	OBL speciesx	:1=	_
FACU species   x4=	1.				<b></b>	2=	_
A	2.				- · — —		_
Prevalance Index = B/A =   Prevalance Index = B/A   P	3.				- · · ·	4=	_
Prevalance Index = B/A =   Prevalance Index = B/A   Prevalance Index = B/A   Prevalance Index = S.0   Prevalance Index = S.0   Prevalance Index = S.0   Prevalance Index = S.0   Prevalance Index = S.0   Prevalance Index = B/A   Prevalance Index = B/A   Prevalance Index = B/A   Prevalance Index = S.0   Prevalance Index = B/A   Preva	4.					5=	_
Prevalance Index = B/A =   Hydrophytic Vegetation Indicators:	5.				Column Totals:	A)	_(B)
Shrub Stratum (Plot size:					]		_
Shrub Stratum (Plot size:	7.						
Prevalence Index is ≤3.0¹   Problematic Hydrophytic Vegetation¹ (Explain)	•	0	= Total Cove	÷r	1 * * * *	ors:	
2.	Shrub Stratum (Plot size:	)					
3. 4. 5. 6. 7. 6. 7. 7. 7. 8. 8. 8. 9. 9. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	1.						
4.	2.				Problematic Hydrophytic V	egetation <sup>1</sup> (Exp	olain)
Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Ludwigia alata  15 yes OBL sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) or BH.  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody Vine Stratum (Plot size:)  1. Protal Cover  Woody Vine Stratum (Plot size:)  4. Hydrophytic  Vegetation Present? Yes No					<u> </u>		
Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Ludwigia alata  15 yes OBL sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) or BH.  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody Vine Stratum (Plot size:)  1. Zhexia spp. 2 no FACW  Woody Vine Stratum (Plot size:)  1. Zhexia spp. 2 no FACW  Woody Vine Stratum (Plot size:)  1. Zhexia spp. 2 no FACW  Woody Vine Stratum (Plot size:)  Hydrophytic  Vegetation Present? Yes No	4.				]¹Indicators of hydric soil and wetla	and hydrology m	nust
Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Ludwigia alata  15 yes OBL sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) or BH.  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody Vine Stratum (Plot size:)  1. Zhexia spp. 2 no FACW  Woody Vine Stratum (Plot size:)  1. Zhexia spp. 2 no FACW  Woody Vine Stratum (Plot size:)  1. Zhexia spp. 2 no FACW  Woody Vine Stratum (Plot size:)  Hydrophytic  Vegetation Present? Yes No	5.						
Herb Stratum (Plot size:)  1. Ludwigia alata 15 yes OBL provimately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  2. Ludwigia repens 15 yes OBL papproximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  3. Hydrocotyle spp. 10 yes OBL papproximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  3. Hydrocotyle spp. 10 yes OBL papproximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  3. Hydrocotyle spp. 3. Hydrocotyle spp. 4. Panicum hemitomon 10 yes OBL papproximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  3. Spaling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  3. Spaling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  3. Spaling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  3. Spaling- Woody plants, excluding woody vines, approximately 20 ft (6m) or larger in diameter at breast height (DBH).  3. Spaling- Woody plants, excluding woody vines, approximately 3 ft 20 ft (1 to 6 m) in height.  4. Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  4. Woody vine- All woody vines, regardless of height.  4. Woody vine- All woody vines, regardless of height.  4. Hydrophytic  4. Vegetation Present? Yes ✓ No					Definitions of Vegetation Strata	:	
Herb Stratum (Plot size:)  1. Ludwigia alata 15 yes OBL 2. Ludwigia repens 15 yes OBL 3. Hydrocotyle spp. 10 yes OBL 4. Panicum hemitomon 10 yes OBL 5. Juncus effusus 6. Cyperus spp. 10 yes FACW 7. Spermacoce sp. 8. Eupatorium capillifolium 10 yes OBL 10 Xyris spp. 11 Diodia virginiana 12 no FACW 12 Rhexia spp. 13 yes OBL 15 yes OBL 2 approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 10s. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 10s. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 10s. (7.6 cm) or larger in diameter at breast height (DBH).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 10s. (7.6 cm) or larger in diameter at breast height (DBH).	7.				1		
1. Ludwigia alata 1. Ludwigia alata 1. Ludwigia alata 1. Ludwigia repens 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. Ludwigia repens 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7.6 cm) DBH. 1. (7		0	= Total Cove	er .			•
2. Ludwigia repens 3. Hydrocotyle spp. 10 yes OBL approximately 20 ft (6m) or more in height and less than 3 4. Panicum hemitomon 10 yes OBL in. (7.6 cm) DBH.  5. Juncus effusus 10 yes FACW Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  7. Spermacoce sp. 10 yes FACW Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  8. Eupatorium capillifolium 5 no FACU Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 to 3 m) in height.  10. Xyris spp. 2 no OBL m) in height.  11. Diodia virginiana 2 no FACW Woody Vine- All woody vines, regardless of height.  12. Rhexia spp. 2 no FACW Woody Vine- All woody vines, regardless of height.  13. Hydrophytic Vegetation Present? Yes No.	Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in	height and 3 in.	(7.6
3. Hydrocotyle spp. 10 yes OBL approximately 20 ft (6m) or more in height and less than 3 4. Panicum hemitomon 10 yes OBL in. (7.6 cm) DBH.  5. Juncus effusus 10 yes FACW Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  7. Spermacoce sp. 5 no FAC Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 no NoBL plants, except woody vines, less than approximately 3 ft (1 no NoBL plants, except woody vines, less than approximately 3 ft (1 no NoBL plants, except woody vines, less than approximately 3 ft (1 no NoBL plants, except woody vines, less than approximately 3 ft (1 no NoBL plants, except woody vines, less than approximately 3 ft (1 no NoBL plants, except woody vines, less than approximately 3 ft (1 no NoBL plants, except woody vines, less than approximately 3 ft (1 no NoBL plants, except woody vines, regardless of height.  10. Xyris spp. 2 no FACW woody vine-All woody vines, regardless of height.  11. Diodia virginiana 2 no FACW woody vine-All woody vines, regardless of height.  12. Rhexia spp. 91 = Total Cover woody vines, regardless of height.  13. Hydrophytic vegetation Present? Yes No No No No No No No No No No No No No		15	yes	OBL	cm) or larger in diameter at breast h	neight (DBH).	
4. Panicum hemitomon 10 yes OBL in. (7.6 cm) DBH.  5. Juncus effusus 10 yes FACW Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  7. Spermacoce sp. 5 no FAC Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 to 3 m) in height.  10. Xyris spp. 2 no OBL m) in height.  11. Diodia virginiana 2 no FACW Woody vine- All woody vines, regardless of height.  12. Rhexia spp. 2 no FACW Woody Vine Stratum (Plot size:)  13	Ludwigia repens	15	yes	OBL	]Sapling- Woody plants, excluding v	voody vines,	
4. Panicum hemitomon 10 yes OBL in. (7.6 cm) DBH.  5. Juncus effusus 10 yes FACW Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  7. Spermacoce sp. 5 no FAC Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 to 3 m) in height.  10. Xyris spp. 2 no OBL m) in height.  11. Diodia virginiana 2 no FACW Woody vine- All woody vines, regardless of height.  12. Rhexia spp. 2 no FACW Woody Vine Stratum (Plot size:)  13	<ol><li>Hydrocotyle spp.</li></ol>	10	yes	OBL		height and less	than 3
6. Cyperus spp. 10 yes FACW 7. Spermacoce sp. 5 no FACU 8. Eupatorium capillifolium 5 no FACU 9. Ludwigia peruviana 5 no OBL 10. Xyris spp. 2 no OBL 11. Diodia virginiana 2 no FACW 12. Rhexia spp. 2 no FACW  Woody Vine Stratum (Plot size:) 1. 2. 3. 4. 5.	4. Panicum hemitomon	10	yes	OBL	]in. (7.6 cm) DBH.		
7. Spermacoce sp.       5       no       FAC       Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.         9. Ludwigia peruviana       5       no       OBL m) in height.         10. Xyris spp.       2       no       FACW m) in height.         11. Diodia virginiana       2       no       FACW m) in height.         12. Rhexia spp.       2       no       FACW m) in height.         Woody vine- All woody vines, regardless of height.       Yegardless of height.         1.       2       1         2.       1       1         3.       4       1         4.       4       4         5.       4       4         6.       4       4         7.       4       4         8.       4       4         9.       4       4         9.       4       4         9.       4       4         9.       4       4         9.       4       4         9.       4       4         9.       4       4         9.       4       4	5. Juncus effusus	10	yes	FACW			
8. Eupatorium capillifolium 9. Ludwigia peruviana 5 no OBL 10. Xyris spp. 2 no OBL 11. Diodia virginiana 2 no FACW 12. Rhexia spp. 2 no FACW Woody Vine Stratum (Plot size:) 1. 2. 3. 4. 5.			yes	FACW	approximately 3 to 20 ft (1 to 6 m) ir	າ height.	
9. Ludwigia peruviana     5     no     OBL     plants, except woody vines, less than approximately 3 ft (1 m) in height.       10. Xyris spp.     2     no     OBL m) in height.       11. Diodia virginiana     2     no     FACW       12. Rhexia spp.     2     no     FACW       Woody Vine Stratum (Plot size:)     )     = Total Cover       1	7. Spermacoce sp.	5	no	FAC	Herb- All herbaceous (non-woody)p	lants, including	
10. Xyris spp.       2       no       OBL Mody vine Stratum (Plot size:)       m) in height.         12. Rhexia spp.       2       no       FACW FACW         Woody Vine Stratum (Plot size:)       91       = Total Cover         Woody Vine Stratum (Plot size:)       1.	8. Eupatorium capillifolium	5	no	FACU	herbaceous vines, regardless of size	e. Includes woo	dy
11. Diodia virginiana 2	Ludwigia peruviana	5	no	OBL		ın approximately	3 ft (1
12. Rhexia spp. 2 no FACW 91		2	no	OBL	m) in height.		
91   Total Cover	11. Diodia virginiana	2	no	FACW	Woody vine- All woody vines, regar	rdless of height.	
Woody Vine Stratum (Plot size:)       1.         1.       2.         3.       4.         5.       Hydrophytic         Vegetation Present?       Yes _✓ _ No	12. Rhexia spp.	2	no	FACW	1		
3.		91	= Total Cove	·r			
4. Hydrophytic 5. Vegetation Present? Yes ✓ No							•
5. Vegetation Present? Yes <u>✓ No</u>					4		
	4.					. N.	
	5.		= Total Cove		Vegetation Present? Yes _	No	<del></del>

Percent cover estimates based on meandering survey of the broader community.

Remarks: (If observed, list morphological adaptations below).

county/soil: Hillsborough- Basinger OIL			Sampling Point:
ofile Description: (Describe to the depth needed		the absence of indicators	s.)
pth Matrix	Redox Features		
ches) Color (moist) % Color (r	noist) % Type' Lo	Texture	Remarks
10 YR 2/1			black fine sand
8 10 YR 6/1			gray fine sand
10 YR 5/3; 10 YR			
42 5/2			brown and grayish brown fine sand
80 10 YR 6/2			light brownish gray fine sand
pe: C=Concentration, D=Depletion, RM=Reduced	Matrix, CS=Covered or Coated Sand Grai	ns. <sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
dric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8	(LRR S. T. U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR		2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (L		Reduced Vertic (F18) (outside MLRA 150A, B)
		KK O)	
_Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
_Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
_Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
_Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLR	A 151)	
_Thick Dark Surface (A12)	Iron-Manganese Masses (F1	2) (LRR O. P.T)	
<del>-</del>	Umbric Surface (F13) (LRR I		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
_Coast Prairie Redox (A16) (MLRA 150A)			hydrology must be present, unless disturbed or
_Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 1	51)	problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA	150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F		
Stripped Matrix (S6)	Anomalous Bright Loamy Soi		RC 153D)
	Atomalous bright Edamy Gol	13 (1 20) (INEION 140A, 100	ic, 1885)
Dark Surface (S7) (LRR P, S, T, U)			
estrictive Layer (If observed):		l	
Туре:	<del></del>		
Depth (inches):		Hydric Soil Prese	ent? Yes <u></u> ✓ No
marks:			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/15/09			
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: 102			
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 3 28S 22E					
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	Slope (%):				
Subregion (LRR or MLRA): LRR U		74 Long: <u>-82.094820</u> Datum: <u>V</u>					
Soil Map Unit Name: Basinger fine sand			NWI classification:	Shrub Wetland			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? YesNo			
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)			
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.			
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	is the Sampled Area w	vithin a Wetland?	Yes No				
Wetland Hydrology Present?	YesNo						
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)			
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil				
✓ Surface Water (A1)	Water-Stained Leaves (I	39)		etated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)	•	Drainage Pat				
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	· ·			
Water Marks (B1)	Hydrogen Sulfide Odor (		-	Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burr	` '			
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)Saturation Visible on Aerial Imagery (C9					
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)			
Field Observations:							
Surface Water Present?	Yes No	Depth (inches): >36	_				
Water Table Present?	Yes No	Depth (inches): 0	384-444				
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology				
(includes capillary fringe)			Present?	Yes No			
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:					
Remarks:							
	•						
-							

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	102
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		•		Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(5)
4.				Species Across All Strata:	(B)
5.	·			Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.	,			FACW species x2=	_
2.			-	FAC species x3=	_
3.				FACU species x4=	_
4.				UPL species x5=	
5.	•			Column Totals: (A)	— <sub>(B)</sub>
6.					(
7.				Prevalance Index = B/A =	
		= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	<del>. '</del>			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (E:	xnlain)
3.				, robemato rijaroprijao vogotatom (E.	\pidii i j
4.				Indicators of hydric soil and wetland hydrology	muet
<del>5</del> .		<del></del>		be present, unless disturbed or problematic.	must
6.				Definitions of Vegetation Strata:	
7.	· ——				
	0	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	1. (7.6
Panicum repens	30	yes	FACW	cm) or larger in diameter at breast height (DBH).	
Sesbania spp.		yes	FAC	Sapling- Woody plants, excluding woody vines,	
Ludwigia repens	15	no	OBL	approximately 20 ft (6m) or more in height and les	s than 3
Hydrocotyle spp.	10	no	OBL	in. (7.6 cm) DBH.	
5. Ludwigia peruviana	5	no	OBL	Shrub- Woody plants, excluding woody vines,	
6. Rhexia spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Eupatorium capillifolium	2	no	FACU	Herb- All herbaceous (non-woody)plants, includin	
8. Commelina spp.	2	no	FACW	herbaceous vines, regardless of size. Includes we	-
9. Cyperus spp.	2	no	FACW	plants, except woody vines, less than approximate	ну 3 <del>п</del> (1
10. Diodia virginiana	2	no	FACW	m) in height.	
11.	•			Woody vine- All woody vines, regardless of heigh	it.
12.				1	
	90	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
Ipomoea sp.	15	yes	FACU	1	
2.					
3.	-			1	
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	<del></del>
	15	= Total Cove	er		
Remarks: (If observed, list morph Percent cover estimates based o			roader co	mmunity.	

SOIL	il: Hillsborough- Basin	ger									Samo	ling Po	int:	102
	escription: (Describe	to the der	oth needed to dor	ument th	ne indicator or	confirm the abs	sence of indicators.)							
Depth	Matrix				<ul><li>Features</li></ul>		,							
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture				Remark	ks		
0-7	10 YR 2/1							black fir	ne sand					
7-28	10 YR 6/1							gray fin	e sand					
	10 YR 5/3; 10 YR													
28-42	5/2							brown a	and gray	ish bro	wn fine s	sand		
42-80	10 YR 6/2							light bro	wnish g	ray fine	sand			
	_													
7.	Concentration, D=Dep	oletion, RM:	=Reduced Matrix,	CS=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	٠,						
	oil Indicators:							ndicators			-	ric Soil	s :	
Histol						rface (S8) (LRR			Muck (a		-			
	Epidon (A2)					S9) (LRR S, T, U			Muck (A			- A41 F		D)
	Histic (A3)			_		ral (F1) (LRR O)	-						RA 150A,	
	ogen Sulfide (A4)				my Gleyed Matri:	, ,	-	_		•			R P, S, 1	')
	fied Layers (A5)	D T !!!			leted Matrix (F3)		-		alous Br		amy Soi	ils (F20	)	
	nic Bodies (A6) (LRR I				ox Dark Surface			•	RA 153E					
5 cm	Mucky Mineral (A7) (L	.RR P,T,U)	<i>t</i>	Dept	leted Dark Surfa	ice (F7)	-		arent M					
✓_Muck	Presence (A8) (LRR	U)		Redo	ox Depressions	(F8)	=	Very S	Shallow I	Dark Si	urface (1	TF12) (I	LRR T, U	J)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)		_	Other	(Explain	ı in Rer	narks)			
	eted Below Dark Surface			Depl	leted Orchric (F	11) (MLRA 151)								
	Dark Surface (A12)	,			•	sses (F12) (LRR	7 D T)							
		**** 5.4 454						Indicators						
Coast	t Prairie Redox (A16) (	(MLKA 150	IA)	_	•	3) (LRR P, T, U)	• • • • • • • • • • • • • • • • • • • •	nydrology		preser	it, unles:	s distur	oed or	
Sandy	y Mucky Mineral (S1) (	(LRR O, S)	1	_	a Orchric (F17) (		•	roblemati	C.					
Sandy	y Gleyed Matrix (S4)			Redu	uced Vertic (F18	B) (MLRA 150A,	150B)							
Sandy	y Redox (S5)					n Soils (F19) (ML								
Stripp	ed Matrix (S6)			Anor	malous Bright Lo	oamy Soils (F20)	) (MLRA 149A, 153C,	153D)						
Dark	Surface (S7) (LRR P,	S, T, U)												
Restrictiv	e Layer (If observed)	):												-
	Type:													
	Depth (inches):						Hydric Soil Present	?	Yes	✓	No _			
Remarks:														
									-					

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/15/0					
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 103					
Investigator(s): Stacy Rizzo, Erin Heinen		Section, Township, Range: 3 28S 22E					
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con-	vex, none): none	Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: <u>28.082009</u>	Long: <u>-82.0</u>	9581	Datum: WGS84			
Soil Map Unit Name: Basinger fine sand			NWI classification	Shrub Wetland			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes _✓	_ No	(If no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology		Are circumstances	., , , ,			
Are Vegetation, Soil			(If needed, explain	any answers in Remarks)			
SUMMARY OF FINDINGS - Attach si			ransects, impo	ortant features, etc.			
Hydrophytic Vegetation Present?	YesNo						
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes No			
  Wetland Hydrology Present?	YesNo						
HYDROLOGY			Secondary Indicat	ors (minimum of two required)			
Wetland Hydrology Indicators:	shock all that apply)		Surface Soil				
Primary Indicators (minimum of one is required; of ✓ Surface Water (A1)	Water-Stained Leaves (	Do)		getated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)	55)	Oparacry vo	-			
✓ Saturation (A3)	Marl Deposits (B15) (LR	PP III	Moss Trim L				
Water Marks (B1)	Hydrogen Sulfide Odor		<u> </u>	Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	• •			
Drift Deposits (B3)	Presence of Reduced Ir			isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction i	, ,	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aguitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	<del></del> · · ·		FAC Neutral Test (D5)				
Field Observations:	Other (Explain in Terms			103(100)			
Surface Water Present?	Yes No	Depth (inches): >36					
Water Table Present?	Yes No		1				
Saturation Present?	Yes✓ No		Wetland				
(includes capillary fringe)			Hydrology Present?	Yes <u>✓ No</u>			
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:					
Remarks:							

VEGETATION - Use scientific nar	mes of plants			Samplir	ng Point:	103
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.	COVCI	Opeoies:	Otatus	Number of Dominant Species		
2.				That Are OBL, FACW, or FAC:	<u>1</u>	(A)
3.		<del></del>		Total Number of Dominant		
4.	<del></del>			Species Across All Strata:	<u>2</u>	(B)
5.				<b>d</b> '		
<u>5.</u> 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>50.00</u>	(A/B)
7.		· · · · · · · · · · · · · · · · · · ·		Prevalance Index worksheet:		
<i>r</i> .		= Total Cove		Total % Cover of:	Multiply by	
Sapling Stratum (Plot size:	-	- Total Cove	;1	OBL species x1	Multiply by:	
1.				FACW species x2		-
2.				FAC species x3		- 1
3.				FACU species x4		-
4.				UPL species x5		-
5.				Column Totals: (A		- (B)
<u>5.</u> 6.				Column rotals(F	.)	- <sup>(B)</sup>
7.				Prevalance Index = B/A =		
1.		= Total Cove		Hydrophytic Vegetation Indicato		
Shrub Stratum (Plot size:	,	- Total Cove	:1	✓ Dominance Test is 50%	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
1.	<del></del>			Prevalence Index is ≤3.0¹	1 / <del>-</del>	1 - 2 - 3
2.				Problematic Hydrophytic Ve	agetation (Exp	iain)
3.				1		
4.				Indicators of hydric soil and wetla		ıust
5.				be present, unless disturbed or pro		
6.				Definitions of Vegetation Strata:	•	
7.	·					
Hands Charles (District	0	= Total Cove	er	Tree- Woody plants, excluding wood		,,, l
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in I	_	(7.6
Panicum repens	60	yes	FACW	cm) or larger in diameter at breast he		
Eupatorium capillifolium	20	yes	FACU	Sapling- Woody plants, excluding w		
Spermacoce sp.	15	no	FAC	approximately 20 ft (6m) or more in I	neight and less t	than 3
Ludwigia peruviana	10	no	OBL	in. (7.6 cm) DBH.		
5. Cyperus spp.	2	no	FACW	Shrub- Woody plants, excluding wo		
6. Lindernia sp.	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in	neignt.	
7. Ludwigia alata	2	no	OBL	Herb- All herbaceous (non-woody)pl	•	
8. Diodia virginiana	2	no	FACW	herbaceous vines, regardless of size		
Indigofera hirsuta	2	no	NL	plants, except woody vines, less that	n approximately	3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, regard	dless of height.	
12.						
	115	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3.			_			
4.				Hydrophytic		
5.				Vegetation Present? Yes _	<u>√No</u>	<u> </u>
	0	= Total Cove	r	1 -		
Remarks: (If observed, list morph-	ological adapta					
Percent cover estimates based or	-		roader cor	nmunity.		

County/soil: Hillsborough- Basinger SOIL			Sampling Point:10
Profile Description: (Describe to the depth needed		the absence of indicators	s.)
Depth Matrix inches) Color (moist) % Color (m	Redox Features oist) % Type¹ Lo	c <sup>2</sup> Texture	Remarks
10 YR 2/1	<u> </u>	- TOXIGIO	black fine sand
-28 10 YR 6/1			gray fine sand
10 YR 5/3; 10 YR			
28-42 5/2			brown and grayish brown fine sand
12-80 10 YR 6/2			light brownish gray fine sand
Type: C=Concentration, D=Depletion, RM=Reduced N	Matrix, CS=Covered or Coated Sand Gra	ins. <sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
Hydric Soil Indicators:	idax, oo ootoloo o, ooddoo oana ola		Indicators for Problematic Hydric Soils 3:
Histol (A1)	Połyvalue Below Surface (S8	) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRF	R S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (I	_RR O)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLF	RA 151)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F1	•	•
	Umbric Surface (F13) (LRR		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)			hydrology must be present, unless disturbed or problematic.
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 1	•	problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLR/		
Sandy Redox (S5)	Piedmont Floodplain Soils (F		
Stripped Matrix (S6)	Anomalous Bright Loamy So	IIS (F20) (WILKA 149A, 153	sc, 183D)
Dark Surface (S7) (LRR P, S, T, U)		····	
Restrictive Layer (If observed):			
Type: Depth (inches):	•	Hydric Soil Prese	ent? Yes ✓ No .
Remarks:		Triyano Son Frese	inti 165 T NO
vernous.			
•			
	,		
			•

Project/Site: Levy Nuclear Plant - Transmission Li	ines		City/County: Hillsborough Sampling Date: 10/15/0					
Applicant/Owner: Progress Energy Florida, Inc.			State: FL Sampling Point: 104					
Investigator(s): Stacy Rizzo, Erin Heinen			Section, Township, Range: 3 28S 22E					
Landform (hillslope, terrace, etc.):N/A			Local relief (concave, convex, none): none Slope (%):					
Subregion (LRR or MLRA): LRR U	Lat	t: <u>28.081997</u>	Long: <u>-82.0</u>	96292	Dati	ım: WGS84		
Soil Map Unit Name: Basinger fine sand				NWI classification:	Shrub Wetland			
Are climatic / hydrologic conditions on the site typ	ical for this time of	year?	Yes <u></u> ✓	_ No	(If no, explain in R	emarks)		
Are Vegetation, Soil,	or Hydrology		significantly disturbed?	Are circumstances		No		
			naturally problematic?	(If needed, explain	any answers in Re	marks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>				ransects, impo	rtant features,	etc.		
Hydrophytic Vegetation Present?								
Hydric Soil Present?	Yes/No		Is the Sampled Area w	ithin a Wetland?	Yes <u>✓</u> No			
Wetland Hydrology Present?	Yes✓No							
Remarks:		•						
				•				
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indicato	ors (minimum of two	required)		
Primary Indicators (minimum of one is required; c	heck all that apply)	)	Surface Soil Cracks (B6)					
✓ Surface Water (A1)	Water-Stair	- ned Leaves (B	9)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Aquatic Fau	una (B13)		Drainage Pat	terns (B10)			
✓ Saturation (A3)	Marl Depos	its (B15) (LRF	R U)	Moss Trim Li	nes (B16)			
Water Marks (B1)		Sulfide Odor (C	-	Dry-Season \	Nater Table (C2)			
Sediment Deposits (B2)	Oxidized RI	hizospheres o	n Living Roots (C3)	Crayfish Burr		i		
Drift Deposits (B3)		f Reduced Iron		Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Recent Iron	Reduction in	Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck S	Surface (C7)	, ,	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	· <del></del>	ain in Remark	s)	FAC Neutral	Neutral Test (D5)			
Field Observations:								
Surface Water Present?	Yes No		Depth (inches): >36					
Water Table Present?	Yes✓ No			·				
  Saturation Present?			Depth (inches): 0	Wetland				
(includes capillary fringe)			,	Hydrology Present?	Yes <u>✓</u> No			
Describe Recorded Data (stream gauge, monitori	ng well, aerial phot	tos, previous i	nspections), if available:	1				
, , , , , , , , , , , , , , , , , , ,								
<u></u>								
Remarks:								

VEGETATION - Use scientific na	mes of plants			9	Sampling Point:	104
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshe	et:	
1.				Number of Dominant Speci	es	(4)
2.				That Are OBL, FACW, or F	AC: <u>3</u>	(A)
3.				Total Number of Dominant	4	(D)
4.			<del>,</del>	Species Across All Strata:	<u>4</u>	(B)
5.				Percent of Dominant Specie	es 75.00	(4.5)
6.				That Are OBL, FACW, or F		(A/B)
7.				Prevalance Index worksh		
		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1. Salix spp.	2	yes	FACW	FACW species	x2=	_
2.				FAC species	x3=	_
3.			•	FACU species	x4=	_
4.				UPL species	x5=	
5.				Column Totals:	(A)	— (B)
6.				1 -	······································	<b>—</b> ` ´
7.				Prevalance Index = B/	A =	
The state of the s	2	= Total Cove	er	Hydrophytic Vegetation Ir	ndicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 5		
Baccharis sp.	30	yes	FAC	Prevalence Index is	≤3.0 <sup>1</sup>	
2.				<del></del>	hytic Vegetation <sup>1</sup> (Ex	olain)
3.	<del></del>			<del>                                     </del>	, , ,	,
4.				1Indicators of hydric soil and	d wetland hydrology r	must
5.	-			be present, unless disturbe		
6.	-			Definitions of Vegetation		
7.				1		
	30	= Total Cove	 er	Tree- Woody plants, excludio	ng woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or n	· ·	(7.6
Ludwigia peruviana	50	yes	OBL	cm) or larger in diameter at b	reast height (DBH).	
2. Eupatorium capillifolium	20	yes	FACU	Sapling- Woody plants, excl	uding woody vines,	
Commelina spp.	2	no	FACW	approximately 20 ft (6m) or n		than 3
4. Indigofera hirsuta	2	no	NL	in. (7.6 cm) DBH.		
5. Sesbania spp.	2	no	FAC	Shrub- Woody plants, exclud	ding woody vines,	
6. Diodia virginiana	2	no	FACW	approximately 3 to 20 ft (1 to	6 m) in height.	
7.	-			Herb- All herbaceous (non-w	oody)plants, including	
8.	- <del> </del>			herbaceous vines, regardles		
9.				plants, except woody vines, I	ess than approximatel	y 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vine:	s, regardless of height	
12.				]		
	78	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1						
2.						
3.	-					
4.				Hydrophytic		
5.					YesNo	
	0	= Total Cove	er	1		
Remarks: (If observed, list morph	ological adapta	ations below).		-		
Percent cover estimates based o	n meandering s	survey of the b	oroader co	mmunity.		

me Bood, parent (Bood, Bo to are depart needs	d to document the indicator or confirm the ab	sence of indicators.)	
oth Matrix	Redox Features		
hes) Color (moist) % Color (	moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
10 YR 2/1			black fine sand
8 10 YR 6/1			gray fine sand
10 YR 5/3; 10 YR			
42 5/2			brown and grayish brown fine sand
80 10 YR 6/2			light brownish gray fine sand
		-21 1' DI D	A North Administration of the Control of the Contro
pe: C=Concentration, D=Depletion, RM=Reduced	Matrix, CS=Covered or Coated Sand Grains.	<sup>2</sup> Location: PL=Pore	
fric Soil Indicators: Histol (A1)	Polyvalue Below Surface (S8) (LRR		ndicators for Problematic Hydric Soils <sup>3</sup> :1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S, T, t		2 cm Muck (A10) (LRR S)
_Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F2)	-	
- , , ,	Redox Dark Surface (F6)	-	Anomalous Bright Loamy Soils (F20)
_Organic Bodies (A6) (LRR P, T, U)			(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)	-	Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)	Redox Depressions (F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)	_	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)		
= •	Iron-Manganese Masses (F12) (LRF		
_Thick Dark Surface (A12)			Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	•	ydrology must be present, unless disturbed or
_Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)	ρ	roblematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A,	150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (ML		
_Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20	•	153D)
, .		, (,,	,
_Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed):		T.	
· · · · · · · · · · · · · · · · · · ·			
Type:	_	Lhudria Cail Dessant	? Yes ✓ No .
Depth (inches):		Hydric Soil Present	r res v No
marks:			
			•

Project/Site: <u>Levy Nuclear Plant - Transmission L</u>	ines	City/County: Hillsborough Sampling Date: 10/19/09				
Applicant/Owner: <u>Progress Energy Florida, Inc.</u>		State: FL	FL Sampling Point: 106			
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	_Section, Township, Range	: 4 28S 22E	g		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): <u>none</u>	Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.082059	Long: <u>-82.1</u>	01479	Datum: WGS84		
Soil Map Unit Name: Malabar fine sands			_NWI classification:	Freshwater Emergent Wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normai? Yes <u>No ✓</u>		
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ing point locations, t	ransects, impor	tant features, etc.		
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No		
Wetland Hydrology Present?	Yes✓ No	]				
Remarks:						
			<u></u>	*		
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicator	rs (minimum of two required)		
Primary Indicators (minimum of one is required; of	heck all that apply)	•	Surface Soil C	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Veg	etated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patt	erns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Lir	nes (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season V	Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burro	ows (C8)		
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic F	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aquit	ard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral 1	Test (D5)		
Field Observations:			1			
Surface Water Present?	Yes No	Depth (inches): 0-12	_			
Water Table Present?	Yes No	Depth (inches): 0				
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)		-	1 -	Yes <u>✓ No</u>		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:				
D						
Remarks:						
	•					
·						
1						

VEGETATION - Use scientific nar				Sampling	Point:	106
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	<u>4</u>	(A)
2.				That Are OBL, FACW, or FAC:	<u> </u>	(/-)
3.				Total Number of Dominant	5	/B)
4.				Species Across All Strata:	<u>5</u>	(B)
5.				Percent of Dominant Species	90.00	(A (D)
6.				That Are OBL, FACW, or FAC:	<u>80.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=		
Sapium sebiferum	5	yes	FAC	FACW species x2=		_
2.				FAC species x3=		_
3.	· — — — —			FACU species x4=		-
4.				UPL species x5=		-
5.				Column Totals: (A)		(B)
6.				(.,,_		_ (_,
7.				Prevalance Index = B/A =		
··-	5	= Total Cove		Hydrophytic Vegetation Indicators		
Shrub Stratum (Plot size:	)	rotal core	,,	✓ Dominance Test is 50%	•	
Sambucus canadensis	/ 	ves	FACW	Prevalence Index is ≤3.0¹		
Baccharis halimifolia	2	ves	FAC	Problematic Hydrophytic Vegi	etation <sup>1</sup> (Evr	lain)
3.		yes	170	Troblematic Hydrophytic Vegi	station (Exp	naiii)
4.	· <del></del>	<del></del>		Indicators of budgie soil and watland	hudrology n	
5.				Indicators of hydric soil and wetland be present, unless disturbed or prob		iust
6.				Definitions of Vegetation Strata:	emanc.	
7.				Deminitions of Vegetation Strata.		
1.	7	= Total Cove		Tana Mandunianta avaludian washiy		
Herb Stratum (Plot size:)	,	- Total Cove	<b>31</b>	Tree- Woody plants, excluding woody approximately 20 ft (6m) or more in hei		/7 G
			EACH	cm) or larger in diameter at breast heigh		(7.0
Eupatorium capillifolium	50	yes	FACU	1		
Juncus effusus	30	yes	FACW	Sapling- Woody plants, excluding woo		4b 0
3. Panicum hemitomon	10	no	OBL	approximately 20 ft (6m) or more in hei	gnt and less	tnan 3
Andropogon spp.		no	FAC	<b>l</b> ` ′		
Ludwigia peruviana	2	no	OBL	Shrub- Woody plants, excluding wood		
6. Carex albolutescens	2	no	FAC	approximately 3 to 20 ft (1 to 6 m) in he		
7. Setaria faberi	2	no	UPL	Herb- All herbaceous (non-woody)plan		
8.				herbaceous vines, regardless of size.		
9.				plants, except woody vines, less than a lm) in height.	pproximately	3π(1
10.				, '		
11.				Woody vine- All woody vines, regardle	ss of neight.	
12.						
	101	= Total Cove	er			
Woody Vine Stratum (Plot size:	)				•	
<u>1.                                    </u>						
2.	•					
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes <u></u> ✓	No	<u>.</u>
	0	= Total Cove	er			
Remarks: (If observed, list morphe	ological adapta	tions below).				

Percent cover estimates based on meandering survey of the broader community.

SOIL Profile De	scription: (Describe t	to the den	oth needed to docu	ıment th	e indicator or o	onfirm the abs	ence of indicators \	Sampling Point:1
Depth	Matrix	o die dep	an needed to door		Features	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ones of maioators,	
inches)	Color (moist)	- %	Color (moist)	%	Type	Loc²	Texture	Remarks
<u>-4</u>	10 YR 4/1							dark gray fine sand
l-12	10 YR 6/2							light grayish brown fine sand
2-30	10 YR 6/6							brownish yellow fine sand
30-50	10 YR 6/3							pate brown fine sand
					<del></del>			
	Concentration, D=Depl	etion, RM	Reduced Matrix, C	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	
	il Indicators:							ndicators for Problematic Hydric Soils 3:
Histol			-		value Below Sur			1 cm Muck (a9) (LRR O)
	Epidon (A2)		-		Dark Surface (S			2 cm Muck (A10) (LRR S)
Black	Histic (A3)		-	Loan	ny Mucky Minera	al (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		-	Loan	ny Gleyed Matrix	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)		-		eted Matrix (F3)		_	Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	', T, U)	-	Redo	ox Dark Surface	(F6)		(MLRA 153B)
5 cm	Mucky Mineral (A7) (LF	RR P.T.U)	_	Depl	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR I		·	Redo	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	-,	_		(F10) (LRR U)	,	_	Other (Explain in Remarks)
	ted Below Dark Surfac	e (A11)		Depl	eted Orchric (F1	1) (MLRA 151)		
	Dark Surface (A12)	` ′		Iron-	Manganese Mas	ses (F12) (LRR	O. P.T)	
	Prairie Redox (A16) (I	VILRA 150	)A) _		ric Surface (F13			Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (L		•	Delta	a Orchric (F17) (	MLRA 151)		problematic.
	Gleyed Matrix (S4)			Redu	uced Vertic (F18	) (MLRA 150A.	150B)	
	Redox (S5)		-		mont Floodplain			
	ed Matrix (S6)		•		•	, ,,	(MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P, \$	STU	-			a, como (; 20)	(,,	,
	e Layer (If observed):						1	
	Type:							
	Depth (inches):						Hydric Soil Present	? Yes <u>√</u> No
Remarks:							<u> </u>	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/19/09					
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 107					
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range: 4 28S 22E					
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con-	/ex, none): none	Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: 28.082016	Long: <u>-82.1</u>	04569	Datum: WGS84			
Soil Map Unit Name: Basinger fine sands				Freshwater Emergent Wetland			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology		Are circumstances				
	or Hydrology		(If needed, explain	any answers in Remarks)			
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.			
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes No			
Wetland Hydrology Present?	Yes/No						
Remarks:							
	•						
				-			
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)			
Primary Indicators (minimum of one is required; o	heck all that apply)		Surface Soil	Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season \	Vater Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	ows (C8)			
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vi	sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction is	n Tilled Soils (C6)	Geomorphic	ic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)			
Field Observations:		•		·			
Surface Water Present?	Yes No	Depth (inches):					
Water Table Present?	Yes No						
Saturation Present?	Yes No		Wetland				
(includes capillary fringe)			Hydrology Present?	Yes ✓ No			
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available;	1.1000				
, , , ,		, ,,					
Described							
Remarks:							
				•			
	*						

1.     Number of Dominant Species       2.     That Are OBL, FACW, or FAC:       3.     Total Number of Dominant       4.     Species Across All Strata:       5.     Percent of Dominant Species       75.00     (A/R)	VEGETATION - Use scientific na	mes of plants				Sampling Point: _	107
Number of Dominant Species   (A)		Absolute %	Dominant	Indicator	Dominance Test Works	heet:	,
That Are OBL, FACW, or FAC: 3	Tree Stratum (Plot size:)	Cover	Species?	Status			
That Are OBL_FACW, in FAC.	1.	-			Number of Dominant Spe	ecies	(8)
Species Across All Strata.	2.				That Are OBL, FACW, or	r FAC:	(A)
Species Across All Strata.	3.				Total Number of Domina	nt ,	453
Percent of Dominant Species   That Are OBL, FACW, or FAC:   Total Cover	4.	-	•		Species Across All Strata	a: <u>4</u>	(B)
That Are OBL, FACW, or FAC: 15.00 (Ws)		-			Percent of Dominant Spe	ecies	
Prevalance Index worksheet:   Total % Cover of: Multiply by:	6.		•				<u>30</u> (A/B)
Sapling Stratum (Plot size:							
Sapling Stratum (Plot size:			= Total Cove	er	Total % Cover of:	Multiply	bv:
1. Salix spp.         30         yes         FACW         FACW species         x2=           2. Sapium sebiferum         2         no         FAC species         x3=           3. Quercus laurifolia         2         no         FACU species         x4=           4. Taxodium distichum         2         no         OBL         UPL species         x5=           5.         -         Column Totals:         (A)         (B)           6.         -         Column Totals:         (A)         (B)           7.         -         -         Prevalance Index = B/A =         -           8.         -         -         Hydrophytic Vegetation Indicators:         ✓ Dominance Test is 50%         -           9.         -         -         Problematic Hydrophytic Vegetation 1 (Explain)         -           1.         Sambucus canadensis         2         yes         FACW         Prevalence Index is ≤3.0¹           2.         Baccharis sp.         2         yes         FACW         Prevalence Index is ≤3.0¹         -           3.         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td>Sapling Stratum (Plot size:</td> <td>)</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Sapling Stratum (Plot size:	)					
2. Sapium sebiferum   2		30	ves	FACW	FACW species	x2=	
3. Quercus laurifolia   2					4	<del></del>	<del></del>
A   Taxodium distichum   2	,				-		
Column Totals: (A) (B)			-		-		
6. 7.					-		—— <sub>(B)</sub>
Prevalance Index = B/A =   Prevalance Index =			,		-	(/,/	(B)
Shrub Stratum (Plot size:		· · · · · · · · · · · · · · · · · · ·			Prevalance Index =	R/A =	
Shrub Stratum (Plot size:)  1. Sambucus canadensis 2 yes FACW Prevalence Index is \$3.0¹ 2. Baccharis sp. 2 yes FAC Problematic Hydrophytic Vegetation¹ (Explain) 3.		36	= Total Cov	 er			
1. Sambucus canadensis 2 yes FACW Prevalence Index is ≤3.0¹ 2. Baccharis sp. 2 yes FAC Problematic Hydrophytic Vegetation¹ (Explain)  4.	Shrub Stratum (Plot size:	)	70101 0011	<b>.</b>	' ' ' '		
2 Baccharis sp. 2 yes FAC Problematic Hydrophytic Vegetation¹ (Explain) 3.  4.			VAC	EAC\M			
3.							(Evolain)
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			·	170	1 Toblematic Hydro	opinytic vegetation	(LAPIGIII)
be present, unless disturbed or problematic.    Definitions of Vegetation Strata:   Tree-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).   Sapling-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).   Sapling-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.   Sapling-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.   Shrub-Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.   Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.   Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.   Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.   Shrub-Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.   Shrub-Woody plants, excluding woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody plants, excluding woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody vines, regardless of size. Includes woody plants, excluding woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody vines, approximately 20 ft (1 to 6 m) in height.   Shrub-Woody vines, approximately 20 ft (2 ft		<del></del>			l Iladiantoro of budrio onil :	and watland budgal	
Definitions of Vegetation Strata:  7.			•				
Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  2. Panicum hemitomon 10 no OBL 3 Juncus effusus 10 no FACW 4. Ludwigia peruviana 2 no OBL 5. Scleria spp. 2 no FACW 5. Scleria spp. 2 no FACW 6. Commelina spp. 2 no FACW 7. Thalia geniculata 2 no OBL 8. Hydrocotyle spp. 2 no OBL 8. Hydrocotyle spp. 2 no FACW 9. Cynodon dactylon 2 no FACW 10. Panicum repens 2 no FACW 11. Passiflora incarnata 2 no NL Woody Vines, less than approximately 3 ft (1 m) in height.  76 = Total Cover Woody Vine Stratum (Plot size:)  8. Hydrophytic Vegetation Present? Yes No  1. Hydrophytic Vegetation Present? Yes No		<del></del>	<del></del>				·
Herb Stratum (Plot size:) 1. Eupatorium capillifolium 2. Panicum hemitomon 3. Juncus effusus 4. Ludwigia peruviana 5. Scleria spp. 6. Commelina spp. 7. Thalia geniculata 8. Hydrocotyle spp. 9. Cynodon dactylon 10. Panicum repens 10. Panicum repens 11. Passiflora incarnata 12. Total Cover  Woody Vine Stratum (Plot size:) 1. Passiflora incarnata 2. Total Cover  Woody Vine Stratum (Plot size:) 1. Eupatorium capillifolium 40		<del></del>			Deminions of Vegetation	m onum.	
Herb Stratum (Plot size:			= Total Cov		Troe Woody plants evalu	idina woody vinos	
1. Eupatorium capillifolium 2. Panicum hemitomon 3. Juncus effusus 4. Ludwigia peruviana 2. no OBL 5. Scleria spp. 6. Commelina spp. 7. Thalia geniculata 8. Hydrocotyle spp. 9. Cynodon dactylon 9. Cynodon dactylon 10. Panicum repens 11. Passiflora incarnata 12. no NL  76 = Total Cover  Remarks: (If observed, list morphological adaptatitons below).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Shrub- Moody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Woody vine All woody vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody Vine Stratum (Plot size:)  1	Herh Stratum (Plot size:	7	- Total Cove	ÇI			13 in (76
2. Panicum hemitomon 10 no OBL 3. Juncus effusus 10 no FACW 4. Ludwigia peruviana 2 no OBL 5. Scleria spp. 6. Commelina spp. 7. Thalia geniculata 8. Hydrocotyle spp. 9. Cynodon dactylon 10. Panicum repens 12. no FACW 11. Passiflora incarnata 12. no NL 12. Total Cover  Woody Vine Stratum (Plot size:) 1. 2  Remarks: (If observed, list morphological adaptations below).  Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody Vine- All woody vines, regardless of height.  Hydrophytic  Vegetation Present? YesNo		- 40	VOS	EACH			
3. Juncus effusus 10 no FACW approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  5. Scleria spp. 2 no FACW approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.  5. Scleria spp. 2 no FACW approximately 3 to 20 ft (1 to 6 m) in height.  7. Thalia geniculata 2 no OBL Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  8. Hydrocotyle spp. 2 no OBL Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  10. Panicum repens 2 no FACW m) in height.  11. Passiflora incarnata 2 no NL Woody vine- All woody vines, regardless of height.  12. 76 = Total Cover  Woody Vine Stratum (Plot size:)  1. 2.					1		•
4. Ludwigia peruviana 2 no OBL in. (7.6 cm) DBH.  5. Scleria spp. 2 no FACW 6. Commelina spp. 2 no FACW 7. Thalia geniculata 2 no OBL Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  4. Hydrophytic  7. Thalia geniculata 2 no OBL Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 no Panicum repens 2 no FACW m) in height.  7. Thalia geniculata 2 no OBL Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 no Panicum repens 2 no NL Woody vine- All woody vines, regardless of height.  7. Thalia geniculata 2 no NBL Werb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, regardless of height.  8. Hydrophytic Woody vines, regardless of height.  9. Total Cover Hydrophytic Vegetation Present? Yes No No No No No No No No No No No No No							
5. Scleria spp. 6. Commelina spp. 7. Thalia geniculata 8. Hydrocotyle spp. 9. Cynodon dactylon 10. Panicum repens 11. Passiflora incarnata 12. no 13.						i more in neight and	icos tilan o
6. Commelina spp. 2 no FACW approximately 3 to 20 ft (1 to 6 m) in height.  7. Thalia geniculata 2 no OBL 8. Hydrocotyle spp. 2 no OBL 9. Cynodon dactylon 2 no FACU 10. Panicum repens 2 no FACW 11. Passiflora incarnata 2 no NL Woody Vine Stratum (Plot size:)  7. Thalia geniculata 2 no OBL Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  Woody vine- All woody vines, regardless of height.  Woody vine- All woody vines, regardless of height.  Woody vine- All woody vines, regardless of height.  Hydrophytic Vegetation Present? Yes ✓ No  No  No  Remarks: (If observed, list morphological adaptations below).					<b>,</b> '	dudina waadu ulaan	
7. Thalia geniculata 2 no OBL 8. Hydrocotyle spp. 2 no OBL 9. Cynodon dactylon 2 no FACU 10. Panicum repens 2 no NL 11. Passiflora incarnata 2 no NL  Woody Vine Stratum (Plot size:) 1. 2. 3. 4. 5.	• • • • • • • • • • • • • • • • • • • •						
8. Hydrocotyle spp. 2 no OBL herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 no Panicum repens 2 no PACW m) in height.  11. Passiflora incarnata 2 no NL Woody vine- All woody vines, regardless of height.  12. 76 = Total Cover  Woody Vine Stratum (Plot size:)  1. 2. 3. 4. 5.							
9. Cynodon dactylon 2 no FACU plants, except woody vines, less than approximately 3 ft (1 10. Panicum repens 2 no FACW m) in height.  11. Passiflora incarnata 2 no NL Woody vine- All woody vines, regardless of height.  12. 76 = Total Cover Woody Vine Stratum (Plot size:)  1. 2. 3. 4. 5.	·				<b>1</b>	• • • •	•
10. Panicum repens 2 no FACW 11. Passiflora incarnata 2 no NL Woody vine- All woody vines, regardless of height.  12. 76 = Total Cover  Woody Vine Stratum (Plot size:) 1. 2. 3.					-		•
11. Passiflora incarnata  2 no NL  Woody vine- All woody vines, regardless of height.  76 = Total Cover  Woody Vine Stratum (Plot size:)  1.  2.  3.  4.  5.						s, less than approxim	nately 5 it (1
12.					J '	naa raaardlaaa af b	oiaht
76				INL	Twoody vine- All woody vii	les, regardless of ne	aignt.
Woody Vine Stratum (Plot size:)         1.         2.         3.         4.       Hydrophytic         5.       Vegetation Present? Yes ✓ No         Remarks: (If observed, list morphological adaptations below).	12.		T-1-1-0		4		
1. 2. 3. 4. Hydrophytic 5. Vegetation Present? Yes _✓ No  Remarks: (If observed, list morphological adaptations below).	Marada Mara Okasta ay (Diata)	, 76	= Total Cove	er			
2. 3. 4. Hydrophytic 5. Vegetation Present? Yes _ ✓ _ No  Remarks: (If observed, list morphological adaptations below).		)					
3. 4. 5.					4		
4. Hydrophytic  5. Vegetation Present? Yes No  0 = Total Cover  Remarks: (If observed, list morphological adaptations below).							
5. Vegetation Present? Yes _✓ _No  0 = Total Cover  Remarks: (If observed, list morphological adaptations below).		· ———			1		
0 = Total Cover  Remarks: (If observed, list morphological adaptations below).		<u> </u>					•
Remarks: (If observed, list morphological adaptations below).	5.				Vegetation Present?	Yes <u>√</u> N	10
					<u> </u>		
		-	-		mmunity		

Depth   Matrix   Redox Features   Redox Features
28 10 YR 6/1 10 YR 5/3; 10 YR 8-42 5/2 2-30 10 YR 6/2  2-30 10
10 YR 6/1
### 10 YR 5/3; 10 YR ### 25/2
brown and grayish brown fine sand light brownish gray fine sand li
pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### Arric Soil Indicators:  ### Histol (A1)
Indicators: Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Histic Epidon (A2) Flistic Epidon (A2) Flistic Epidon (A2) Flistic (A3) Loamy Mucky Mineral (F1) (LRR O) Floar Surface (S9) (LRR S, T, U) Loamy Mucky Mineral (S1) Floar Surface (S9) (LRR S, T, U) Loamy Mucky Mineral (S1) Floar Surface (S9) (LRR S, T, U) Loamy Mucky Mineral (S1) Floar Mucky Mineral Mucky Mineral (S1) Floar Mucky Mineral Mucky Mineral (S1) Floar Mucky Mineral Mucky Mineral (S1) Floar Mucky Mineral Mucky Mineral (S1) Floar Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mineral Mucky Mucky Mineral Mucky Mucky Mineral Mucky Mucky Mineral Mucky Mucky Mineral Mucky Mucky Mineral Mucky Mucky Mineral Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mucky Mu
Indicators: Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Histic Epidon (A2) Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T, U)  — Redox Depressions (F8) — Marl (F10) (LRR U) — Depleted Below Surface (S9) (LRR S, T, U) — Redox Derressions (F8) — Namiface (S9) (LRR S, T, U) — Redox Derressions (F8) — Piedmont Floodplain Soils (F19) (LRR P, S) — Anomalous Bright Loamy Soils (F20) — (MLRA 153B) — Red Parent Material (TF2) — Red Parent Material (TF2) — Red Parent Material (TF2) — Namid (F10) (LRR U) — Depleted Below Dark Surface (A11) — Depleted Below Dark Surface (A12) — Coast Prairie Redox (A16) (MLRA 150A) — Sandy Mucky Mineral (S1) (LRR O, S) — Reduced Vertic (F18) (MLRA 151) — Reduced Vertic (F18) (MLRA 150A) — Delta Orchric (F17) (MLRA 151) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Piedmont Floodplain Soils (F19) (MLRA 149A)
Indicators: Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Histic Epidon (A2) Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T, U)  — Redox Depressions (F8) — Marl (F10) (LRR U) — Depleted Below Surface (S9) (LRR S, T, U) — Redox Derressions (F8) — Namiface (S9) (LRR S, T, U) — Redox Derressions (F8) — Piedmont Floodplain Soils (F19) (LRR P, S) — Anomalous Bright Loamy Soils (F20) — (MLRA 153B) — Red Parent Material (TF2) — Red Parent Material (TF2) — Red Parent Material (TF2) — Namid (F10) (LRR U) — Depleted Below Dark Surface (A11) — Depleted Below Dark Surface (A12) — Coast Prairie Redox (A16) (MLRA 150A) — Sandy Mucky Mineral (S1) (LRR O, S) — Reduced Vertic (F18) (MLRA 151) — Reduced Vertic (F18) (MLRA 150A) — Delta Orchric (F17) (MLRA 151) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Reduced Vertic (F18) (MLRA 150A) — Piedmont Floodplain Soils (F19) (MLRA 149A)
Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F10) (LRR D, P, P, P, P, P, P, P, P, P, P, P, P, P,
Elack Histic (A3)
Loamy Gleyed Matrix (F2)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Sedox Dark Surface (F6)  Mucky Mineral (A7) (LRR P,T,U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P,T) Depleted Below Dark Surface (F10) Depleted Dark Surface (F7) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Lron-Manganese Masses (F12) (LRR O, P,T) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 150A) Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B)  Anomalous Bright Loamy Soils (F20) (MLRA 153B)  Anomalous Bright Loamy Soils (F20) (MLRA 153B)  Lead or CF10 (MLRA 153B)  Lead Parent Material (TF2)
Organic Bodies (A6) (LRR P, T, U)Redox Dark Surface (F6) (MLRA 153B)5 cm Mucky Mineral (A7) (LRR P,T,U)Depleted Dark Surface (F7)Red Parent Material (TF2)Muck Presence (A8) (LRR U)Redox Depressions (F8)Very Shallow Dark Surface (TF12) (LRR T,1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)Other (Explain in Remarks)Depleted Below Dark Surface (A11)Depleted Orchric (F11) (MLRA 151)Thick Dark Surface (A12)Iron-Manganese Masses (F12) (LRR O, P,T)Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F13) (LRR P, T, U)
Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR T,  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  — Very Shallow Dark Surface (TF12) (LRR T,  — Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wettan hydrology must be present, unless disturbed or problematic.
Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR T,  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  — Very Shallow Dark Surface (TF12) (LRR T,  — Other (Explain in Remarks)  3 Indicators of hydrophytic vegetation and wettan hydrology must be present, unless disturbed or problematic.
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Tron-Manganese Masses (F12) (LRR O, P,T)  Umbric Surface (F13) (LRR P, T, U)  Pelta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)
Thick Dark Surface (A12)  Lron-Manganese Masses (F12) (LRR O, P,T)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Lron-Manganese Masses (F12) (LRR O, P,T)  Jindicators of hydrophytic vegetation and wettan hydrology must be present, unless disturbed or problematic.  problematic.  Indicators of hydrophytic vegetation and wettan hydrology must be present, unless disturbed or problematic.  Produced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Delta Orchric (F17) (MLRA 151) Predmont Floodplain Soils (F19) (MLRA 149A)
Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)
trictive Layer (If observed):
Туре:
Depth (inches): Hydric Soil Present? Yes ✓ No

Project/Site: Levy Nuclear Plant - Transmission L	City/County: Hillsborough Sampling Date: 1			ite: 10/19/09		
Applicant/Owner: Progress Energy Florida, Inc.	the state of the s	State:FL		Sampling Point:108		
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range: <u>4 28S 22E</u>				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, convex, none): none Slop			_Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.081998	98 Long: <u>-82.107069</u> Datum:			Datum: WGS84	
Soil Map Unit Name: Malabar fine sands			_NWI classification	n: <u>NA</u>		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain	n in Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal?	Yes <u>No ✓</u>	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers	in Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ng point locations,	transects, impo	ortant featu	res, etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes <u>√</u>	_ No	
Wetland Hydrology Present?	Yes No					
Remarks:				•		
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum	of two required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soi	l Cracks (B6)		
Surface Water (A1)	(B9)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim t	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (	C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bu	Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced In	Iron (C4)Saturation Visible on Aerial Imagery (			l Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction is	<del></del>				
Iron Deposits (B5)	Thin Muck Surface (C7)					
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutra	• •		
Field Observations:		,		` ,		
Surface Water Present?	Yes No <u>✓</u>	Depth (inches):				
Water Table Present?	Yes No ✓		-			
Saturation Present?	Yes No		Wetland			
	140		Hydrology Present?	Yes <u>✓</u>	No	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor)	ing well aerial obotos previous	inspections) if available:	Fresentr	162 4	_No	
Describe Necolded Data (circum gaage, monitor	ing won, dental priotos, provioda	mopodiono,, il avallabio.				
Remarks:						

VEGETATION - Use scientific names of plants	
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VEGETATION - Use scientific nar	nes of plants			Sampling Point	:108
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	<u>2</u> (A)
2.				That Are OBL, FACW, or FAC:	£ (7)
3.				Total Number of Dominant	<u>2</u> (B)
4.				Species Across All Strata:	رد، ک
5.				Percent of Dominant Species	0.00 (A/B)
6.				That Are OBL, FACW, or FAC:	0.00 (20)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multip	ly by:
Sapling Stratum (Plot size:	)			OBL speciesx1=	
1.			- <u></u>	FACW species x2=	
2.				FAC species x3=	
3.				FACU speciesx4=	
4.				UPL species x5=	
5.				Column Totals: (A)	(B)
6.				<u> </u>	
7.			-	Prevalance Index = B/A =	
	0	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation	n <sup>1</sup> (Explain)
3.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydro	ology must
5.				be present, unless disturbed or problemati	
6.			-	Definitions of Vegetation Strata:	
7.				1	ļ
		= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height ar	
Commelina spp.	40	yes	FACW	cm) or larger in diameter at breast height (DE	
Muridannia nudiflora	40	yes	FAC	Sapling- Woody plants, excluding woody vin	es.
3. Diodia virginiana	10	no	FACW	approximately 20 ft (6m) or more in height ar	
Cynodon dactylon	10	no	FACU	in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines	s,
6.				approximately 3 to 20 ft (1 to 6 m) in height.	,
7.				Herb- All herbaceous (non-woody)plants, inc	ludina
8.				herbaceous vines, regardless of size. Includ	
9.			-	plants, except woody vines, less than approx	
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of	height.
12.		• • • • • • • • • • • • • • • • • • • •		1	Ĭ
	100	= Total Cove	r	<b>1</b>	
Woody Vine Stratum (Plot size:	)		`		
1.			ļ		
2.				1	
3.					
4.				l Hydrophytic	
5.					No .
<u>.                                    </u>		= Total Cove	r	Vegetation Flescht:	
Remarks: (If observed, list morpho					
Percent cover estimates based on	-		roader cor	mmunity	
r crociii cover cominates basea on	incanacing 5	divey of the bi	roduct cor	minumy.	

ome Description oth	: (Describe to the Matrix	e depth needed to		e indicator or of eatures	Lomini ule abse	ince of indicators.)	
·		% Color (mois		Type <sup>1</sup>	Loc²	Texture	Remarks
40.40.4							dark gray fine sand
10 YR 4							
10 YR 6			<del></del>				light grayish brown fine sand
10 YR 6							brownish yellow fine sand
10 YR 6							pale brown fine sand
	<del></del>						
						21	
: C≃Concentra c Soil Indicate		n, RM=Reduced Mati	nx, CS=Covere	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Indicators for Problematic Hydric Soils 3:
listol (A1)	JIS.		Dohar	alue Below Sur	face (S8) (LRR S		1 cm Muck (a9) (LRR O)
listic Epidon (A	.21				69) (LRR S, T, U)		2 cm Muck (A10) (LRR S)
						-	
lack Histic (A3					al (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A,
tydrogen Sulfid				y Gleyed Matri		-	Piedmont Floodplain Soils (F19) (LRR P, S, T
Stratified Layers				ted Matrix (F3)		_	Anomalous Bright Loamy Soils (F20)
organic Bodies	(A6) (LRR P, T,	U)		x Dark Surface			(MLRA 153B)
cm Mucky Mir	neral (A7) (LRR F	P,T,U)	Deple	ted Dark Surfa	ce (F7)	-	Red Parent Material (TF2)
	(A8) (LRR U)		Redox	x Depressions	(F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U
cm Muck (A9)				F10) (LRR U)	. ,	_	Other (Explain in Remarks)
	Dark Surface (A	11)	Deple	ted Orchric (F	11) (MLRA 151)		
hick Dark Surf	•	• • • •			sses (F12) (LRR	O. P.T)	
	edox (A16) (MLR	A 450A)		-	3) (LRR P, T, U)		Indicators of hydrophytic vegetation and wetland
				•			nydrology must be present, unless disturbed or problematic.
	lineral (S1) (LRR	O, S)		Orchric (F17) (			or oblemane.
Sandy Gleyed N					3) (MLRA 150A, 1		
Sandy Redox (S					Soils (F19) (MLF		
Stripped Matrix	(S6)		Anom	atous Bright Lo	oamy Soils (F20) (	MLRA 149A, 153C,	, 153D)
<u>'</u>	67) (LRR P, S, T,	U)					
rictive Layer (I	f observed):				ŀ		
Type:					1		
Depth (in	ches):					Hydric Soil Present	t? Yes <u>✓ No .</u> .
narks:							

ines	City/County: Hillsborou	ıgh	Sampling Date: 10/19/09	
	State:FL		Sampling Point: 109	
s-Mofienski				
	Local relief (concave, conv	vex, none): none	Slope (%):	
Lat: 28.081933	Long:82.1	Datum: WGS84		
		_NWI classification:	Freshwater emergent wetland	
ical for this time of year?	Yes <u>√</u>	_ No	(If no, explain in Remarks)	
or Hydrology	significantly disturbed?	Are circumstances	normal? YesNo ✓	
or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)	
e map showing samplir	ng point locations, t	ransects, impo	rtant features, etc.	
Yes No				
Hydric Soil Present? Yes <u>✓</u> No			YesNo	
Yes No				
	-			
		Secondary Indicate	ors (minimum of two required)	
heck all that apply)				
	39)		etated Concave Surface (B8)	
			` ′	
· , ,	R U)		· '	
	•		Vater Table (C2)	
	•	-	· ·	
· · · · · · · · · · · · · · · · · · ·			sible on Aerial Imagery (C9)	
	, ,		• • • •	
<del></del>	, ,	Shallow Aquitard (D3)		
Other (Explain in Remark	ks)	FAC Neutral	Test (D5)	
Yes No	Depth (inches): 0-24			
Yes No	Depth (inches): 0			
Yes No	Depth (inches): 0			
		Present?	Yes <u>✓ No</u>	
ng well, aerial photos, previous	inspections), if available:			
	beck all that apply)  Water-Stained Leaves (E Aquatic Fauna (B13)  Marl Deposits (B15) (LR Hydrogen Sulfide Odor (C Coxidized Rhizospheres of Presence of Reduced Iro Recent Iron Reduction in Thin Muck Surface (C7)  Other (Explain in Remarl	State: FL s-Mofienski Section, Township, Range Local relief (concave, conv Lat: 28.081933 Long:82.1  ical for this time of year? Yes✓ or Hydrology significantly disturbed? or Hydrology naturally problematic? te map showing sampling point locations, to the sampled Area we heck all that apply)  Yes✓ No Is the Sampled Area we heck all that apply)  Water-Stained Leaves (B9)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Thin Muck Surface (C7)  Other (Explain in Remarks)  Yes No Depth (inches): 0-24  Yes No Depth (inches): 0	State: FL   SeMofienski   Section, Township, Range: 4 28S 22E   Local relief (concave, convex, none): none   Lat: 28.081933   Long: -82.109082   NWI classification: ical for this time of year?   Yes _ ✓ No	

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	109
Trac Stratum (Diot pizo:	Absolute %	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	. Cover	Species?	Status	Number of Deminent Species	
<u>1.</u> 2.	· <del></del>			Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(B)
4.				Species Across Ali Strata.	
5.				Percent of Dominant Species 100.0	<u>0</u> (A/B)
6.	,		•	That Are OBL, FACW, or FAC:	
7.				Prevalance Index worksheet:	1
Sapling Stratum (Plot size:	)	= Total Cove	:r	OBL speciesx1=	<u> </u>
1.				FACW species x2=	
2.				FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	
5.				Column Totals: (A)	— (B)
6.					— ` ´
7.				Prevalance Index = B/A =	
	0	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (	(Explain)
3.					,,,
4.			-	Indicators of hydric soil and wetland hydrolog	av must
5.				be present, unless disturbed or problematic.	gy illust
6.				Definitions of Vegetation Strata:	
7.				, Dominions 51 10gs	
		= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	•	- 10101 0010	<b>71</b>	approximately 20 ft (6m) or more in height and 3	3 in (7.6
Euphorbia inundata	80	yes	FACW	cm) or larger in diameter at breast height (DBH)	•
Alternanthera philoxeroides	5	no	OBL	Sapling- Woody plants, excluding woody vines,	
Cynodon dactylon	5	no	FACU	approximately 20 ft (6m) or more in height and le	
Panicum hemitomon	5	no	OBL	in. (7.6 cm) DBH.	CSS man C
Ludwigia peruviana	2	no	OBL	Shrub- Woody plants, excluding woody vines,	
Cyperus spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
Urochloa mutica	2		NL	1	
8. Lemna spp.	2	no no	OBL	Herb- All herbaceous (non-woody)plants, includ herbaceous vines, regardless of size. Includes	•
Chasmanthium latifolium	2	no	FAC	plants, except woody vines, less than approxima	
	·	no	FAC	m) in height.	attery on the
<u>10.</u> 11.				<b>1</b> '	
				Woody vine- All woody vines, regardless of hei	gnt.
12.	405			-	
Woody Vine Stratum (Plot size:	105 )	= Total Cove	e <b>r</b>		
1.					
2.				1	
3.					
4.				Hydrophytic	
<del>5</del> .				Vegetation Present? YesNo	<b>1</b>
<u> </u>		= Total Cove	٠ <u></u>	Vegemuon i reconci	<b>'</b>
Remarks: (If observed, list morph			-		
Percent cover estimates based or	-		roader cor	mmunity.	

County/soil: Hillsborough- Malabar	
SOIL	

SOIL								Sampling Point:109
Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the abs	sence of indicators.	)
Depth	Matrix				Features			,
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
					-77-			Remarks
0-4	10 YR 4/1							dark gray fine sand
4-12	10 YR 6/2	- —						light grayish brown fine sand
12-30	10 YR 6/6							brownish yellow fine sand
30-50	10 YR 6/3							
30-30	10 18 6/3							pale brown fine sand
<u> </u>								
						•		
'Type: C=0	Concentration, D=Dep	letion, RM	Reduced Matrix, C	S=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.
Hydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Polyv	ralue Below Su	rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)		•			S9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)		•		,	al (F1) (LRR O)	''	, , , ,
	gen Sulfide (A4)							Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sullide (A4) ied Lavers (A5)				y Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ic Bodies (A6) (LRR F				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic bodies (Ao) (LRR F	2, 1, 0)			x Dark Surface	. ,		(MLRA 153B)
5 cm l	Mucky Mineral (A7) (LI	RR P,T,U)	-	Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
✓ Muck	Presence (A8) (LRR I	U)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
		-,	•		(F10) (LRR U)	` '		Other (Explain in Remarks)
1 cm r	Muck (A9) (LRR P,T)		-	wian	(FIO) (LKK U)			Other (Explain in Remarks)
Deplet	ted Below Dark Surfac	æ (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
Thick	Dark Surface (A12)			Iron-N	Manganese Ma	sses (F12) (LRR	(O. P.T)	3
-	• •				-	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	MLKA 150	A) .		ic Surface (Fi	3) (LRR P, 1, U)		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (I	LRR O, S)	-	Delta	Orchric (F17)	(MLRA 151)		problematic.
	Gleyed Matrix (S4)			Redu	ced Vertic (F1)	B) (MLRA 150A,	1508)	
	Redox (S5)		-			Soils (F19) (ML	•	
	ed Matrix (S6)		-				(MLRA 149A, 153C	4520)
			-		ialous bright £	uanty Suis (FZU)	(WLKA 149A, 155C	, 1550)
	Surface (S7) (LRR P, S							
Restrictive	Layer (If observed)	:						
	Type:							
l	Depth (inches):						Hydric Soil Presen	t? Yes ✓ No
Remarks:	, , , , , , , , , , , , , , , , , , , ,						1	
-								
1								
İ								
1								
1								
į								
								•
								İ

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date:10/20/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL_		Sampling Point: 110A
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	_Section, Township, Range	: 4 28S 22E	
Landform (hillslope, terrace, etc.):N/A	<u> </u>	Local relief (concave, conv	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.081930</u>	)Long: <u>-82.1</u>	09516	Datum: WGS84
Soil Map Unit Name: Malabar fine sands			_NWI classification:	: Freshwater emergent wetland
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? YesNo ✓
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit		ing point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes No	1		
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No
Wetland Hydrology Present? Remarks:	Yes No			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	<del></del>	getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	()	Drainage Pa	-
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim Li	
Water Marks (B1)	Hydrogen Sulfide Odor			Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Buri	• •
Drift Deposits (B3)	Presence of Reduced In			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	- ,		Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Shallow Aqu	
✓ Inundation Visible on Aerial Imagery (B7)		•	FAC Neutral	
Field Observations:			T	
Surface Water Present?	Yes No	Depth (inches): 0-12		
Water Table Present?	Yes✓ No		]	
Saturation Present?	Yes No		Wetland	
(includes capillary fringe)		-	Hydrology Present?	Yes _< No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	<u> </u>	
Remarks:				

/EGETATION - Use scientific na	<u> </u>			Sampling F	oint:	110A
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status			
1.				Number of Dominant Species	1	(A)
2.				That Are OBL, FACW, or FAC:	<b>÷</b>	٧٠,
3.				Total Number of Dominant	1	(B)
ł. -				Species Across All Strata:	_	, ,
).				Percent of Dominant Species	<u>100.00</u>	(A/B)
). ,	. ——			That Are OBL, FACW, or FAC:  Prevalance Index worksheet:		
·		= Total Cove			Multiply by	
Sapling Stratum (Plot size:	,	- Total Cove	<b>!!</b>	Total % Cover of: OBL species x1=	Multiply by:	
Saping Stratum (Flot size	<del>-</del> '			FACW species x2=		
)				FAC species x3=		
				FACU species x4=		
<u>,</u>	· ———	<del>`</del>		UPL species x5=		_
<del>,</del>				Column Totals: (A)		(B)
3				(,,)_		_(''
7.	- —			Prevalance Index = B/A =		
		= Total Cove	·r	Hydrophytic Vegetation Indicators	<del></del>	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.	<u> </u>			Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Veg	etation1 (Exp	olain)
3.						
1.				<sup>1</sup> Indicators of hydric soil and wetland	d hydrology n	nust
5.				be present, unless disturbed or prob	lematic.	
5.				Definitions of Vegetation Strata:		
7.						
	0	= Total Cove	r	Tree- Woody plants, excluding woody		
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) or more in he		(7.6
I. Euphorbia inundata	75	yes	FACW	cm) or larger in diameter at breast heig		
2. Urochloa mutica	15	no	NL	Sapling- Woody plants, excluding woo		41 0
3. Cynodon dactylon	5	no	FACU	approximately 20 ft (6m) or more in he in. (7.6 cm) DBH.	ignt and less	tnan 3
1. Panicum hemitomon	2	no	OBL	i ' '		
5. Thalia geniculata	2	no	OBL FACW	Shrub- Woody plants, excluding wood approximately 3 to 20 ft (1 to 6 m) in he		
S. Phyla nodiflora	2	no	FACW			
7. Cyperus spp. 3. Setaria geniculata		no no	FAC	Herb- All herbaceous (non-woody)plar herbaceous vines, regardless of size.		dv
Alternanthera philoxeroides		no	OBL	plants, except woody vines, less than		•
Alternanthera prilitoxeroides     Alternanthera prilitoxeroides     Alternanthera prilitoxeroides		no	FACW	m) in height.	-pp	
11.			TAOVV	Woody vine- All woody vines, regardle	ess of beight	
12.					oco or morgina	
	109	= Total Cove	r	1		
Noody Vine Stratum (Plot size:	1	. 3.3. 0010				
1.						
2.				1		
3.						
1.				Hydrophytic		
5.				Vegetation Present? Yes	No	<u>.</u>
		= Total Cava		1		

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

								Sampling Point:11		
	scription: (Describe t	o the dep	th needed to doc			confirm the ab	sence of indicator	rs.)		
epth nches)	Matrix Color (moist)	%	Color (moist)	%	Features Type <sup>1</sup>	Loc²	Texture	Remarks		
-4	10 YR 4/1							dark gray fine sand		
-12	10 YR 6/2		<del> </del>					light grayish brown fine sand		
2-30	10 YR 6/6							brownish yellow fine sand		
0-50	10 YR 6/3			_				pale brown fine sand		
							7			
	Concentration, D=Deple I Indicators:	etion, RM	Reduced Matrix, C	S=Cove	red or Coated S	and Grains.	"Location: PL=P	ore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:		
iyarıc sol Histol (				Doha	ralua Palaur Sur	faco (SR) /I DD	e T III	1 cm Muck (a9) (LRR O)		
	Epidon (A2)		-	Polyvalue Below Surface (S8) (LRR S				2 cm Muck (A10) (LRR S)		
	Histic (A3)		-	Thin Dark Surface (S9) (LRR S, T, U Loamy Mucky Mineral (F1) (LRR O)				Reduced Vertic (F18) (outside MLRA 150A, B)		
_	gen Sulfide (A4)		-		ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ed Layers (A5)				eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)		
Organi	ic Bodies (A6) (LRR P	, T, U)		Redox Dark Surface (F6)			-	(MLRA 153B)		
5 cm Mucky Mineral (A7) (LRR P,T,U)				Depleted Dark Surface (F7)			_	Red Parent Material (TF2)		
✓ Muck	Presence (A8) (LRR L	l) .		Redox Depressions (F8)				Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm Muck (A9) (LRR P,T)			_	Marl (F10) (LRR U)				Other (Explain in Remarks)		
Deplet	ed Below Dark Surface	e (A11)	_	Depl	eted Orchric (F1	1) (MLRA 151)				
Thick Dark Surface (A12)				lron-	Manganese Ma	sses (F12) (LRI	R O, P,T)	31. Part of the day of the control of the day of		
Coast Prairie Redox (A16) (MLRA 150A)			Umbric Surface (F13) (LRR P, T, U)  Delta Orchric (F17) (MLRA 151)				<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.			
	Mucky Mineral (S1) (L	RR O, S)	-			•		problematic.		
	Gleyed Matrix (S4)				ced Vertic (F18					
			-		mont Floodplain		•	20. 4520)		
				Anoi	naious Brigini Li	arry Sons (F20	) (MLRA 149A, 153	3C, 133D)		
Sandy Redox (S5)Stripped Matrix (S6)Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):						Hydric Soil Pres	ent? Yes ✓ No .			
	Depart (inches).						Triyane con ries			
torrianto.										

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/20/09		
Applicant/Owner: Progress Energy Florida, Inc.						
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range	: 4 28S 22E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	/ex, none): none	Slope (	%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.081920	Long: <u>-82.1</u>	11931	Datum:	WGS84	
Soil Map Unit Name: Ona fine sands			_NWI classification:	NA		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Rem	arks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		No ✓	
	or Hydrology	naturally problematic?	(If needed, explain	any answers in Rema	rks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, et	c.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes✓No	Is the Sampled Area w	vithin a Wetland?	Wetland? YesNo		
Wetland Hydrology Present?	Yes ✓ No					
Remarks:						
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicato	re (minimum of two re	quired\	
Primary Indicators (minimum of one is required; c	hock all that apply)			adicators (minimum of two required)		
Surface Water (A1)	Water-Stained Leaves (I	Ba)	Surface Soil Cracks (B6)Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)	59)				
✓ Saturation (A3)	Marl Deposits (B15) (LR	D III				
Water Marks (B1)	Hydrogen Sulfide Odor (	•				
` ′	Oxidized Rhizospheres	•				
Sediment Deposits (B2)	Presence of Reduced Iro					
Drift Deposits (B3)	Recent Iron Reduction in	-				
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C7)	Trilled Solis (CO)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ke)	FAC Neutral	• •		
Field Observations:	otrici (Explain in recinal	K3)		1631 (50)		
Surface Water Present?	Yes No	Denth (inches):				
Water Table Present?	Yes No		-			
Saturation Present?	Yes No	Depth (inches): 0	Wetland			
(includes capillary fringe)		, - ( · ( ) /	Hydrology Present?	Yes No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksho	eet:	
1.				Number of Dominant Spec	ies	
2.				That Are OBL, FACW, or F		(A)
3.				Total Number of Dominant	40	(5)
1.				Species Across All Strata:	<u>12</u>	(B)
5.				Percent of Dominant Speci	es oo oo	/ 4 /5
5.				That Are OBL, FACW, or F		(A/E
7.				Prevalance Index worksh		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.	•			FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.			***************************************	UPL species	x5=	
5.				Column Totals:	(A)	— (B)
5.				_	,, ,	<b>-</b> ` `
7.				Prevalance Index = B/	'A =	
		= Total Cove	<del></del>	Hydrophytic Vegetation I	ndicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is:	50%	
1.				Prevalence Index is	≤3.0 <sup>1</sup>	
2.				Problematic Hydrop	hytic Vegetation <sup>1</sup> (Ex	plain)
3.					-	
4.				<sup>1</sup> Indicators of hydric soil an	d wetland hydrology i	must
5.				be present, unless disturbe		
6.				Definitions of Vegetation		
7.				1		
	0	= Total Cove	r	Tree- Woody plants, excludi	ng woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or r	nore in height and 3 in	. (7.6
Phyllanthus urinaria	5	yes	FAC	cm) or larger in diameter at t	oreast height (DBH).	
2. Rhexia spp.	5	yes	FACW	Sapling- Woody plants, excl	luding woody vines,	
3. Juncus scirpoides	5	yes	FACW	approximately 20 ft (6m) or r	nore in height and less	than
4. Juncus effusus	5	yes	FACW	in. (7.6 cm) DBH.	•	
5. Andropogon spp.	5	yes	FAC	Shrub- Woody plants, exclu	ding woody vines,	
6. Polypremum procumbens	5	yes	FACU	approximately 3 to 20 ft (1 to	6 m) in height.	
7. Paspalum urvillei	5	yes	FAC	Herb- All herbaceous (non-v	voody)plants, including	ł
8. Ludwigia spp.	5	yes	OBL	herbaceous vines, regardles		
9. Cyperus polystachyos	5	yes	FACW	plants, except woody vines,	less than approximatel	y 3 ft (
10. Muridannia nudiflora	5	yes	FAC	m) in height.		
11. Scoparia dulcis	5	yes	FAC	Woody vine- All woody vine	s, regardless of height	
12. Paspalum notatum	5	yes	FACU			
	60	= Total Cove	r			
Wo <u>ody Vine Stratum (Plot size:</u>	)					
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present?	YesNo	
		= Total Cove	r	1		

County/soil:	Hillsborough- Ona
SOIL	

	escription: (Describe t	o the dep	th needed to doc			onfirm the ab	sence of indicators	.)
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%_	Type'	Locz	Texture	Remarks
0-4	10 YR 3/1							very dark gray fine sand
4-8	10 YR 2/1						-	black fine sand
8-22	10 YR 2/2	—						very dark brown fine sand
22-80	10 YR 7/1						-	light gray fine sand
Tyne: C=	Concentration, D=Deple	etion RM=	Reduced Matrix (	S=Cove	red or Coated S	and Grains	2l ocation: Pl =Po	re Lining, M=Matrix.
,,	oil Indicators:	00011, 11111	rtoddood mairx,	30 0010	ica or ocalog o	una Granio.	Location: 1 L 1 o	Indicators for Problematic Hydric Soils 3:
Histol				Poly	value Below Sur	face (S8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)
	Epidon (A2)				Dark Surface (S			2 cm Muck (A10) (LRR S)
	Histic (A3)				ny Mucky Minera	, ,	•	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matrix			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				eted Matrix (F3)	. (. ~)		Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR P	, T, U)			ox Dark Surface	(F6)		(MLRA 153B)
	Mucky Mineral (A7) (LF			—— Depl	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR L				ox Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	••			(F10) (LRR U)	,		Other (Explain in Remarks)
	ted Below Dark Surface	~ (A11)			eted Orchric (F1	1) (MI DA 151)		,
	Dark Surface (A12)	e (ATT)			Manganese Mas			
	Prairie Redox (A16) (N	# DA 150	۸)		ric Surface (F13			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
			~,	_	a Orchric (F17) (			problematic.
	y Mucky Mineral (S1) (L	.KK (), S)			uced Vertic (F18	-	450D)	F1-0-0-11-11-11-11-11-11-11-11-11-11-11-1
	y Gleyed Matrix (S4) y Redox (S5)				mont Floodplain			
	ed Matrix (S6)				•		) (MLRA 149A, 1530	C. 153D)
	Surface (S7) (LRR P, S	: T III				, (	, , ,	., ,
	e Layer (If observed):						1	
11001110111	Type:							
	Depth (inches):						Hydric Soil Preser	nt? Yes ✓ No .
Remarks:								
							•	

Applicant/Owner: Progress Energy Florida, Inc. State: FL  Investigator(s): Mike Arrants, Lianne Ramos-Mofienski Section, Township, Range: 4 28S 22E  Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none  Subregion (LRR or MLRA): LRR U Lat: 28.081872 Long: -82.113915	Sampling Point: 112A/112B
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none	
Subregion (LRR or MLRA): LRR U Lat: 28.081872 Long: -82.113915	Slope (%):
	Datum: WGS84
Soil Map Unit Name: Basinger fine sand NWI classification:	
Are climatic / hydrologic conditions on the site typical for this time of year?	(If no, explain in Remarks)
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are circumstances r	
	any answers in Remarks)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, impor	tant features, etc.
Hydrophytic Vegetation Present? YesNo	
Hydric Soil Present? Yes No Is the Sampled Area within a Wetland?	YesNo
Wetland Hydrology Present? YesNo	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators: Secondary Indicator	rs (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil C	cracks (B6)
✓ Surface Water (A1)Water-Stained Leaves (B9)Sparsely Vege	etated Concave Surface (B8)
High Water Table (A2)Aquatic Fauna (B13)Drainage Patte	erns (B10)
Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lin	
	Vater Table (C2)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burro	, ,
	ible on Aerial Imagery (C9)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic P	- · · ·
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquita	. ,
✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral T	•
Field Observations:	
Surface Water Present? Yes No Depth (inches): _ 0-24	
Water Table Present? Yes No Depth (inches):0	
Wetland	
	Yes <u>✓ No</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	100
Remarks:	
·	

<b>VEGETATION</b> - Use scientific nan	nes of plants			Sampling Point: _	112A/112B
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.	0010.	Opcoico:	Otatao	Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	<u>2</u> (A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	<u>3</u> (B)
5.				Percent of Dominant Species	
6.	<del></del>			That Are OBL, FACW, or FAC:	<u>66.67</u> (A/B)
7.				Prevalance Index worksheet:	
		= Total Cove			Multiply by:
Sapling Stratum (Plot size:	١	- Total Cove	5I	OBL species x1=	numpiy by.
Acer rubrum		V06	OBL	FACW species x2=	
2.		yes	OBL	FAC species x3=	
3.				FACU species x4=	<del></del>
<u>4.</u>				-{	
5.				UPL species x5=	
				Column Totals:(A)_	(B)
6.				Decompliance to day = D/A =	
7.		- Total Cave		Prevalance Index = B/A =	
Charle Ctretions (Diet sine)	2	= Total Cove	÷i	Hydrophytic Vegetation Indicators	•
Shrub Stratum (Plot size:	_)			Dominance Test is 50%	
1.				Prevalence Index is ≤3.0¹	1
2.				Problematic Hydrophytic Vege	etation" (Explain)
3.				<u>.</u>	
4.				Indicators of hydric soil and wetland	
5.				be present, unless disturbed or problem	ematic.
6.				Definitions of Vegetation Strata:	
7.					
Herb Stratum (Plot size:)	0	= Total Cove	er	Tree- Woody plants, excluding woody vapproximately 20 ft (6m) or more in heigh	ght and 3 in. (7.6
Eupatorium capillifolium	45	yes	FACU	cm) or larger in diameter at breast heig	ht (DBH).
Panicum hemitomon	30	yes	OBL	Sapling- Woody plants, excluding woo	dy vines,
Andropogon virginicus	15	no	FAC	approximately 20 ft (6m) or more in hei	ght and less than 3
4. Rhexia spp.	5	no	FACW	in. (7.6 cm) DBH.	
<ol><li>Amphicarpum muhlenbergianu</li></ol>	n5	no	FACW	Shrub- Woody plants, excluding woody	
6. Euthamia spp.	2	no	FAC	approximately 3 to 20 ft (1 to 6 m) in he	ight.
7. Alternanthera philoxeroides	2	no	OBL	Herb- All herbaceous (non-woody)plan	ts, including
8. Ludwigia repens	2	no	OBL	herbaceous vines, regardless of size. I	ncludes woody
9. Urochloa plantaginea	2	no	NL	plants, except woody vines, less than a	pproximately 3 ft (1
10. Panicum abscissum	2	no	FACW	m) in height.	
11. Aeschynomene sp.	2	no	FACW	Woody vine- All woody vines, regardle	ss of height.
12. Lemna spp.	2	no	OBL	1	•
	114	= Total Cove	er	1	
Woody Vine Stratum (Plot size:	)				
1.					
2.				1	
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>✓</u>	No .
		= Total Cove	er	1	
Remarks: (If observed, list morpho					
Percent cover estimates based on	-	•	rondor oor	mmunity.	

Profile De	escription: (Describe t	o the dep	th needed to doc	ument th	e indicator or c	onfirm the ab:	sence of indicators	.)
Depth	Matrix	•		Redox	Features			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc²	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							· · · · · · · · · · · · · · · · · · ·
28-42	5/2							brown and grayish brown fine sand
12-80	10 YR 6/2							light brownish gray fine sand
		<del></del>						
							7 5. 6	
	Concentration, D=Deple oil Indicators:	etion, RM=	Reduced Matrix,	CS=Cover	ed or Coated Sa	and Grains.	*Location: PL=Por	re Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :
Histol				Doha	alue Below Surf	ana /S9\ (I DD	S T III	1 cm Muck (a9) (LRR O)
	1 /							
	Epidon (A2)				Dark Surface (S			2 cm Muck (A10) (LRR S)
	Histic (A3)				ny Mucky Minera			Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				ny Gleyed Matrix	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)	<b>-</b>			eted Matrix (F3)	(FC)		Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR P	, I, U)			x Dark Surface	, ,		(MLRA 153B)
5 cm	Mucky Mineral (A7) (LF	RR P,T,U)		Deple	eted Dark Surfac	e (F7)		Red Parent Material (TF2)
✓_Muck	Presence (A8) (LRR L	J)		Redo	x Depressions (	F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) <b>(LRR U)</b>			Other (Explain in Remarks)
Deple	ted Below Dark Surface	e (A11)		Deple	eted Orchric (F1	1) (MLRA 151)	•	
Thick	Dark Surface (A12)				Manganese Mas			<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	t Prairie Redox (A16) (N	VILRA 150.	A)	Umb	ric Surface (F13	) (LRR P, T, U)	)	hydrology must be present, unless disturbed or
Sandy	y Mucky Mineral (S1) (L	.RR O, S)		Delta	Orchric (F17) (i	VILRA 151)		problematic.
Sandy	y Gleyed Matrix (S4)			Redu	iced Vertic (F18)	(MLRA 150A,	150B)	
Sandy	y Redox (S5)			Piedr	mont Floodplain	Soils (F19) (ML	_RA 149A)	
Stripp	ed Matrix (S6)			Anon	nalous Bright Lo	amy Soils (F20	) (MLRA 149A, 1530	C, 153D)
	Surface (S7) (LRR P, S							
Restrictiv	e Layer (if observed):							
	Type:						 	nt? Yes √ No
Remarks:	Depth (inches):						Hydric Soil Prese	nt? Yes <u>✓</u> No
Remarks.								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	_Sampling Date:	10/20/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	113
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range	: 4 28S 22E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	/ex, none): <u>none</u>	SI	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.081834	Long:82.1	18125	D	atum: WGS84
Soil Map Unit Name: Myakka fine sands			_NWI classification:	Freshwater en	nergent wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Ye	es <u>No ✓</u>
Are Vegetation, Soil,			(If needed, explain	any answers in F	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant feature	s, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes <u>√</u> N	o
Wetland Hydrology Present?	Yes/No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate		wo required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	jetated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season \	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burr	ows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	sible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	•	_		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓ N</u>	<b></b>
Describe Recorded Data (stream gauge, monitoring Remarks:	ing well, aerial photos, previous	inspections), if available:			

Topo Chrotum (Diet eine)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshee	t:	
Tree Stratum (Plot size:) 1.	- Cover	Species?	Status	Number of Dominant Specie	8	
2.	<del></del>			That Are OBL, FACW, or FA		(A)
3.	<del></del>			Total Number of Dominant		
<del>3.</del> 4.	· ——			Species Across All Strata:	<u>3</u>	(B)
<del>1.</del> 5.	. ——		<del>.</del>			
5. 6.	· · · · · · · · · · · · · · · · · · ·			Percent of Dominant Species That Are OBL, FACW, or FA		(A/E
7.	<u> </u>			Prevalance Index workshe		
		= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	,	- Total Cove	•	OBL species	x1=	
1.				FACW species	x2=	_
2.				FAC species	x3=	_
2. 3.	<del></del>			FACU species	x3= x4=	_
5. 4.			-	UPL species	x4 x5=	_
<del>1</del> . 5.				Column Totals:		— <sub>(B)</sub>
o. ô.				Column Totals.	(A)	(B)
o. 7.	·			Beautalanaa ladau - B/A	_	
<i>r</i> .		= Total Cove		Prevalance Index = B/A Hydrophytic Vegetation Ind		
Chruh Ctratum (Blat aiza:	,	- Total Cove	'I	✓ Dominance Test is 50		
Shrub Stratum (Plot size:	<del>/</del>					
1.				Prevalence Index is ≤		1 ! \
2.				Problematic Hydrophy	tic vegetation (Ex	(piain)
3.				<b>1</b>		
4.				Indicators of hydric soil and	,	must
5. 6.				be present, unless disturbed		
o. 7.	<del></del>			Definitions of Vegetation S	trata:	
<i>l</i> .				<u> </u>		
Herb Stratum (Plot size:)	U	= Total Cove	·I	Tree- Woody plants, excluding approximately 20 ft (6m) or mo		ı. (7.6
Juncus effusus	- 20	yes	FACW	cm) or larger in diameter at bro		•
2. Aster spp.	5	yes	FAC	Sapling- Woody plants, exclud	ding woody vines	
3. Andropogon spp.	5	yes	FAC	approximately 20 ft (6m) or mo		s than :
4. Diodia virginiana	2	no	FACW	in. (7.6 cm) DBH.	·	
5. Eupatorium capillifolium	2	no	FACU	Shrub- Woody plants, excludi	na woodv vines.	
6. Lemna spp.	2	no	OBL	approximately 3 to 20 ft (1 to 6		
7. Muridannia nudiflora		no	FAC	Herb- All herbaceous (non-wo	odv)plants_including	1
8. Hydrocotyle spp.	2	no	OBL	herbaceous vines, regardless		
9. Ludwigia arcuata	2	no	OBL	plants, except woody vines, le		
10. Phyla nodiflora	2	no	FACW	m) in height.		•
11. Urochloa plantaginea	2	no	NL	Woody vine- All woody vines,	regardless of height	t.
12. Paspalum notatum	2	no	FACU	1		-
Ta. Taoparam motatam	48	= Total Cove		-		
Woody Vine Stratum (Plot size:	)			•		
1.						
2.				1		
3.						
<del>3.</del> 4.				Hydrophytic		
5.		-			'es <u>√</u> No_	
<del></del>		= Total Cove	<u></u> r			
	J	- Julai Cuve		ī		

	il: Hillsborough- Myakk	а						0 " 0 " 440
SOIL								Sampling Point: 113
	scription: (Describe	to the dep	th needed to doc			confirm the abs	sence of indicators.)	
Depth	Matrix		0.1.1.1.1		Features	1	<b>-</b> .	
(inches)	Color (moist)	<u> </u>	Color (moist)	<u> %</u>	Type <sup>1</sup>	Loc <sup>z</sup>	Texture	Remarks
0-5	10 YR 3/1							very dark gray fine sand
5-20	10 YR 6/1							gray fine sand
20-25	N 2/0		<del></del>		-			black fine sand
25-30	5 YR 3/3							dark reddish brown fine sand
¹Type: C=0	Concentration, D=Dep	letion, RM	Reduced Matrix, C	S=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
	il Indicators:							ndicators for Problematic Hydric Soils 3:
Histol	(A1)			Poly	value Below Su	rface (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (	S9) (LRR S, T, U	))	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loan	ny Mucky Mine	ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	gen Sulfide (A4)			Loan	ny Gleyed Matr	ix (F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	îed Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR F	P, T, U)		Redo	ox Dark Surface	e (F6)	_	(MLRA 153B)
5 cm I	Mucky Mineral (A7) (LI	RR P,T,U)		Deple	eted Dark Surfa	ace (F7)	<u></u>	Red Parent Material (TF2)
	Presence (A8) (LRR			Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	-•	•		(F10) (LRR U)		_	Other (Explain in Remarks)
			•				-	Culor (Explain in Normality)
	ted Below Dark Surfac	æ (A11)				11) (MLRA 151)		
Thick	Dark Surface (A12)			lron-	Manganese Ma	asses (F12) (LRR	₹O, P,T) <sub>3¦</sub>	ndicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 150	A) .	Umb	ric Surface (F1	3) (LRR P, T, U)		ydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)			Delta	Orchric (F17)	(MLRA 151)		roblematic.	
	Gleyed Matrix (S4)	, o,	•			8) (MLRA 150A,	150B)	
	Redox (S5)		•		•	n Soils (F19) (ML	•	
	ed Matrix (S6)		•				(MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P,	C T III				, (,	(,,	,
	e Layer (If observed)						ı	
	Type:	•						
	Depth (inches):						Hydric Soil Present	? Yes ✓ No .
Remarks:	Deptit (inches).						Injune Son Fresent	1 tes
rtemarks.								
	•							
								•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Dat	e: <u>10/20/09</u>	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poi	nt:114	
Investigator(s): Mike Arrants, Lianne Ramos	-Mofienski	Section, Township, Range: 4 28S 22E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): <u>none</u>		Slope (%):	
		4 Long: <u>-82.119203</u> Datum: <u>WGS</u>				
Soil Map Unit Name: Basinger fine sands			_NWI classification		emergent wetland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>√</u>	_ No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		Yes <u>No ✓</u>	
<u> </u>	or Hydrology		(If needed, explain	n any answers i	n Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	ortant featui	es, etc.	
Hydrophytic Vegetation Present?	Yes No		•			
Hydric Soil Present?	YesNo	Is the Sampled Area w	ithin a Wetland?	Yes <u></u> ✓	No	
Wetland Hydrology Present?	Yes No	]				
Remarks:					•	
HVDDOL OOV						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat		of two required)	
Primary Indicators (minimum of one is required; o			Surface Soil			
Surface Water (A1)	Water-Stained Leaves (	B9)		getated Concav	e Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa			
Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim L			
` ′	Water Marks (B1)Hydrogen Sulfide Odor				(2)	
Sediment Deposits (B2)	Oxidized Rhizospheres					
Drift Deposits (B3)	Presence of Reduced In	• •	isible on Aerial	Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	• •		Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	, ,		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	l Test (D5)		
Field Observations:	•					
Surface Water Present?	Yes No		-			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yes No	_Depth (inches):0	Hydrology			
(includes capillary fringe)			Present?	Yes <u>√</u>	No	
Describe Recorded Data (stream gauge, monitor	ng well, aenal photos, previous	inspections), if available:				
Remarks:						
·						
					•	

VEGETATION - Use scientific na	mes or plants				Sampling P	OITIL	114
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Works	sheet:		
1.				Number of Dominant Sp That Are OBL, FACW, o		<u>1</u>	(A)
3.	-			Total Number of Domina			
4.	•			Species Across All Strata	<del>-</del>	<u>3</u>	(B)
5.				Percent of Dominant Spe	ecies	22.22	/ ^ /D\
6.				That Are OBL, FACW, o		<u>33.33</u>	(A/B)
7.				Prevalance Index work	sheet:		
	0	= Total Cove	r	Total % Cover of:	-	ultiply by:	
Sapling Stratum (Plot size:	)			OBL species	50%_x1=	0.5	_
1.				FACW species	10% x2=	0.2	-
2.				FAC species	50%_x3=	1.5	_
3.				FACU species	x4=		_
4.	<del></del>			UPL species	x5=		_
5.				Column Totals:	110% (A)	2.2	2 (B)
6. 7.	-			Dravelance Index -	D/A -	2.00	`
7.		= Total Cove	·	Prevalance Index = Hydrophytic Vegetation		2.00	<u> </u>
Shrub Stratum (Plot size:	١	= 10tal Cove	·r	Dominance Test			
				✓ Prevalence Index			
1. 2.	-			Problematic Hydr		otion <sup>1</sup> (Evn	Jain)
3.				FIODICINATION	Opinytic veget	מנוטוו (באף	lalli,
4.				<sup>1</sup> Indicators of hydric soil	and watland h	udrology ir	suct.
5.	- ——			be present, unless distur			ในธเ
6.				Definitions of Vegetation		Hado.	
7.	-			1			
		= Total Cove	r	Tree- Woody plants, exclu	uding woody vir	nes,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) o			(7.6
Cynodon dactylon	30	yes	FACU	cm) or larger in diameter a	at breast height	(DBH).	
Ludwigia arcuata	20	yes	OBL	Sapling- Woody plants, e	xcluding woody	y vines,	
Paspalum notatum	20	yes	FACU	approximately 20 ft (6m) o			than 3
4. Alternanthera philoxeroides	15	no	OBL	in. (7.6 cm) DBH.			
5. Juncus repens	10	no	OBL	Shrub- Woody plants, exc			
6. Phyla nodiflora	10	no	FACW	approximately 3 to 20 ft (1	to 6 m) in heig	jht.	
7. Pontederia cordata	5	no	OBL	Herb- All herbaceous (nor	•		
8.				herbaceous vines, regardi			
9.				plants, except woody vine:	s, less than ap	proximately	3 ft (1
10. 11.				m) in height.		** * 1.	
				Woody vine- All woody vi	nes, regardiess	s of height.	
12.	440	<del></del>		4			
Manada Vina Charles (District)	110	= Total Cove	ł.				
Woody Vine Stratum (Plot size:	<del></del> )						
1.			<del></del>	4			
2. 3.	- ——						
J.	- ——			11			
<b>4</b> . <b>5</b> .	-			Hydrophytic Vegetation Present?	Yes <u>√</u>	No	
<u> </u>		= Total Cove	·r	vegetation Fresent?	169	NO	<del></del>
Remarks: (If observed, list morph			<u></u>				
Percent cover estimates based or		•	roader cou	mmunity			
ercent cover estimates based of	in ineandening s	survey or the b	Toauer cor	minumy.			

Depth	Matrix moist) %  10 YR  n, D=Depletion, R  3:	Color (moist)	Redox Feat %  CS=Covered o	Type¹ Loc²	Texture	black fine sand gray fine sand brown and grayish b light brownish gray f	
(inches) Color (inches) Color (inches) Color (inches) 20-7 10 YR 2/17-28 10 YR 6/2 10 YR 6/2 5/2 42-80 10 YR 6/2 10	n, D=Depletion, R		%  CS=Covered o	Type¹ Loc²		gray fine sand brown and grayish b light brownish gray f	prown fine sand
7-28 10 YR 6/1 10 YR 5/3 28-42 5/2 42-80 10 YR 6/2  Type: C=Concentratic Hydric Soil Indicator Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (A2)	n, D=Depletion, R	M=Reduced Matrix,	Polyvalue		²Location: PL=Por	gray fine sand brown and grayish b light brownish gray f	
7-28 10 YR 6/1 10 YR 5/3 28-42 5/2 12-80 10 YR 6/2 12-80 10 YR 6/2 12-80 10 YR 6/2 13-80 10 YR 6/2 14-80 10 YR 6/2 15-80 10 YR 6/2 15-80 10 YR 6/2 15-80 10 YR 6/2 15-80 10 YR 6/2 15-80 10 YR 6/2 15-80 10 YR 6/2 15-80 10 YR 6/2 15-80 10 YR 6/2 15-80 10 YR 6/2	n, D=Depletion, R	M=Reduced Matrix,	Polyvalue		²Location: PL=Por	gray fine sand brown and grayish b light brownish gray f	
10 YR 5/3 8-42 5/2 2-80 10 YR 6/2  Type: C=Concentratic tydric Soil Indicator Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (A	n, D=Depletion, R	M=Reduced Matrix,	Polyvalue		<sup>2</sup> Location: PL=Por	brown and grayish b light brownish gray f	
8-42 5/2 2-80 10 YR 6/2  Type: C=Concentratic lydric Soil Indicator Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (A	n, D=Depletion, R	M=Reduced Matrix,	Polyvalue		<sup>2</sup> Location: PL=Por	light brownish gray f	
Type: C=Concentration  Hydric Soil Indicator  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide  Stratified Layers (  Organic Bodies (A	S: (A4)	M=Reduced Matrix,	Polyvalue		<sup>2</sup> Location: PL=Por	light brownish gray f	
hydric Soil Indicator Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (A	S: (A4)	M=Reduced Matrix,	Polyvalue		<sup>2</sup> Location: PL=Por	e lining. M=Matrix	
hydric Soil Indicator Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (A	S: (A4)	M=Reduced Matrix,	Polyvalue		<sup>2</sup> Location: PL=Por	e Lining M=Matrix	
hydric Soil Indicator Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (A	S: (A4)	Wi-Reduced Wallix,	Polyvalue		EUCANON, FE-FOR		
Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (A	(A4)					Indicators for Problem	natic Hydric Soils 3:
Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (A	(A4)			Below Surface (S8) (LRI		1 cm Muck (a9) (L	
Hydrogen Sulfide Stratified Layers ( Organic Bodies (				Surface (S9) (LRRS, T,		2 cm Muck (A10) (	· · · · · · · · · · · · · · · · · · ·
Stratified Layers ( Organic Bodies (A			Loamy Mi	ucky Mineral (F1) (LRR C	)	Reduced Vertic (F	18) (outside MLRA 150A, B)
Organic Bodies (A	A5)			eyed Matrix (F2)			in Soils (F19) (LRR P, S, T)
	C) /I DD D T III			Matrix (F3) rk Surface (F6)		Anomalous Bright	Loamy Soils (F20)
				Dark Surface (F7)		(MLRA 153B)Red Parent Materia	ol /TE9)
	al (A7) (LRR P,T,	U)		pressions (F8)		<del></del>	Surface (TF12) (LRR T, U)
✓ Muck Presence (	, , ,		_			Other (Explain in R	, ,, ,
1 cm Muck (A9) (	• •		Mart (F10			Other (Explain in R	(emarks)
Depleted Below D				Orchric (F11) (MLRA 151	•		
• • • • • • • • • • • • • • • • • • • •			anese Masses (F12) (LF		3Indicators of hydrophy	tic vegetation and wetland	
Coast Prairie Red	ox (A16) (MLRA 1	50A)	Umbric S	urface (F13) (LRR P, T, t	(ل		sent, unless disturbed or
Sandy Mucky Min	eral (S1) (LRR O,	S)	Delta Orc	hric (F17) (MLRA 151)		problematic.	
Sandy Gleyed Ma				Vertic (F18) (MLRA 1504			
Sandy Redox (S5				Floodplain Soils (F19) (N		APAD)	
Stripped Matrix (S	•		Anomalou	s Bright Loamy Soils (F2	(I) (IMLKA 149A, 153C	, 153D)	
Dark Surface (S7)							
Restrictive Layer (If o	observea):						
Depth (inch	es).				Hydric Soil Preser	nt? Yes ✓	No .
Remarks:					11.7		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	Sampling Date:_	10/20/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:_	115
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range	: <u>4 28S 22E</u>		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slo	pe (%):
Subregion (LRR or MLRA): LRR U		Long: <u>-82.1</u>	19670	Da	tum: WGS84
Soil Map Unit Name: Basinger fine sands			_NWI classification:	Freshwater eme	ergent wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in I	Remarks)
Are Vegetation, Soil	or Hydrology		Are circumstances		s <u>No                                </u>
	or Hydrology		(If needed, explain	any answers in Re	emarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>			ransects, impo	rtant features	, etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	YesNo	
Wetland Hydrology Present?	YesNo				
Remarks:					
<u> </u>					
HYDROLOGY					
Wetland Hydrology Indicators:	•		Secondary Indicato	ors (minimum of tw	o required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil (	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (E	39)	Sparsely Veg	etated Concave S	urface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LRI	R U)	Moss Trim Li	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (6	C1)	Dry-Season V	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burn	rows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	n (C4)	Saturation Vi	sible on Aerial Ima	igery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic I	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	•	Shallow Aqui	tard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No	Depth (inches):	<u> </u>		i
Saturation Present?	Yes No	Depth (inches): 0-12	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			
Remarks:					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	115
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	•	•		Number of Dominant Species	İ
2.				That Are OBL, FACW, or FAC: $\frac{4}{}$	(A)
3.	• ——			Total Number of Dominant	
4.	. ———			Species Across All Strata:	(B)
5.				1 '	
6.	·			Percent of Dominant Species 80.00	(A/B)
7.	·			That Are OBL, FACW, or FAC:	
1.					
Capling Chatum (Dist size)	, 0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:				OBL species x1=	_
1.	·			FACW speciesx2=	_
2.		<u> </u>		FAC speciesx3=	
3.				FACU species x4=	_
4.				UPL speciesx5=	_
5.				Column Totals:(A)	_(B)
6.	·				
7.				Prevalance Index = B/A =	
	0	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.					·
4.				Indicators of hydric soil and wetland hydrology n	nust
5.				be present, unless disturbed or problematic.	
6.			·	Definitions of Vegetation Strata:	
7.		***			
		= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in.	(7.6
1. Eichhornia sp.	40	yes	OBL	cm) or larger in diameter at breast height (DBH).	`
2. Polygonum punctatum	15	yes	FACW	Sapling- Woody plants, excluding woody vines,	
3. Phyla nodiflora	15	yes	FACW	approximately 20 ft (6m) or more in height and less	than 3
Cynodon dactylon	15	ves	FACU	in. (7.6 cm) DBH.	
Bulbostylis barbata	15	yes	FAC	Shrub- Woody plants, excluding woody vines,	
6. Ludwigia repens	10	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Commelina spp.	10	no	FACW		
8.		110	IACVV	Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woo	, du
9.	· <del>·</del>			plants, except woody vines, less than approximately	- 1
10.				m) in height.	, 3 11 (1
11.				Į ' · · · ·	
				Woody vine- All woody vines, regardless of height.	
12.					
	120	= Total Cove	Г		
Woody Vine Stratum (Plot size:	)			•	ı
1.					
2.					
3					
4	<del></del>			Hydrophytic	
5.				Vegetation Present? YesNo	<u>.</u>
	0	= Total Cove	r		
Remarks: (If observed, list morph	ological adapta	itions below).			
Percent cover estimates based or	n meandering s	survey of the b	roader cor	nmunity.	

Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Form Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Loamy Gleyed Matrix (F2)  Redox Dark Surface (F6)  Mark Surface (F7)  Redox Dark Surface (F7)  Redox Depleted Dark Surface (F7)  Redox Depleted Dark Surface (F7)  Redox Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Piedmont Floodplain Soils (F19) (LRR P, S  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T)  Other (Explain in Remarks)	SOIL								Sampling Point:11
(inches) Color (moist) % Color (moist) % Type* Loc* Texture Remarks  0-7 10 YR 2/1 7-28 10 YR 6/1 10 YR 5/3; 10 YR 28-42 5/2 42-80 10 YR 6/2	Profile De	scription: (Describe t	to the de	oth needed to doo	ument th	ne indicator or	confirm the abs	sence of indicators	.)
D-7	Depth	Matrix			Redox	Features			
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   CS=Cooted Coate Coated Sand Grains.   CS=Cooted Grains.   CS=Cooted Matrix.   CS=Cooted M	(inches)	Color (moist)	%	Color (moist)	_%_	Type <sup>1</sup>	Loc2	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   CS=Cooted Coate Coated Sand Grains.   CS=Cooted Grains.   CS=Cooted Matrix.   CS=Cooted M		10.1/0.0/1							
10 YR 5/3; 10 YR   28-42   5/2   brown and grayish brown fine sand   light brownish gray fin									
28-42 5/2 42-80 10 YR 6/2   brown and grayish brown fine sand light brownish gray fine sand light by fine sand light by fine sand light by fine sand light by fine sand light by fine sand light by fine sand light by fine sand light by fine sand light by fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light by fine sand light by fine sand light by fine sand light by fine sa	1-20								gray line sand
42-80 10 YR 6/2    Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.	28.42								brown and gravish brown fine cand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    Hydric Soil Indicators:						-	<del></del>	<del></del>	
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Histol Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Loamy Mucky Mineral (F1) (LRR O)  Redox Depressions (F8)  Loamy Mack (A9) (LRR P, T)  Marl (F10) (LRR U)  Depleted Below Surface (F12) (LRR O)  Marl (F10) (LRR O)  Marl (F10) (LRR D, T)  Depleted Below Surface (F1)  Marl (F10) (LRR O, T)  Marl (F10) (LRR D, T, U)  Depleted Matrix (F2)  Marl (F10) (LRR D, T)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restorced F12 (LRR A 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Dark Surface (B1) (LRR O, S)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Marl (F10) (LRR D, S)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes ✓ No	12 00	10 11( 0/2					· <del></del>		iight brownish gray line sand
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Histol Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Loamy Mucky Mineral (F1) (LRR O)  Redox Depressions (F8)  Loamy Mack (A9) (LRR P, T)  Marl (F10) (LRR U)  Depleted Below Surface (F12) (LRR O)  Marl (F10) (LRR O)  Marl (F10) (LRR D, T)  Depleted Below Surface (F1)  Marl (F10) (LRR O, T)  Marl (F10) (LRR D, T, U)  Depleted Matrix (F2)  Marl (F10) (LRR D, T)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restorced F12 (LRR A 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Dark Surface (B1) (LRR O, S)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Marl (F10) (LRR D, S)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes ✓ No									
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Histol Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Loamy Mucky Mineral (F1) (LRR O)  Redox Depressions (F8)  Loamy Mack (A9) (LRR P, T)  Marl (F10) (LRR U)  Depleted Below Surface (F12) (LRR O)  Marl (F10) (LRR O)  Marl (F10) (LRR D, T)  Depleted Below Surface (F1)  Marl (F10) (LRR O, T)  Marl (F10) (LRR D, T, U)  Depleted Matrix (F2)  Marl (F10) (LRR D, T)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restorced F12 (LRR A 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Indicators for Problematic Hydric Soils ¹:  1 cm Muck (A9) (LRR O, P)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Dark Surface (B1) (LRR O, S)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Marl (F10) (LRR D, S)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes ✓ No									•
Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR S, T, U) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Extratified Layers (A5) Depleted Matrix (F2) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6)  Mark (FP) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7)  Muck (A9) (LRR P,T) Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Delta Orchric (F17) (MLRA 151) Piedmont Floodplain Soils (F19) (LRR T)  Delta Orchric (F17) (MLRA 151) Piedmont Floodplain Soils (F20)  (MLRA 153B) Anomalous Bright Loamy Soils (F20)  (MLRA 153B) Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T) Depleted Dark Surface (F7)  Very Shallow Dark Surface (TF12) (LRR T)  Other (Explain in Remarks)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jindicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present? Yes ✓ No	¹Type: C=	Concentration, D=Depl	etion, RM	Reduced Matrix,	CS=Cove	red or Coated	Sand Grains.	<sup>2</sup> Location: PL=Por	re Lining, M=Matrix.
Histic Epidon (A2)  Black Histic (A3)  Black Histic (A3)  Black Histic (A3)  Coamy Mucky Mineral (F1) (LRR O)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Black Histic (A3)  Comy Gleyed Matrix (F3)  Depleted Matrix (F3)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Sometime of the Mucky Mineral (A7) (LRR P, T, U)  Bedeved Matrix (F3)  Bedved Matrix (F3)  Bedeved Matrix (F3)  Bedved Matrix (F3)  Bedved Matrix (F3)  Bedved Matrix (F3)  Bedved Matrix (F3)  Bedved Mat									Indicators for Problematic Hydric Soils 3:
Black Histic (A3)									1 cm Muck (a9) (LRR O)
Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T)  — Depleted Matrix (F3) — Depleted Dark Surface (F6) — Mark (F10) (LRR U) — Redox Derressions (F8) — Depleted Below Dark Surface (A11) — Thick Dark Surface (A12) — Coast Prairie Redox (A16) (MLRA 150A) — Sandy Mucky Mineral (S1) (LRR O, S) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Sandy Redox (S5) — Sandy Redox (S5) — Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): — Type: — Depth (inches): — Depth (inches): — Depleted Matrix (F2) — Depleted Matrix (F2) — Anomalous Bright Loamy Soils (F20) — (MLRA 153B) — Anomalous Bright Loamy Soils (F20) — (MLRA 153B) — Red Parent Material (TF2) — Red Parent Material (TF2) — (MLRA 151) — Pepleted Dark Surface (A11) — Other (Explain in Remarks) — Other (Explain in Remarks) — Other (Explain in Remarks)		, , ,							
Stratified Layers (À5)  Organic Bodies (A6) (LRR P, T, U)  Edox Dark Surface (F6)  Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Mark (F9)  Mark (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Deleted Matrix (F3)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Mark (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  JIndicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F13) (MLRA 150A, 150B)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No									Reduced Vertic (F18) (outside MLRA 150A, B)
Organic Bodies (A6) (LRR P, T, U)  — Redox Dark Surface (F6)  — S cm Mucky Mineral (A7) (LRR P,T,U)  — Muck Presence (A8) (LRR U)  — 1 cm Muck (A9) (LRR P,T)  — Depleted Below Dark Surface (A11)  — Thick Dark Surface (A12)  — Coast Prairie Redox (A16) (MLRA 150A)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sandy Gleyed Matrix (S4)  — Sandy Redox (S5)  — Stripped Matrix (S6)  — Dark Surface (S7) (LRR P, S, T, U)  Redox Depressions (F8)  — Depleted Dark Surface (F7)  — Marl (F10) (LRR U)  — Depleted Orchric (F11) (MLRA 151)  — Iron-Manganese Masses (F12) (LRR O, P,T)  — Jumbric Surface (F13) (LRR P, T, U)  — Depleted Orchric (F17) (MLRA 151)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sendy Gleyed Matrix (S4)  — Reduced Vertic (F18) (MLRA 150A, 150B)  — Stripped Matrix (S6)  — Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  — Type: — Depth (inches): — Hydric Soil Present? Yes ✓ No									
			TIN						
✓ Muck Presence (A8) (LRR U)       Redox Depressions (F8)      Very Shallow Dark Surface (TF12) (LRR T)         _ 1 cm Muck (A9) (LRR P,T)      Marl (F10) (LRR U)      Other (Explain in Remarks)        Depleted Below Dark Surface (A11)      Depleted Orchric (F11) (MLRA 151)        Thick Dark Surface (A12)      Iron-Manganese Masses (F12) (LRR O, P,T)      3Indicators of hydrophytic vegetation and wetland the hydrology must be present, unless disturbed or problematic.        Sandy Mucky Mineral (S1) (LRR O, S)      Delta Orchric (F13) (MLRA 151)      problematic.        Sandy Gleyed Matrix (S4)      Reduced Vertic (F18) (MLRA 150A, 150B)      problematic.        Sandy Redox (S5)      Piedmont Floodplain Soils (F19) (MLRA 149A)      Nomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)        Dark Surface (S7) (LRR P, S, T, U)	-						` '		·
				1					<del></del>
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Depleted Orchric (F11) (MLRA 151)  Lron-Manganese Masses (F12) (LRR O, P,T)  JIndicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Piedmont Floodplain Soils (F19) (MLRA 150A, 150B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No		` '.	J)			•	, ,		
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Iron-Manganese Masses (F12) (LRR O, P, T)  JIndicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Peduced Vertic (F13) (MLRA 151)  Predmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	1 cm	Muck (A9) (LRR P,T)			мап	(F10) (LKK U)			Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	Deple	ted Below Dark Surfac	e (A11)		Depl	leted Orchric (F	11) (MLRA 151)		
Coast Prairie Redox (A16) (MLRA 150A)	Thick	Dark Surface (A12)			Iron-	Manganese Ma	asses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Poelta Orchric (F17) (MLRA 151)  Problematic  Reduced Vertic (F18) (MLRA 150A, 150B)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes ✓ No	Coast	Prairie Redox (A16) (I	MLRA 150	DA)	Umb	oric Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Park Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes ✓ No	Sandy	/ Mucky Mineral (S1) (I	RR O. SI		Delta	a Orchric (F17)	(MLRA 151)		problematic.
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes ✓ No								150B)	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type: Depth (inches): Hydric Soil Present? Yes ✓ No	1					,	, ,		
						•	, ,,	•	C, 153D)
Restrictive Layer (If observed):    Type:   Depth (inches): Hydric Soil Present? Yes ✓ No			STIN			_			
Type:            Depth (inches):            Hydric Soil Present? Yes ✓ No								<u> </u>	
Depth (inches): Hydric Soil Present? Yes ✓ No			•						
Remarks:								Hydric Soil Preser	nt? Yes ✓ No .
	Remarks:							• •	
									•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date: 10/20/09			
Applicant/Owner: Progress Energy Florida, Inc.	-W.1	State:FL	•	Sampling Point: 117			
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range	e: 4 28S 22E				
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con	vex, none): none	8	Slope (%):		
Subregion (LRR or MLRA): LRR U		Long: <u>-82.</u>	120417	Ε	Datum: WGS84		
Soil Map Unit Name: Basinger fine sands			NWI classification	: Freshwater ei	mergent wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	 No	(If no, explain in	n Remarks)		
Are Vegetation, Soil	-		Are circumstances		′es′No_✓		
Are Vegetation, Soil,			(If needed, explain		Remarks)		
SUMMARY OF FINDINGS - Attach sit				•	•		
Hydrophytic Vegetation Present?	Yes✓_No				, , , , , , , , , , , , , , , , , , , ,		
Hydric Soit Present?	YesNo	Is the Sampled Area v	vithin a Wetland?	Yes <u> ✓</u> ١	10		
Wetland Hydrology Present?	YesNo	i '					
Remarks:							
1							
HYDROLOGY							
Wetland Hydrology Indicators:	#T		Secondary Indicat	ors (minimum of	two required)		
Primary Indicators (minimum of one is required; of	heck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concave	Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	ines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2	2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)			
Drift Deposits (B3)	Presence of Reduced In		Saturation V	isible on Aerial I	magery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,		c Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	` '					
✓ Inundation Visible on Aerial Imagery (B7)			Shallow Aqu				
Field Observations:			T				
Surface Water Present?	Yes No/	Deoth (inches):	:				
Water Table Present?	Yes No <u>✓</u>		-				
Saturation Present?	Yes No		Wetland				
	110		Hydrology Present?	Yes <u>✓</u> I	No		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	Fresence	1651	10		
	<b>9</b> ,, p	, , , , , , , , , , , , , , , , , , , ,					
Remarks:							
1							

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Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u>	(A)
3.				Total Number of Dominant		
4.	- —			Species Across All Strata:	<u>2</u>	(B)
5.	- —			Percent of Dominant Species	100.00	
6.			-	That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=		
1.				FACW species x2=		_
2.				FAC species x3=	:	_
3.				FACU species x4=	:	_
4.	-			UPL species x5=	:	<del>-</del>
5.				Column Totals: (A)		— (B)
6.	-			1 —		<b>-</b> ' '
7.				Prevalance Index = B/A =		
		= Total Cove	er .	Hydrophytic Vegetation Indicators	s:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.	· ·			Prevalence Index is ≤3.0 <sup>1</sup>		
2.	•			Problematic Hydrophytic Veg	getation <sup>1</sup> (Exp	olain)
3.				<u> </u>	•	.
4.				Indicators of hydric soil and wetland	d hydrology r	nust
5.				be present, unless disturbed or prob		
6.	•		<b>t</b> r .	Definitions of Vegetation Strata:		
7.				1		
	0	= Total Cove	er .	Tree- Woody plants, excluding woody	vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in he		(7.6
Bulbostylis barbata	35	yes	FAC	cm) or larger in diameter at breast hei	ght (DBH).	
2. Alternanthera philoxeroides	25	yes	OBL	Sapling- Woody plants, excluding wo	ody vines,	
3. Eichhornia sp.	15	no	OBL	approximately 20 ft (6m) or more in he		than 3
Polygonum punctatum	10	no	FACW	in. (7.6 cm) DBH.		
Cynodon dactylon	10	no	FACU	Shrub- Woody plants, excluding wood		
6. Micromeria spp.	2	no	NL	approximately 3 to 20 ft (1 to 6 m) in h	eight.	
<ol><li>Hydrocotyle spp.</li></ol>	2	no	OBL	Herb- All herbaceous (non-woody)pla	nts, including	
8. Muridannia nudiflora	2	no	FAC	herbaceous vines, regardless of size.		-
9.				plants, except woody vines, less than	approximately	/ 3 ft (1
10.				m) in height.		
11.				<b>Woody vine</b> - All woody vines, regardle	ess of height.	
12.	- <u> </u>			]		
	101	= Total Cove	er .	·		
Woody Vine Stratum (Plot size:	)			1		
1.						
2.	,			1		
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	<u> </u>
	0	= Total Cove	:r	1 ~		
Remarks: (If observed, list morphe	ological adapta	ations below).	-			
Percent cover estimates based or			roader cor	mmunity.		

SOIL	il: Hillsborough- Basing	, c.						Sampling Point:117
ı	escription: (Describe t	to the dep	th needed to doo			onfirm the abs	sence of indicators.	)
Depth (inches)	Matrix Color (moist)		Color (moist)	Redox 	Features Type <sup>1</sup>	Loc²	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1				<del></del>		<del></del>	gray fine sand
<u> </u>	10 YR 5/3; 10 YR							3,
28-42	5/2							brown and grayish brown fine sand
42-80	10 YR 6/2							light brownish gray fine sand
					<del></del>			
¹Tvpe: C=	Concentration, D=Depl	etion. RM=	Reduced Matrix.	CS=Cove	red or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.
	oil Indicators:	,						Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Poly	value Below Surf	ace (\$8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
_	Epidon (A2)				Dark Surface (S		•	2 cm Muck (A10) (LRR S)
	Histic (A3)				ny Mucky Minera			Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matrix	: (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5) nic Bodies (A6) (LRR P	т 11\			eted Matrix (F3) ox Dark Surface	(E6)		Anomalous Bright Loamy Soils (F20)
						• •		(MLRA 153B)
_	Mucky Mineral (A7) (LF				eted Dark Surfac			Red Parent Material (TF2)
	Presence (A8) (LRR L	U)			ox Depressions (	F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)				(F10) (LRR U)	=		Other (Explain in Remarks)
ı— ·	eted Below Dark Surfac	æ (A11)			eted Orchric (F1			
1	Dark Surface (A12)				Manganese Mas			<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	t Prairie Redox (A16) (I	MLRA 150	A)		ric Surface (F13			hydrology must be present, unless disturbed or
Sand	y Mucky Mineral (S1) (L	LRR O, S)		_	a Orchric (F17) (	•		problematic.
	y Gleyed Matrix (S4)				uced Vertic (F18)	•		
	y Redox (S5)				mont Floodplain			450
	ed Matrix (S6)			Anor	naious Bright Lo	amy Soils (F20	) (MLRA 149A, 153C	, 1530)
	Surface (S7) (LRR P, See Layer (If observed):			-			r	
Restrictiv	Type:	•						
	Depth (inches):						Hydric Soil Preser	nt? Yes ✓ No .
Remarks:	Dopar (monoc):						1,	
								·
1								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	_Sampling Date: 10/20/09			
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: 118			
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range: 4 28S 22E					
Landform (hilislope, terrace, etc.):N/A	<u>.                                    </u>	Local relief (concave, con-	/ex, none): <u>none</u>	Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: 28.081791	Long: <u>-82.1</u>	21182	Datum: WGS84			
Soil Map Unit Name: Paisley fine sands			_NWI classification:	:_NA			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	No	(If no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	s normal? Yes <u>No ✓</u>			
	or Hydrology		(If needed, explain	any answers in Remarks)			
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.			
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland?	Yes No			
Wetland Hydrology Present?	Yes No	]					
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:		ė.	Secondary Indicate	ors (minimum of two required)			
Primary Indicators (minimum of one is required; o	heck all that apply)	Surface Soil Cracks (B6)					
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	ines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season	Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	rows (C8)			
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Titled Soils (C6)	Geomorphic	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	FAC Neutral Test (D5)			
Field Observations:							
Surface Water Present?	Yes No	Depth (inches):0-12	4				
Water Table Present?	Yes No	Depth (inches): 0					
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology				
(includes capillary fringe)			Present?	Yes _/ No			
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	<b>.</b>				
Domorko							
Remarks:							
				,			

VEGETATION - Use scientific na	mes of plants				Sampling Point:	118
	Absolute %	Dominant	Indicator	Dominance Test Worksh	eet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
Quercus virginiana	2	yes	FACU	Number of Dominant Spec		(A)
2.				That Are OBL, FACW, or I	FAC:	( 7
3.				Total Number of Dominan	4	(B)
4.				Species Across All Strata:	<u> </u>	(=)
5.				Percent of Dominant Spec	cies 75.00	(A/B)
6.				That Are OBL, FACW, or	FAC:	(, 00)
7.				Prevalance Index worksl	heet:	
Sapling Stratum (Plot size:	) 2	= Total Cove	er	Total % Cover of: OBL species	<u>Multiply by:</u> x1=	
1. Salix spp.	2	yes	FACW	FACW species	x2=	
2.				FAC species	x3=	
3.		<del></del>		FACU species	x4=	
4.				UPL species	x5=	_
5.				Column Totals:	(A)	— (B)
6.	_			_	(, ,	— \- <i>'</i>
7.				Prevalance Index = B	3/A =	
		= Total Cove	r	Hydrophytic Vegetation		
Shrub Stratum (Plot size:	)			✓ Dominance Test is		
1.	<del>- `</del>			Prevalence Index is	s ≤3.0 <sup>1</sup>	
2.				<del></del>	phytic Vegetation <sup>1</sup> (E:	xplain)
3.					, , , ,	. ,
4.				<sup>1</sup> Indicators of hydric soil a	nd wetland hydrology	must
5.				be present, unless disturb		
6.				Definitions of Vegetation		
7.				1		
		= Total Cove	er	Tree- Woody plants, exclud	ling woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or	more in height and 3 in	n. (7.6
Colocasia esculenta	30	yes	FACW	cm) or larger in diameter at	breast height (DBH).	
Pontederia cordata	30	yes	OBL	Sapling- Woody plants, exc	cluding woody vines,	
3. Juncus effusus	10.	no	FACW	approximately 20 ft (6m) or	more in height and les	s than 3
4. Eichhornia sp.	15	no	OBL	in. (7.6 cm) DBH.		
5. Commelina spp.	5	no	FACW	Shrub- Woody plants, exclu		
6. Aster spp.	2	no	FAC	approximately 3 to 20 ft (1 to	o 6 m) in height.	
7. Eupatorium capillifolium	2	no	FACU	Herb- All herbaceous (non-	woody)plants, includin	g
8. Paspalum notatum	2	no	FACU	herbaceous vines, regardles	ss of size. Includes we	oody
9. Micromeria spp.	2	no	NL	plants, except woody vines,	less than approximate	ely 3 ft (1
10. Polygonum punctatum	2	no	FACW	m) in height.		
11. Urochloa mutica	2	no	NL	Woody vine- All woody vine	es, regardless of heigh	ıt.
12.						
Woody Vine Stratum (Plot size:_	102	= Total Cove	er			
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present?	Yes ✓ No	-
		= Total Cove	er			<del>_</del>
	•					

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil:	Hillsborough-	Paisley

SOIL								Sampling Point:118
	scription: (Describe	to the de	pth needed to doo			confirm the ab	sence of indicators.	)
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0-2	10 YR 3/1							very dark gray fine sand
2-4	10 YR 5/2							grayish brown fine sand
							few fine distinct	
4-24	10 YR 5/1		10 YR 5/4				mottles	gray sandy clay
· · · · · · · · · · · · · · · · · · ·							common medium	3,,,
24-52	10 YR 6/1		10 YR 5/6				distinct mottles	light gray sandy clay
-	10 11( 0/1		10 111 0/0				distinct motics	iight gray sandy day
<b></b>								
ļ								
	Concentration, D=Depl	etion, RN	1=Reduced Matrix,	CS=Cove	red or Coated S	Sand Grains.	Location: PL=Por	e Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol				Poly	zalue Below Su	rface (S8) (LRR	l S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (	S9) (LRR S, T,	U)	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loan	ny Mucky Miner	al (F1) (LRR O)	)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	gen Sulfide (A4)				ny Gleved Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratif	ied Layers (A5)			Depl	eted Matrix (F3	) ´ ´		Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P	TIN			x Dark Surface	•		(MLRA 153B)
						٠, ,		,
	Mucky Mineral (A7) (LI		)		eted Dark Surfa	٠, ,		Red Parent Material (TF2)
∕Muck	Presence (A8) (LRR )	J)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Mari	(F10) (LRR U)			Other (Explain in Remarks)
						=		
Deple	ted Below Dark Surfac	e (A11)		Depl	eted Orchric (F	11) (MLRA 151	}	
Thick	Dark Surface (A12)			lron-	Manganese Ma	isses (F12) (LR	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F13) (LRR P, T, U)							}	hydrology must be present, unless disturbed or
							•	problematic.
	Mucky Mineral (S1) (I	.RR O, S	)		Orchric (F17)			problematic.
Sandy	Gleyed Matrix (S4)			Redu	iced Vertic (F18	B) (MLRA 150A	, 150B)	
Sandy	Redox (S5)			Piedi	mont Floodplair	Soils (F19) (M	LRA 149A)	
Stripp	ed Matrix (S6)			—— Anon	nalous Bright Le	oamy Soils (F20	) (MLRA 149A, 153C	C. 153D)
	Surface (S7) (LRR P, S				J	, . ,	,,	•
	e Layer (If observed):							
	Туре:						1	
	Depth (inches):						Hydric Soil Preser	nt? Yes <u>✓</u> No
Remarks:								
i								
1								
1								
1								
1								
}								
<u> </u>								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date:10/20/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: 119		
Investigator(s): Mike Arrants, Lianne Ramos	-Mofienski	Section, Township, Range: 6 28S 22E				
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con-	vex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.081797	Long:82.1	31257		Datum: WGS84	
Soil Map Unit Name: Myakka fine sand			_NWI classification			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo ✓	
Are Vegetation, Soil,			(If needed, explain	any answers ii	n Remarks)	
SUMMARY OF FINDINGS - Attach sit						
Hydrophytic Vegetation Present?	YesNo		•		<u> </u>	
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes <u></u> ✓	No	
Wetland Hydrology Present?	Yes✓_No	1				
HYDROLOGY			Connecting Indicate	(	f two species d	
Wetland Hydrology Indicators:	h t 11 4h - a 1		Secondary Indicat		i two required)	
Primary Indicators (minimum of one is required; c		Do)	Surface Soil	, ,	o Surface (PS)	
✓ Surface Water (A1)	Water-Stained Leaves (	D9)		parsely Vegetated Concave Surface (B8) rainage Patterns (B10)		
High Water Table (A2)		D III	-			
✓ Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim L	, ,	2)	
Water Marks (B1)	Hydrogen Sulfide Odor	•	-	Water Table (C	.2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced In	• •				
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic Position (D2) Shallow Aquitard (D3)			
Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)			• ,		
Field Observations:	Other (Explain in Remai	185)	FAC Neutral	Test (D3)		
Surface Water Present?	Yes No	Denth (inches): 0-36				
	Yes No		1			
Water Table Present?	Yes No		Wetland			
Saturation Present? (includes capillary fringe)	NO	_ Deptil (iliches)	Hydrology Present?	Yes ✓	No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				

<b>VEGETATION</b> - Use scientific nar	mes of plants				Sampling Poi	nt:	119
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:		
Tree Stratum (Plot size:)	Cover	Species?	Status				
1.	·	•		Number of Dominant Spe	ecies	_	
2.				That Are OBL, FACW, or		<u>0</u>	(A)
3.	. —			Total Number of Domina			
4.				Species Across All Strata		<u>2</u>	(B)
<del>5</del> .	. ———			Percent of Dominant Spe			
6.	· <del></del>			That Are OBL, FACW, or		<u>0.00</u>	(A/B)
7.				Prevalance Index works			
		= Total Cove		Total % Cover of:		tiply by:	
Sapling Stratum (Plot size:	١	- Total Cove	•	OBL species	x1=	<u>.ipiy by.</u> 0	
	<del></del> ′			FACW species	10% x2=	0.2	-
1. 2.				FAC species	20% x3=	0.2	-
3.	· ——			-			- 1
				FACU species	67%_x4=	2.68	-
4.				UPL species	x5=	0	-
5.				Column Totals:	97% (A)	3.48	-(R)
6.							
7.	. <del></del>			Prevalance Index =		3.59	
	0	= Total Cove	r	Hydrophytic Vegetation			
Shrub Stratum (Plot size:	_)			Dominance Test i			
1.				Prevalence Index			
2.				✓ Problematic Hydro	ophytic Vegetat	ion¹ (Expl	ain)
3.							
4.				Indicators of hydric soil			ust
5.				be present, unless distur		atic.	
6.				Definitions of Vegetation	on Strata:		
7.							
Herb Stratum (Plot size:)	. 0	= Total Cove	r	Tree- Woody plants, exclu approximately 20 ft (6m) o			7.6
Paspalum notatum	45	yes	FACU	cm) or larger in diameter a			,
Eupatorium capillifolium	20	yes	FACU	Sapling- Woody plants, ex	cludina woody v	vines.	
Cyperus globulosus	10	no	FAC	approximately 20 ft (6m) o			han 3
Scoparia dulcis	10	no	FAC	in. (7.6 cm) DBH.	ū		
5. Cyperus spp.	10	no	FACW	Shrub- Woody plants, exc	ludina woody vir	nes.	
6. Sida rhombifolia	2	no	FACU	approximately 3 to 20 ft (1			
7.	· <del></del>			Herb- All herbaceous (non	-woodv)nlants i	ncludina	
8.	· — ·			herbaceous vines, regardle			·lv
9.	· <del></del>	-	-	plants, except woody vines			
10.				m) in height.	,		
11.	· <del></del>			Woody vine- All woody vir	nes regardless o	of height	
12.	-			1	,		
12.	97	= Total Cove					
Woody Vine Stratum (Plot size:	\	- Total Cove	'				
·							
1.							
2.							
3.							
4.				Hydrophytic	V /	Nie	
5.		_ Take! O:		Vegetation Present?	Yes <u>√</u>	No	
Pomorko: (If observed list was the	O ological adapta	= Total Cove	l 	l			
Remarks: (If observed, list morph	บเบนเบลเ สนิสมิโส	にいける DCIUW).					

Percent cover estimates based on meandering survey of the broader community. Irrigation flooded the area and area will likely develop into a wetland if frequent inundation occurs.

	escription: (Describe to	o uie deļ	pui needed to doc			Commin the ab	sence of indicators	5.)
Depth	Matrix Color (moist)	%	Calas (maist)	%	Features Type <sup>1</sup>	Loc²	Texture	Remarks
inches) )-5	10 YR 3/1	<del>-70</del>	Color (moist)	70	туре	LOC	rexture	very dark gray fine sand
5-20	10 YR 6/1							
								gray fine sand
20-25	N 2/0							black fine sand
25-30	5 YR 3/3							dark reddish brown fine sand
					<del></del>			
Type: C=	Concentration, D=Deple	tion RM	=Reduced Matrix I	^S=Cover	ed or Coated S	Sand Grains	21 ocation: PI =Pr	ore Lining, M=Matrix.
	oil Indicators:		-ricadoca matrix,	00-00101	ca or coulca c	Jana Granis.	Location, 1 L-1	Indicators for Problematic Hydric Soils 3:
Histol				Polyv	ralue Below Su	rface (S8) (LRR	S. T. (II)	1 cm Muck (a9) (LRR O)
	Epidon (A2)					S9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
		T 115			•	•		<del></del>
_	nic Bodies (A6) (LRR P,			_	x Dark Surface			(MLRA 153B)
5 cm	Mucky Mineral (A7) (LR	(R P,T,U)	)	Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)Redox Depressions (F8)					(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)	
1 cm Muck (A9) (LRR P,T)				Marl	(F10) (LRR U)			Other (Explain in Remarks)
Deple	eted Below Dark Surface	(A11)		Deple	eted Orchric (F	11) (MLRA 151)		
Thick Dark Surface (A12)				lron-l	Manganese Ma	sses (F12) (LRF	R O, P,T)	3) and contains of the december to constation and contains
Coas	t Prairie Redox (A16) (N	ILRA 150	DA)	Umbr	ric Surface (F1	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
					Orchric (F17)			problematic.
Sandy Mucky Mineral (S1) (LRR O, S)			!		, ,	•	4500)	problemane.
Sandy Gleyed Matrix (S4)						B) (MLRA 150A,		
	y Redox (S5)			_		Soils (F19) (ML	,	
Stripp	oed Matrix (S6)			Anon	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 153	C, 153D)
Dark	Surface (S7) (LRR P, S	, T, U)						
Restrictiv	e Layer (If observed):							
	Type:							
	Depth (inches):						Hydric Soil Prese	ent? Yes <u>√</u> No
Remarks:								
ļ								
!								
i								

Project/Site: Levy Nuclear Plant - Transmission Li	nes	City/County: Hillsborou	ıgh	Sampling Date:	10/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL			120
Investigator(s): Mike Arrants, Lianne Ramos	-Mofienski	Section, Township, Range			
Landform (hilfslope, terrace, etc.):N/A		Local relief (concave, conv	vex, none): none	Slop	e (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.0817</u>	7 <u>02</u> Long: <u>-82.1</u>	33040	Datu	ım: <u>WGS84</u>
Soil Map Unit Name: Basinger fine sand			_NWI classification:	Shrub wetland	*
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	No	(If no, explain in R	emarks)
Are Vegetation, Soil	or Hydrology		Are circumstances		No ✓
	or Hydrology		(If needed, explain	any answers in Rei	marks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features,	etc.
Hydrophytic Vegetation Present?	Yes ✓ No			·	
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	rithin a Wetland?	YesNo_	
Wetland Hydrology Present?	Yes ✓ No				
Remarks:		•			
					ł
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two	required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil (		
Surface Water (A1)	Water-Stained Leave	es (B9)		jetated Concave Su	rface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	- ( /	Drainage Patt		
✓ Saturation (A3)	Marl Deposits (B15) (	I RR III	Moss Trim Lir		
Water Marks (B1)	Hydrogen Sulfide Od	•		Nater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizosphere		Crayfish Burro		1
	Presence of Reduced	- , ,		sible on Aerial Imag	en (CO)
Drift Deposits (B3)		• •		-	jery (Ca)
Algal Mat or Crust (B4)	Recent Iron Reductio	, ,	Geomorphic F	, ,	
Iron Deposits (B5)	Thin Muck Surface (C	,	Shallow Aquit	, ,	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rer	narks)	FAC Neutral <sup>-</sup>	Test (D5)	
Field Observations:					
Surface Water Present?	YesNo				
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	Depth (inches): 0-12	Hydrology		
(includes capillary fringe)			Present?	Yes / No_	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previo	ous inspections), if available:			
Remarks:					
					ŀ

VEGETATION - Use scientific nar	mes of plants			Samı	pling Point:	120
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	·			Number of Dominant Species	2	(4)
2.				That Are OBL, FACW, or FAC:	<u>2</u>	(A)
3.				Total Number of Dominant	2	<b>(D)</b>
4.				Species Across All Strata:	<u>3</u>	(B)
5.			-	Percent of Dominant Species	00.07	
6.				That Are OBL, FACW, or FAC:	<u>66.67</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.	•			FACU species	x4=	_
4.	· ———			UPL species	x5=	_
5.				Column Totals:	(A)	- (В)
6.					. ( , /	_\'
7.			<del></del>	Prevalance Index = B/A =		
		= Total Cove	r	Hydrophytic Vegetation Indica	ators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0	11	
2.				Problematic Hydrophytic		nlain)
3.	· ———			1 Toblematic Hydrophytic	vegetation (Exp	Jiani)
4.				Indicators of hydric soil and we	tland hydrology n	nuct
5.				be present, unless disturbed or		iiust
6.				Definitions of Vegetation Stra		
7.				]		
		= Total Cove		Tree- Woody plants, excluding w	andu vinan	
Herb Stratum (Plot size:)	Ū	- Total 0000	••	approximately 20 ft (6m) or more		<b>(7.6</b>
Panicum hemitomon	30	yes	OBL	cm) or larger in diameter at breas		(,,,
Juncus effusus	30	yes	FACW	Sapling- Woody plants, excluding		
Eupatorium capillifolium	20	yes	FACU	approximately 20 ft (6m) or more		than 3
Diodia virginiana	5	no	FACW	in. (7.6 cm) DBH.	noight and loos	indir o
Scoparia dulcis	5	no	FAC	Shrub- Woody plants, excluding	woody vines	
Cynodon dactylon	5	no	FACU	approximately 3 to 20 ft (1 to 6 m)		
7. Commelina spp.	2	no	FACW	•	_	
Alternanthera philoxeroides	2	no	OBL	Herb- All herbaceous (non-wood) herbaceous vines, regardless of s	,,	odv
9.	·		<del>ODL</del>	plants, except woody vines, less t		
10.	·		<del></del>	m) in height.	approximator	,
11.	·			Woody vine- All woody vines, reg	ardless of height	
12.				Troody vine-7 in woody vines, reg	jaraicss of neight.	
12.	99	= Total Cove		1		
Woody Vine Stratum (Plot size:	١	- Total Cove	1			
1. 2.				1		
3.	· ——					
	· ——			الله بطاء مساه، هذه		
<b>4</b> . <b>5</b> .				Hydrophytic	./ No	
J.		= Total Cove	<u></u>	Vegetation Present? Yes	No	<u> </u>
Remarks: (If observed, list morph				I.		
Percent cover estimates based or		•	roader cor	mmunity.		

Redox Features   Redox Features	
District   District	
28	ks
10 YR 5/3; 10 YR 5/2   brown and grayish brown fine so light brownish gray fine sand   light	
S/2	
Section   Sect	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    Varice Soil Indicators:	sand
Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F13) (outsic (A5) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F3) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soi Mucky Mineral (A7) (LRR P, T, U) Poepleted Dark Surface (F6) (MLRA 153B) Stratified Layers (A8) (LRR P, T, U) Poepleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR V) Redox Dark Surface (F7) Poepleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P,T) Sandy Mucky Mineral (S1) (LRR O, S) Piedmont Floodplain Soils (F18) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Present? Yes No	
Histic (A1)	
Histic (A1)	
Histic (A1)	
_Histol (A1)	
Histic Epidon (A2)	ric Soils *:
Black Histic (A3)	
Loamy Gleyed Matrix (F2)  Piedmont Floodplain Soils (F Stratified Layers (A5)  Depleted Matrix (F3)  Anomalous Bright Loamy Soi (P Depleted Matrix (F3)  Anomalous Bright Loamy Soi (MLRA 153B)  Piedmont Floodplain Soils (F Anomalous Bright Loamy Soi (MLRA 153B)  Anomalous Bright Loamy Soi (MLRA 153B)  Piedmont Floodplain Soils (F Anomalous Bright Loamy Soi (MLRA 153B)  Anomalous Bright Loamy Soi (MLRA 153B)  Piedmont Floodplain Soils (F3)  Anomalous Bright Loamy Soils (F3)  Anomalous Bright Loamy Soil (MLRA 153B)  Piedmont Floodplain Soils (F3)  Anomalous Bright Loamy Soils (F2) (MLRA 153B)  Piedmont Floodplain Soils (F3) (MLRA 150A)  Piedmont Floodplain Soils (F10) (MLRA 151)  Piedmont Floodplain Soils (F10) (MLRA 151)  Piedmont Floodplain Soils (F10) (MLRA 151)  Problematic (F13) (MLRA 151)  Problematic (F13) (MLRA 151)  Problematic (F13) (MLRA 151)  Problematic (F13) (MLRA 150A)  Piedmont Floodplain Soils (F10) (MLRA 149A)  Piedmont Floodplain Soils (F10) (MLRA 149A)  Piedmont Floodplain Soils (F10) (MLRA 149A)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153	
Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  From Mucky Mineral (A7) (LRR P,T,U)  Depleted Dark Surface (F6)  Mark (Presence (A8) (LRR U)  Tom Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox Depressions (F8)  Depleted Orchric (F17) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Delta Orchric (F18) (MLRA 150A)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Anomalous Bright Loamy Soil  (MLRA 153B)  Anomalous Bright Loamy Soil  (MLRA 153B)  Anomalous Bright Loamy Soil  (MLRA 153B)  Anomalous Bright Loamy Soil  (MLRA 153B)  Anomalous Bright Loamy Soil  (MLRA 153B)  Anomalous Bright Loamy Soil  Fresent (F7)  Red Parent Material (TF2)  Very Shallow Dark Surface (17)  Present (F10) (MLRA 151)  SITING THE TOM TOWN TOWN TOWN TOWN TOWN TOWN TOWN TOWN	
	ils (F20)
Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Other (Explain in Remarks)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Detripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jandicators of hydrophytic vegetati hydrology must be present, unless problematic.  Pedia Orchric (F17) (MLRA 151)  Problematic.  Problematic.  Problematic.  Problematic.  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Strictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	
	TF12) (LRR T. U)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Perdor Marse (A12)  Indicators of hydrophytic vegetati (P13) (LRR P, T, U)  Alnoitators of hydrophytic vegetati (P13) (LRR P, T, U)  Prother C (F17) (MLRA 151)  Problematic.  Pr	,
Thick Dark Surface (A12)	
Coast Prairie Redox (A16) (MLRA 150A)	
Coast Prairie Redox (A16) (MLRA 150A)	tion and wetland
	5 distarbed of
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)Dark Surface (S7) (LRR P, S, T, U)  strictive Layer (If observed):	
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  setrictive Layer (If observed):	
estrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes	
Type:  Depth (inches): Hydric Soil Present? Yes ✓ No	
Depth (inches): Hydric Soil Present? Yes 🗸 No	
· · · · · · · · · · · · · · · · · · ·	
marks:	·
·	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Date:1	0/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	121
Investigator(s): Mike Arrants, Lianne Ramo	s-Mofienski	_Section, Township, Range	e: <u>6 28S 22E</u>		
Landform (hillslope, terrace, etc.): N/A	\	Local relief (concave, con	vex, none): none	Slope	(%):
Subregion (LRR or MLRA): LRR U	Lat: 28.081761	1Long: <u>-82.</u>	133320	Datum	n: <u>WGS84</u>
Soil Map Unit Name: Basinger fine sand			_NWI classification	: Freshwater emerge	ent wetland
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes✓	_ No	(If no, explain in Rer	narks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		<u>No ✓</u>
	or Hydrology		(If needed, explain	any answers in Rema	arks)
SUMMARY OF FINDINGS - Attach si			transects, impo	rtant features, e	tc.
Hydrophytic Vegetation Present?	Yes No		•	·	
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes∕No	
Wetland Hydrology Present?	Yes No				
Remarks:					
		•			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two r	equired)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil		
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave Surf	ace (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	·		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Bur		
Drift Deposits (B3)	Presence of Reduced I			isible on Aerial Image	ry (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i			Position (D2)	, ()
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	•	
✓ Inundation Visible on Aerial Imagery (B7)	· ·		FAC Neutral	· · · · ·	
Field Observations:		· · · · · · · · · · · · · · · · · · ·			
Surface Water Present?	Yes No <u></u> <u> </u>	_ Depth (inches):			
Water Table Present?	Yes No		=		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)		_ ` ` ` /	Hydrology Present?	Yes <u>✓</u> No _	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	1		
Remarks:	<u> </u>				
Remarks.					
					•
}					

VEGETATION - Use scientific na	mes of plants				mpling Point:	121
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshee	t:	
1.				Number of Dominant Species		(A)
2.				That Are OBL, FACW, or FA	C: =	(八)
3. 4.				Total Number of Dominant	4	(B)
4.				Species Across All Strata:	2	(0)
5. 6.				Percent of Dominant Species		(A/B)
6.				That Are OBL, FACW, or FA	C:	(,,,,,
7.				Prevalance Index workshee	et:	
Sapling Stratum (Plot size:	) )	= Total Cove	r	Total % Cover of: OBL species	$\frac{\text{Multiply by:}}{x1=}$	
				FACW species	x2=	_
1. 2. 3.				FAC species	x3=	
3.				FACU species	x4=	
4.	· ——			UPL species	x5=	_
5.				Column Totals:	(A)	— (B)
6.						_ (-,
7.	• ——			Prevalance Index = B/A	=	
		= Total Cove	 r	Hydrophytic Vegetation Ind		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50		
1.				Prevalence Index is ≤	3.0 <sup>1</sup>	
2.				Problematic Hydrophy		olain)
3.						•
4.	· · · · · · · · · · · · · · · · · · ·			<sup>1</sup> Indicators of hydric soil and	wetland hydrology i	nust
5.				be present, unless disturbed	or problematic.	
6.				Definitions of Vegetation S	trata:	
7.						
	0	= Total Cove	r	Tree- Woody plants, excluding		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or mo		(7.6
1. Paspalum notatum		yes	FACU	cm) or larger in diameter at bre		
Cynodon dactylon	20	yes	FACU	Sapling- Woody plants, exclud		
3. Panicum hemitomon	20	yes	OBL	approximately 20 ft (6m) or mo	re in height and less	than 3
Scoparia dulcis	20	yes	FAC	in. (7.6 cm) DBH.		
5. Cyperus spp.	- 5	no	FACW	Shrub- Woody plants, excludir approximately 3 to 20 ft (1 to 6		
6. Diodia virginiana	5	no	FACW	1 ''		
7. Aeschynomene sp.	5	no	FACW	Herb- All herbaceous (non-woo	• • • • •	
8. Aster spp.	2	no	FAC	herbaceous vines, regardless of plants, except woody vines, les		
9. Commelina spp.		no	FACW	m) in height.	is than approximate	y 5 it (1
<ol> <li>Alternanthera philoxeroides</li> <li>Eupatorium capillifolium</li> </ol>	2 2	no no	OBL FACU	1	rogardlana of boight	
<del></del>		no		Woody vine- All woody vines,	regardless of neight	
12. Digitaria sp.	2	no Total Cause	FACU	1		
Woody Vine Stratum (Plot size:	105 )	= Total Cove				
1.				]		
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Y	es <u>     /          </u> No <u> </u>	<u>.</u>
	0	= Total Cove	r	1		

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region- Interim Version

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

OIL					Sampling Point:
rofile Description: (Describe to the dept	h needed to doci		confirm the abs	ence of indicators.)	
epth Matrix	0.1.7.1.0	Redox Features	1.00	T	<b>D</b>
ches) Color (moist) % 10 YR 2/1	Color (moist)		Loc'	Texture	Remarks black fine sand
8 10 YR 6/1					gray fine sand
10 YR 5/3; 10 YR					
42 5/2					brown and grayish brown fine sand
80 10 YR 6/2					light brownish gray fine sand
					•
pe: C=Concentration, D=Depletion, RM=F	Reduced Matrix, C	S=Covered or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Iric Soil Indicators:				J	ndicators for Problematic Hydric Soils 3:
_Histol (A1)		Polyvalue Below Sur	face (S8) (LRR S	S, T, U) _	1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)		Thin Dark Surface (S	9) (LRR S, T, U	) _	2 cm Muck (A10) (LRR S)
Black Histic (A3)	_	Loamy Mucky Minera	I (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, B
Hydrogen Sulfide (A4)	•	Loamy Gleyed Matrix		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	-	Depleted Matrix (F3)		-	Anomalous Bright Loamy Soils (F20)
	-	Redox Dark Surface		-	
_Organic Bodies (A6) (LRR P, T, U)	-				(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)		Depleted Dark Surfa	ce (F7)	_	Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)		Redox Depressions	(F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)		Marl (F10) (LRR U)			Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	_	Depleted Orchric (F1	1) /MI PA 151)	_	
• •				O D.T.	
Thick Dark Surface (A12)	-	Iron-Manganese Mas		O, P, I) 3	Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A	<b>()</b>	Umbric Surface (F13	) (LRR P, T, U)	t	hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)		Delta Orchric (F17) (	MLRA 151)	F	problematic,
Sandy Gleyed Matrix (S4)	-	Reduced Vertic (F18	•	150R)	
	-	Piedmont Floodplain			
_Sandy Redox (S5)	-				4530)
_Stripped Matrix (S6)	-	Anomalous Bright Lo	amy Solis (F20)	(MLRA 149A, 153C,	(טפר)
Dark Surface (S7) (LRR P, S, T, U)					
strictive Layer (If observed):					
Туре:					
Depth (inches):				Hydric Soil Present	? Yes <u>√</u> No
narks:			_		

Project/Site: Levy Nuclear Plant - Transmission	<u>Lines</u>	City/County: Hillsboro	ugh	Sampling Date:10/21/09
Applicant/Owner: Progress Energy Florida, In	c	State: Fl		Sampling Point: 123
Investigator(s): Mike Arrants, Lianne Ran	nos-Mofienski	_Section, Township, Range	e: <u>6 28S 22E</u>	
Landform (hillslope, terrace, etc.):	I/A	Local relief (concave, con	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.08191	2 Long: <u>-82.</u>	134887	Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification	: Freshwater emergent wetland
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes <u>✓</u>	No	_ (If no, explain in Remarks)
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstance	s normal? Yes <u>No ✓</u>
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	n any answers in Remarks)
SUMMARY OF FINDINGS - Attach			transects, impo	ortant features, etc.
Hydrophytic Vegetation Present?	Yes <u>✓</u> No		•	
Hydric Soil Present?	Yes No	Is the Sampled Area	within a Wetland?	Yes No
Wetland Hydrology Present?	Yes No			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum of one is required	: check all that anniv)		•	I Cracks (B6)
✓ Surface Water (A1)	Water-Stained Leaves	(B9)		getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	(20)		atterns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (L	RR UN	Moss Trim L	
Water Marks (B1)	Hydrogen Sulfide Odo	•	<del></del>	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	` '	Crayfish But	` ,
Drift Deposits (B3)	Presence of Reduced			/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	• •		Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7	, ,	Shallow Aqu	
✓ Inundation Visible on Aerial Imagery (B'	-	•	FAC Neutra	, ,
Field Observations:			1	
Surface Water Present?	Yes No	Depth (inches): 0-36		
Water Table Present?	Yes No		7	
Saturation Present?	Yes✓ No	Depth (inches): 0-12	Wetland	
(includes capillary fringe)		_	Hydrology Present?	Yes No
Describe Recorded Data (stream gauge, moni	oring well, aerial photos, previou	s inspections), if available:	T TOOUR.	
Remarks:				

VEGETATION -	- Use scientific names of plants	Sampling Point:	123
	oco colonimo names en plante		

	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	-
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	0 (^)
2.				That Are OBL, FACW, or FAC:	<u>0</u> (A)
3.				Total Number of Dominant	<u>1</u> (B)
4.				Species Across All Strata:	<u>1</u> (B)
5.				Percent of Dominant Species	0.00 (A/B)
6.				That Are OBL, FACW, or FAC:	<u>0.00</u> (A/b)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of:	Multiply by:
Sapling Stratum (Plot size:	)			OBL species 32% x1=	0.32
1.				FACW species 9% x2=	0.18
2.				FAC species 2% x3=	0.06
3.				FACU species 61% x4=	2.44
4.				UPL speciesx5=	0
5.				Column Totals: 104% (A)	3 (B)
6.	•			<u> </u>	
7.				Prevalance Index = B/A =	2.88
	0	= Total Cove	er	Hydrophytic Vegetation Indicator	s:
Shrub Stratum (Plot size:	_)			Dominance Test is 50%	
1.				✓ Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Veg	getation <sup>1</sup> (Explain)
3.					
4.				Indicators of hydric soil and wetland	d hydrology must
5.				be present, unless disturbed or prot	
6.				Definitions of Vegetation Strata:	
7.				1	
	0	= Total Cove	r	Tree- Woody plants, excluding woody	vines,
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in he	
Eupatorium capillifolium	55	yes	FACU	cm) or larger in diameter at breast hei	ght (DBH).
2. Alternanthera philoxeroides	15	no	OBL	Sapling- Woody plants, excluding wo	ody vines,
3. Lemna spp.	10	no	OBL	approximately 20 ft (6m) or more in he	
4. Juncus effusus	5	no	FACW	in. (7.6 cm) DBH.	
5. Panicum hemitomon	5	no	OBL	Shrub- Woody plants, excluding wood	dy vines,
6. Commelina spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in h	eight.
7. Diodia virginiana	2	no	FACW	Herb- All herbaceous (non-woody)pla	nts, including
8. Hydrocotyle spp.	2	no	OBL	herbaceous vines, regardless of size.	
9. Paspalum notatum	2	no	FACU	plants, except woody vines, less than	approximately 3 ft (1
10. Cyperus globulosus	2	no	FAC	m) in height.	
11. Digitaria sp.	2	no	FACU	Woody vine- All woody vines, regardl	ess of height.
12. Cynodon dactylon	2	no	FACU	1	
	104	= Total Cove	er	1	
Woody Vine Stratum (Plot size:	)				
1.					
2.			-	1	
3.					•
4.				Hydrophytic	
5.				1	No
	0	= Total Cove	er	1 -	
Remarks: (If observed, list morph	ological adapta			•	
Percent cover estimates based or			roader co	mmunity.	
	J	•		•	

Matrix   Redox Features   Scolor (moist)   % Type   Loc   Texture   Remarks	Color (moist)		Sampling Point:								
So Color (moist) % Color (moist) % Type* Loc* Texture Remarks  10 YR 2/1  10 YR 5/1  10 YR 5/3; 10 YR  5/2  10 YR 6/2  10 YR Malkrix  10 Ya Cation: PL=Pore Lining, Memarks  10 Idicators of Problematic Hydric Soils 3:  10 Yes Malkrix  10 Yes Malkrix  10 Ya Cation: PL=Pore Lining, Memarks  10 Yes Willing Memarks  10 Yes Memarks  10 Yes Willing Memarks  10 Yes Willing Memarks  10 Yes Malkrix  10 Yes Willing Memarks  10 Yes Willing Memarks  10 Yes Malkrix  10 Yes Willing Memarks  10 Yes Willing Memarks  10 Yes Malkrix  10 Yes Willing Memarks  10 Yes Willing Memarks  10 Yes Memarks  10 Yes Willing Memarks  10 Yes Willing Memarks  10 Ye	Color (moist)   Color (moist)   Color (moist)   Type   Loc   Texture   Remarks		s.)	sence of indicators.)	onfirm the ab	e indicator or o	ocument th	pth needed to doo	o the dep	cription: (Describe to	Profile Des
10 YR 2/1 10 YR 6/1 10 YR 5/3; 10 YR 5/2 10 YR 6/2 10 YR	Diack fine sand   Diack fine					Features	Redox			Matrix	Depth
10 YR 6/1 10 YR 5/3; 10 YR 5/2 10 YR 6/2 10 YR	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   CS=Coate Muck (A9) (LRR O)   CP=Coate Matrix (CS=Coate Muck (A9) (LRR O)   CS=Coate Muck (A9) (LRR O, S)   CS=Coate Muck (A9) (LRR O, S)   CS=Coate Muck (A9) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR O, S)   CS=Coate Muck (A10) (LRR		Remarks	Texture	Loc²	Type	%	Color (moist)	%		
To YR 5/3; 10 YR 5/2	28-42 5/2 brown and grayish brown fine sand light brownish gray fi		black fine sand								
5/2   brown and grayish brown fine sand   light brownish gray fine sand gray fine sand gray fine sand gray fine sand gray fine	Bed   Stratified Layers (A5)   Depleted Matrix (F2)   Depleted Matrix (F3)   Depleted Matrix (F3)   Mucky Mineral (A7) (LRR P,T, U)   Depleted Below Dark Surface (A1)   Depleted Below Dark Surface (A1)   Depleted Below Dark Surface (A1)   Depleted Dark Surface (A1)   Depleted Orchric (F11) (MLRA 151)   Depleted Matrix (S4)   Deleta Orchric (F17) (MLRA 151)   Sandy Mucky Mineral (S1) (LRR O, S)   Deleta Orchric (F17) (MLRA 151)   Depleted Matrix (S4)   Deleta Orchric (F18) (MLRA 150A)   Depleted Matrix (F1) (MLRA 150A)   Depleted Matrix (F2)   Deleta Orchric (F17) (MLRA 150A)   Depleted Matrix (F2)   Depleted Matrix (F3)   Depleted Matrix (F4)   Depleted Ma		gray fine sand								7-28
Toyke 6/2   Toyk	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, P=Overall Fig. (purple Sall Sall Sall Sall Sall Sall Sall Sa										
C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  2 Soil Indicators:	Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Str Mucky Mineral (A7) (LRR P, T, U)  Bredword Matrix (F2)  Depleted Dark Surface (F6)  Muck (A9) (LRR P, T, U)  Redox Depressions (F8)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Polyvalue Below Surface (S8) (LRR S, T, U)  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (a9) (LRR O)  1 cm Muck (a9) (LRR O)  2 cm Muck (A10) (LRR S)  Reduced Vertic (F18) (outside MLRA  Piedmuch (A10) (LRR O)  Piedmont Floodplain Soils (F19) (LRR  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  (MLRA 153B)  Very Shallow Dark Surface (TF12) (LR  Other (Explain in Remarks)  Jindicators of hydrophytic vegetation and we hydrology must be present, unless disturbed problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Pellat Orchric (F18) (MLRA 150A, 150B)										
Polyvalue Below Surface (S8) (LRR S, T, U)	Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P,T, U)  I cm Muck (A9) (LRR P,T, U)  Redox Depressions (F8)  Lom Muck (A9) (LRR P,T)  Mard (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Polyvalue Below Surface (S8) (LRR S, T, U)  Lord Muck Surface (S9) (LRR S, T, U)  Lord Muck (A9) (LRR O, Thin Dark Surface (F10) (MLRA 151)  Indicators for Problematic Hydric Soils (A9)  Lord Muck (A9) (LRR S, T, U)  Lord Mucky Mineral (A1) (LRR O)  Pelded Matrix (F3)  Mard (F10) (LRR C)  Peleted Dark Surface (F7)  Mard (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F13) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A)  Problematic.  Indicators for Problematic Hydric Soils (B1)  Lord Muck (A9) (LRR S, T, U)  Lord Mucky Mineral (S1) (LRR O, S)  Polta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A)  Problematic.		light brownish gray fine sand							10 YR 6/2	42-80
Polyvalue Below Surface (S8) (LRR S, T, U)	Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P,T,U)  I cm Muck (A9) (LRR P,T,U)  Pepleted Dark Surface (F7)  Muck (A9) (LRR P,T,U)  Pepleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Gleyed Matrix (F3)  Loamy Mucky Mineral (S1) (LRR O)  Loamy Mucky Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR O)  Loamy Mucky Mineral (S1) (LRR O)  Loamy Mucky Mineral (S1) (LRR O, S)  Pelvalue Below Surface (S8) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR O, S)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Muck Surface (S8) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR O, S)  Loamy Mucky Mineral (S1) (LRR O, S)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  I cm Muck (A9) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR O, S)  Loamy Mucky Mineral (S1) (LRR O, S)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)										
Polyvalue Below Surface (S8) (LRR S, T, U)	Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  I cm Muck (A9) (LRR P, T, U)  Redox Derressions (F8)  Lom Muck (A9) (LRR P, T, U)  Muck (A9) (LRR P, T)  Muck (A9) (LRR S, T, U)  Redox Dark Surface (S9) (LRR S, T, U)  Redox Dark Surface (F6)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F18) (MLRA 150A)  Reduced Vertic (F18) (MLRA 150A)  Indicators for Problematic Hydric Soils (F20)  1 cm Muck (A9) (LRR S, T, U)  1 cm Muck (A9) (LRR S, T, U)  2 cm Muck (A10) (LRR S)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LR O, T)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and we hydrology must be present, unless disturbed problematic.										
Polyvalue Below Surface (S8) (LRR S, T, U)	Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P,T,U)  I cm Muck (A9) (LRR P,T,U)  Pepleted Dark Surface (F7)  Muck (A9) (LRR P,T,U)  Pepleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Gleyed Matrix (F3)  Loamy Mucky Mineral (S1) (LRR O)  Loamy Mucky Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR O)  Loamy Mucky Mineral (S1) (LRR O)  Loamy Mucky Mineral (S1) (LRR O, S)  Pelvalue Below Surface (S8) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR O, S)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Muck Surface (S8) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR O, S)  Loamy Mucky Mineral (S1) (LRR O, S)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  I cm Muck (A9) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR O, S)  Loamy Mucky Mineral (S1) (LRR O, S)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)  Loamy Mucky Mineral (S1) (MLRA 150A)										<del></del> .
Polyvalue Below Surface (S8) (LRR S, T, U)	Histol (A1)				and Grains.	red or Coated Sa	, CS=Cover	=Reduced Matrix,	etion, RM		
Thin Dark Surface (S9) (LRR S, T, U)  ack Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Loamy Mucky Mineral (F1) (LRR O)  Loamy Gleyed Matrix (F2)  Depleted Marrix (F3)  Mard (F10) (LRR P, T, U)  Pedenont Floodplain Soils (F19) (LRR P, S, T, U)  Reduced Vertic (F18) (outside MLRA 150 (P18) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (LRR P, S, T, U)  Redox Dark Surface (F6)  MLRA 153B)  Depleted Matrix (F3)  Mard (F10) (LRR P, T)  Mard (F10) (LRR U)  Peleted Dark Surface (F7)  Red Parent Material (TF2)  Wery Shallow Dark Surface (TF12) (LRR T)  Com Muck (A9) (LRR P, T)  Peleted Below Dark Surface (A11)  Peleted Dark Surface (A12)  Iron-Manganese Masses (F12) (LRR O, P, T)  Partirie Redox (A16) (MLRA 150A)  Anomalous Bright Loamy Soils (F20)  Mucky Mineral (S1) (LRR O, S)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Prope:  Depth (inches):  Hydric Soil Present?  Yes  No  Piedmont Floodplain Soils (F19) (MLRA 149A, F1)  Popth (inches):  Hydric Soil Present?	Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stem Mucky Mineral (A7) (LRR P, T, U) Stem Mucky Mineral (A7) (LRR P, T, U) Stem Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Stem Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) Stem Muck (A9) (LRR P, T) Depleted Dark Surface (F7) Mard (F10) (LRR U) Depleted Below Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Reduced Vertic (F18) (MLRA 150A) Reduced Vertic (F18) (MLRA 150A) Reduced Vertic (F18) (MLRA 150A) Senduced Vertic (F18) (MLRA 150A) Senduced Vertic (F18) (MLRA 150A) Senduced Vertic (F18) (MLRA 150A) Senduced Vertic (F18) (MLRA 150A) Senduced Vertic (F18) (MLRA 150A) Senduced Vertic (F18) (MLRA 150A) Senduced Vertic (F18) (MLRA 150A)	s³:	•								•
Loamy Mucky Mineral (F1) (LRR O)  Loamy Mucky Mineral (F1) (LRR O)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Reduced Vertic (F18) (outside MLRA 150  Piedmont Floodplain Soils (F19) (LRR P, S, Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red No Depleted Matrix (F3)  Red Normalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Piedmont Floodplain Soils (F19) (LRR P, S, S, T, U)  (MLRA 153B)  Red Natriace (F6)  (MLRA 153B)  Red Parent Material (TF2)  (MLRA 153B)  Red Parent Material (TF2)  Pepleted Dark Surface (F7)  Red Parent Material (TF2)  Narl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Pindick Dark Surface (A12)  Depleted Orchric (F13) (LRR P, T, U)  Iron-Manganese Masses (F12) (LRR O, P,T)  Pindick Dark Surface (A12)  Depleted Orchric (F13) (LRR P, T, U)  Pioth Orchric (F17) (MLRA 151)  Pioth Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes ✓ No	Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) (MLRA 153B) (MRA 151) (MRA 151) (MRA 151) (MRA 151) (MRA 151) (MRA 151) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150A) (MRA 150B)									•	
ydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Cm Mucky Mineral (A7) (LRR P, T, U)  Cm Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Cm Muck (A9) (LRR U)  Cm Muck (A9) (LRR P, T)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  andy Mucky Mineral (S1) (LRR O, S)  andy Mucky Mineral (S1) (LRR O, S)  andy Gleyed Matrix (F3)  Piedmont Floodplain Soils (F19) (LRR P, S, T, U)  Redox Dark Surface (A12)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  andy Mucky Mineral (S1) (LRR O, S)  andy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20)  Mark Surface (A6)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  ark Surface (S7) (LRR P, S, T, U)  ctive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Piedmont Floodplain Soils (F19) (LRR  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LR  Other (Explain in Remarks)  Piedmont Floodplain Soils (F19) (LRR  (MLRA 1511)  Thick Dark Surface (A11)  Jepleted Dark Surface (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)									,	_
Tratified Layers (A5)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Cm Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Cm Muck (A9) (LRR P, T)  Depleted Dark Surface (F7)  Mart (F10) (LRR U)  Depleted Below Dark Surface (A11)  Dick Dark Surface (A12)  Dart Prairie Redox (A16) (MLRA 150A)  Depleted Orchric (F11) (MLRA 151)  Dart Prairie Redox (A16) (MLRA 150A)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 150A)  Depleted Orchric (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Tripped Matrix (S6)  Depleted Orchric (F17) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Depleted Dark Surface (S7) (LRR P, S, T, U)  Ctive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  Mucky Mineral (A7) (LRR P,T,U)  Pepleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Other (Explain in Remarks)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LR  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and we hydrology must be present, unless disturbed problematic.			•						, ,	
rganic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  Red Parent Material (TF2)  Red Parent Material (TF2)  Red Parent Material (TF2)  Red Parent Material (TF2)  Red Parent Material (TF2)  (MLRA 153B)  Red Parent Material (TF2)  Red Parent Material (TF2)  (McK Presence (A8) (LRR U)  Cother (Explain in Remarks)  Depleted Below Dark Surface (A11)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  andy Mucky Mineral (S1) (LRR O, S)  andy Mucky Mineral (S1) (LRR O, S)  andy Gleyed Matrix (S4)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  ark Surface (S7) (LRR P, S, T, U)  Ctive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes _ No	Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  Sem Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Redox Dark Surface (F6)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LR  Very Shallow Dark Surface (TF12) (LR  Other (Explain in Remarks)  Thick Dark Surface (A12)  Liron-Manganese Masses (F12) (LRR O, P,T)  Jandicators of hydrophytic vegetation and we hydrology must be present, unless disturbed problematic.			-	(FZ)		_			, ,	
cm Mucky Mineral (A7) (LRR P,T,U)  duck Presence (A8) (LRR U)  muck (A9) (LRR P,T)  muck (A9) (LRR P,T)  epleted Below Dark Surface (A11)  nick Dark Surface (A12)  cast Prairie Redox (A16) (MLRA 150A)  andy Mucky Mineral (S1) (LRR O, S)  andy Gleyed Matrix (S4)  andy Geloyed Matrix (S6)  andy Sedox (S5)  Imped Matrix (S6)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  muck (A9) (LRR P,T,U)  Depleted Dark Surface (F7)  — Red Parent Material (TF2)  — Very Shallow Dark Surface (TF12) (LRR T)  — Other (Explain in Remarks)  — Depleted Orchric (F11) (MLRA 151)  — Iron-Manganese Masses (F12) (LRR O, P,T)  — Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  — Pelta Orchric (F13) (MLRA 151)  — Reduced Vertic (F18) (MLRA 150A, 150B)  — Piedmont Floodplain Soils (F19) (MLRA 149A)  — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  ark Surface (S7) (LRR P, S, T, U)  ctive Layer (If observed):  — Type: — Depth (inches): — Hydric Soil Present? Yes ✓ No — .	5 cm Mucky Mineral (A7) (LRR P,T,U)  — Depleted Dark Surface (F7)  — Red Parent Material (TF2)  — Muck Presence (A8) (LRR U) — Redox Depressions (F8) — Very Shallow Dark Surface (TF12) (LR — Other (Explain in Remarks)  — Depleted Below Dark Surface (A11) — Depleted Orchric (F11) (MLRA 151) — Thick Dark Surface (A12) — Coast Prairie Redox (A16) (MLRA 150A) — Umbric Surface (F13) (LRR P, T, U) — Sandy Mucky Mineral (S1) (LRR O, S) — Delta Orchric (F17) (MLRA 151) — Reduced Vertic (F18) (MLRA 150A, 150B)	1		-	/E6\	, ,		-	T 10		
fluck Presence (AB) (LRR U)  — Redox Depressions (F8)  — Wery Shallow Dark Surface (TF12) (LRR T — Other (Explain in Remarks)  — Other (Explain in Remarks)  — Depleted Below Dark Surface (A11) — Depleted Orchric (F11) (MLRA 151) — Iron-Manganese Masses (F12) (LRR O, P,T) — Iron-Manganese Masses (F12) (LRR O, P,T) — Iron-Manganese Masses (F12) (LRR O, P,T) — Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  — Delta Orchric (F17) (MLRA 151) — Piedmont Floodplain Soils (F19) (MLRA 149A) — Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) — Type: — Depth (inches): Hydric Soil Present? Yes _ ✓ _ No	Muck Presence (A8) (LRR U)				• •						
muck (A9) (LRR P,T)  ———————————————————————————————————				-							
epleted Below Dark Surface (A11)  — Depleted Orchric (F11) (MLRA 151)  — Iron-Manganese Masses (F12) (LRR O, P,T)  andy Mucky Mineral (S1) (LRR O, S)  — Delta Orchric (F13) (LRR P, T, U)  — Delta Orchric (F17) (MLRA 151)  — Delta Orchric (F17) (MLRA 151)  — Delta Orchric (F18) (MLRA 150A, 150B)  — Reduced Vertic (F18) (MLRA 150A, 150B)  — Piedmont Floodplain Soils (F19) (MLRA 149A)  — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  — Type: — Depth (inches): — Hydric Soil Present? Yes ✓ No	Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Liron-Manganese Masses (F12) (LRR O, P,T)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Delta Orchric (F18) (MLRA 150A, 150B)  Delta Orchric (F18) (MLRA 150A, 150B)	₋RR T, U)		-	F8)				1)	resence (A8) (LRR U	_✓_Muck I
Iron-Manganese Masses (F12) (LRR O, P,T)  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetlan hydrology must be present, unless disturbed or problematic.  Indicators of hydrology must be present, unless disturbed or problematic.  Indicators of hydrology must be present, unless disturbed or problematic.  Indicators of hydrology must be present, unless disturbed or problematic.  Indicators of hydrology must be present, unless disturbed or problematic.  Indicators of hydrology must be present, unless disturbed or problematic.  Indicators of hydrology must be present, unless disturbed or problematic.  Indicators of hydrology must	Thick Dark Surface (A12)		Other (Explain in Remarks)	-		(F10) (LRR U)	Marl			uck (A9) (LRR P,T)	1 cm N
Delta Orchric (F13) (LRR P, T, U) hydrology must be present, unless disturbed or problematic.  Delta Orchric (F17) (MLRA 151) problematic.  Delta Orchric (F18) (MLRA 150A, 150B)  andy Redox (S5) Reduced Vertic (F18) (MLRA 150A, 150B)  andy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  ark Surface (S7) (LRR P, S, T, U)  ctive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes V No	Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 150) Reduced Vertic (F18) (MLRA 150A, 150B)			•	1) (MLRA 151)	eted Orchric (F1	Deple		(A11)	d Below Dark Surface	Deplete
Dest Prairie Redox (A16) (MLRA 150A)  andy Mucky Mineral (S1) (LRR O, S)  andy Gleyed Matrix (S4)  andy Redox (S5)  — Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  ark Surface (S7) (LRR P, S, T, U)  ctive Layer (If observed):  Type:  — Depth (inches):  — Umbric Surface (F13) (LRR P, T, U)  Aphydrology must be present, unless disturbed or problematic.  — Reduced Vertic (F18) (MLRA 151)  — Reduced Vertic (F18) (MLRA 150A, 150B)  — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  — Hydric Soil Present?  Yes ✓ No	Coast Prairie Redox (A16) (MLRA 150A)		31	R O, P,T) 3	ses (F12) (LRF	Manganese Mas	Iron-N			ark Surface (A12)	Thick E
andy Mucky Mineral (S1) (LRR O, S) andy Gleyed Matrix (S4) andy Redox (S5) andy Redox (S5) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  ark Surface (S7) (LRR P, S, T, U)  ctive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Yes _ ✓ No	Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)				) (LRR P, T, U)	ric Surface (F13	Umbr	DA)	ILRA 150	rairie Redox (A16) (M	Coast I
andy Gleyed Matrix (S4)	Sandy Microsy Millera (31) (ERR 0, 3)  Sandy Gleyed Matrix (S4)  Reduced Vertic (F18) (MLRA 150A, 150B)	ied of		•				-			
andy Redox (S5)	_ , , , , _ , , , , , , , , , , , , , ,		· · · · · · · · · · · · · · · · · · ·	450D)	•			,	KK 0, 3)		
Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  ark Surface (S7) (LRR P, S, T, U)  ctive Layer (If observed):  Type:  Depth (inches): Hydric Soil Present? Yes ✓ No				•	•					•	
ark Surface (S7) (LRR P, S, T, U)  ctive Layer (If observed):  Type:  Depth (inches): Hydric Soil Present? Yes ✓ No	<del></del>		C 153D)	•		•					
ctive Layer (If observed):     Type:	<del></del>		5, 1000)	) (MEICH 145A, 1550,	arriy 00113 (1 20)	naious prignt co				, ,	
Type:			· · · · · · · · · · · · · · · · · · ·	-1"					, 1, 0)		
Depth (inches): Hydric Soil Present? Yes ✓ No										• •	
	71							<del></del>			
		<del> </del>	nt? Yes <u>√</u> No	Hydric Soil Present	··· · · · · · · · · · · · · · · · · ·				<del> </del>	eptn (inches):	
ks:		Hydric Soil Present? Yes <u>✓</u> No	Hydric Soil Prese						, T, U)	Layer (If observed): ype:	Restrictive 1

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Dat	e: 10/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poi	nt:124
Investigator(s): Mike Arrants, Lianne Ramos		Section, Township, Range	e: <u>6 28S 22E</u>		
Landform (hillslope, terrace, etc.): N/A	·	Local relief (concave, con-	vex, none): <u>none</u>		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.081615	Long:82.1	38463		Datum: WGS84
Soil Map Unit Name: St. John's fine sand			_NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	s normal?	Yes <u>No ✓</u>
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers i	n Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	rtant featur	res, etc.
Hydrophytic Vegetation Present?	Yes✓ No				
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes <u></u> ✓	No
Wetland Hydrology Present?	Yes✓ No				•
LIVEDOL GOV					
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum o	of two required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil		
Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Ve	getated Concav	ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season	Water Table (C	C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation V	isible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):	_		
Water Table Present?	Yes No	Depth (inches):	_		
Saturation Present?	Yes No	Depth (inches): 0-12	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes 🗸	_No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:			
Remarks:					

VEGETATION - OSE SCIENTING Has	ines of plants				Sampling Fortt.	124
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksl	heet:	
1. Quercus nigra	20	yes	FAC	Number of Dominant Spe	cies	(8)
2.				That Are OBL, FACW, or	FAC: <u>10</u>	(A)
3.				Total Number of Dominar	nt 40	(D)
4.			•	Species Across All Strata	<u>10</u>	(B)
5.				Percent of Dominant Spe	cies <u>100.00</u>	(A/B)
6.				That Are OBL, FACW, or	FAC: 100.00	(AVD)
7.				Prevalance Index works	heet:	
	20	= Total Cov	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	_
Sapium sebiferum	30	yes	FAC	FACW species	x2=	
2. Salix spp.	20	yes	FACW	FAC species	x3=	
Melia azedarach	2	no	NL	FACU species	x4=	
4.				UPL species	x5=	
5.				Column Totals:	(A)	(B)
6.						
7.			•	Prevalance Index = E		
Oha h Ohad as (Dhadas)	52	= Total Cov	er	Hydrophytic Vegetation		
Shrub Stratum (Plot size:	<del>)</del>		E4.0	✓ Dominance Test is		
Baccharis sp.	10	yes	FAC	Prevalence Index i		
2. Sambucus canadensis	5	yes	FACW	Problematic Hydro	phytic Vegetation <sup>1</sup> (Ex	(plain)
3.	· ——			1		
4.				<sup>1</sup> Indicators of hydric soil a		must
5. 6.	·			be present, unless disturb  Definitions of Vegetation		
7.			-	Deminitions of Vegetation	ii Stiata.	
1.	15	= Total Cov	or	Troe Woody plants, avalua	ding woody vinos	
Herb Stratum (Plot size:)	15	- Total Cov	CI	Tree- Woody plants, exclude approximately 20 ft (6m) or		(7.6
Ludwigia spp.	15	yes	OBL	cm) or larger in diameter at		. (7.0
Juncus effusus	10	yes	FACW	Sapling- Woody plants, ex		
Woodwardia virginica	2	no	OBL	approximately 20 ft (6m) or		s than 3
Urena lobata	2	no	FACU	in. (7.6 cm) DBH.		
5. Alpinia sp.	2	no	NL.	Shrub- Woody plants, excl	uding woody vines	
6. Manihot grahamii	2	no	NL	approximately 3 to 20 ft (1 t		
7.	·			Herb- All herbaceous (non-	.woody)plants including	,
8.				herbaceous vines, regardle		
9.	-			plants, except woody vines		
10.				m) in height.		
11.			,	Woody vine- All woody vin	es, regardless of height	t.
12.						
	33	= Total Cov	er			
Woody Vine Stratum (Plot size:	)					
Lygodium japonicum	2	yes	FAC			
Lygodium microphyllum	2	yes	NL			
Vitus rotundifolia	2	yes	FAC			
4. Parthenocissus quinquefolia	2	yes	FAC	Hydrophytic		
5.				Vegetation Present?	Yes <u>√</u> No_	
	8	= Total Cov	er			
Remarks: (If observed, list morph						
Percent cover estimates based or	n meandering s	urvey of the	broader co	mmunity.		
						į

SOIL Drofile De	ecription: (Deceribe	to the der	th peeded to doe	umont t	ho indicator or	confirm the ab	sonse of indicators	Sampling Point: 124		
Profile Description: (Describe to the depth needed to de Depth Matrix		our needed to doc		x Features	committe ab	sence of indicators.	•1			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks		
0-6	10 YR 2/1		, , , , , , , , , , , , , , , , , , ,					black fine sand		
6-12	10 YR 3/2							very dark grayish brown fine sand		
12-29	10 YR 6/2							light brownish gray fine sand		
29-36	10 YR 2/1							black fine sand		
¹Tvpe: C=	Concentration, D=Dep	letion, RM	=Reduced Matrix.	CS=Cove	ered or Coated	Sand Grains.	2Location: PL=Por	re Lining, M=Matrix.		
,,	il Indicators:				-			Indicators for Problematic Hydric Soils 3:		
Histol (A1)				Polyvalue Below Surface (S8) (LRR S, T, U)				1 cm Muck (a9) (LRR O)		
	Epidon (A2)			Thin Dark Surface (S9) (LRR S, T, U)				2 cm Muck (A10) (LRR S)		
	Histic (A3)			Loamy Mucky Mineral (F1) (LRR O)				Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)				my Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	fied Layers (A5)			Depleted Matrix (F3)				Anomalous Bright Loamy Soils (F20)		
_	nic Bodies (A6) (LRR F	T III		Redox Dark Surface (F6)				(MLRA 153B)		
·								· ·		
	Mucky Mineral (A7) (L			Depleted Dark Surface (F7)				Red Parent Material (TF2)		
Muck	Presence (A8) (LRR	U)		Redox Depressions (F8)				Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm	Muck (A9) (LRR P,T)			Marl (F10) (LRR U)				Other (Explain in Remarks)		
Deple	ted Below Dark Surfac	æ (A11)	*	Dep	eleted Orchric (F	11) (MLRA 151)	)			
Thick	Dark Surface (A12)			Iron-Manganese Masses (F12) (LRR O, P,T)				31 - 12 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
	Prairie Redox (A16) (	MI DA 150	161	Umbric Surface (F13) (LRR P, T, U)				<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or		
	, , ,		•	Delta Orchric (F17) (MLRA 151)				problematic.		
	y Mucky Mineral (\$1) (I	LRR (), S)						problematic.		
	y Gleyed Matrix (S4)					8) (MLRA 150A				
Sandy Redox (S5)				Piedmont Floodplain Soils (F19) (MLRA 149A)						
Stripp	ed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)		
Dark	Surface (S7) (LRR P,	S, T, U)								
Restrictiv	e Layer (If observed)	:								
	Type:						1			
Depth (inches):			<del>.</del>				Hydric Soil Presei	nt? Yes ✓ No		
Remarks:			<del></del>							
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/21/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: 125		
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski					
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: 28.081603	3 Long: <u>-82.138643</u> Datum: <u>WG</u>				
Soil Map Unit Name: St. John's fine sand			_NWI classification:			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in R	Remarks)	
Are Vegetation, Soil	or Hydrology		Are circumstances		No ✓	
	or Hydrology		(If needed, explain	any answers in Re	marks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features,	etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes No	Is the Sampled Area w				
Wetland Hydrology Present?	YesNo					
Remarks:						
	,					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	tors (minimum of two required)		
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (E	39)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	je Patterns (B10)		
✓ Saturation (A3)	Mart Deposits (B15) (LR	R U)Moss Trim Lines (B16)				
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burn	ows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic I	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarl	ks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No/					
Water Table Present?	Yes No	Depth (inches):	Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	YesNo		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				
Remarks:						
·						

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	125			
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:				
Tree Stratum (Plot size:)	Cover	Species?	Status					
1.		•		Number of Dominant Species	(0)			
2.				That Are OBL, FACW, or FAC:	(A)			
3.				Total Number of Dominant				
4.				Species Across All Strata:	(B)			
5.				Percent of Dominant Species				
6.				That Are OBL, FACW, or FAC:	(A/B)			
7.				Prevalance Index worksheet:				
•	0	= Total Cove	·r	Total % Cover of: Multiply by:				
Sapling Stratum (Plot size:	)	. Otal Oove	,,	OBL species x1=				
1.				FACW species x2=	-			
2.				FAC species x3=	-			
3.				FACU species x4=	-			
4.				UPL species x5=	-			
5.				Column Totals: (A)	- <sub>(B)</sub>			
<u>5.</u> 6.				(A)	- <sup>(B)</sup>			
7.				Dravalance Indox = B/A =				
7.		= Total Cove		Prevalance Index = B/A =				
Chrish Ctratum (Diat aire)	,	- Total Cove	er	Hydrophytic Vegetation Indicators:  ✓ Dominance Test is 50%				
Shrub Stratum (Plot size:			E40	<del></del>				
1. Baccharis sp.	30	yes	FAC	Prevalence Index is ≤3.0¹				
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	·lain)			
3.				<b>.</b>	1			
4.	. <del></del>			Indicators of hydric soil and wetland hydrology m	านst			
5.				be present, unless disturbed or problematic.				
6.				Definitions of Vegetation Strata:				
7.								
	30	= Total Cover		Tree- Woody plants, excluding woody vines,				
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in.	(7.6			
Ludwigia peruviana	40	yes	OBL	cm) or larger in diameter at breast height (DBH).				
Panicum hemitomon	20	yes	OBL	Sapling- Woody plants, excluding woody vines,	-			
<ol><li>Phyllanthus urinaria</li></ol>	2	no	FAC	approximately 20 ft (6m) or more in height and less	than 3			
<ol><li>Andropogon spp.</li></ol>	2	no	FAC	in. (7.6 cm) DBH.				
5. Eupatorium capillifolium	2	no	FACU	Shrub- Woody plants, excluding woody vines,				
6. Hydrocotyle spp.	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.				
7. Phyla nodiflora	2	no	FACW	Herb- All herbaceous (non-woody)plants, including				
8. Commelina spp.	2	no	FACW	herbaceous vines, regardless of size. Includes woo	dy			
9. Paspalum notatum	2	no	FACU	plants, except woody vines, less than approximately	/ 3 ft (1			
10. Urochloa mutica	2	no	NL	m) in height.				
11. Verbesina spp.	2	no	FAC	Woody vine- All woody vines, regardless of height.				
12.				1				
, .	78	= Total Cove	er	1				
Woody Vine Stratum (Plot size:	)							
1.								
2.	· ——			1				
3.	·							
4.		<del></del>		  Hydrophytic				
5.				Vegetation Present? YesNo				
<u>.                                    </u>	0 = Total Cover			100				
Remarks: (If observed, list morph			· · · · · · · · · · · · · · · · · · ·	<u> </u>				
Percent cover estimates based or		·	roader co	mmunity.				

SOIL De	contation: (Deceribe	to the de-	ath panded to doe		ha indicator or	aanfirm tha ab	anne of indicators	Sampling Point:125		
	Scription: (Describe Matrix	to the dep	our needed to doc		ne indicator or x Features	confirm the at	sence of indicators.	)		
Depth (inches)	Color (moist)		Color (moist)	%	Type	Loc²	Texture	Remarks		
0-6	10 YR 2/1		Color (Holst)		1,700		TEXILITE	black fine sand		
6-12	10 YR 3/2						<del></del>	very dark grayish brown fine sand		
12-29	10 YR 6/2		**					light brownish gray fine sand		
29-36	10 YR 2/1							black fine sand		
	Concentration, D=Dep	letion, RM	=Reduced Matrix, C	S=Cove	ered or Coated S	and Grains.		e Lining, M=Matrix.		
	il Indicators:							Indicators for Problematic Hydric Soils 3:		
Histol				_ ′	value Below Sur	, , ,		1 cm Muck (a9) (LRR O)		
	Epidon (A2)		-		Dark Surface (\$		•	2 cm Muck (A10) (LRR S)		
	Histic (A3)				my Mucky Miner		)	Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)		-		my Gleyed Matri	, ,		Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ied Layers (A5)		-		leted Matrix (F3)			Anomalous Bright Loamy Soils (F20)		
Organ	ic Bodies (A6) (LRR F	ν, τ, υ)			iox Dark Surface	, ,		(MLRA 153B)		
5 cm	Mucky Mineral (A7) (L	RR P,T,U)		Dер	leted Dark Surfa	ice (F7)		Red Parent Material (TF2)		
_✓_Muck	Presence (A8) (LRR	U)		Red	lox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm	Muck (A9) (LRR P,T)			Mar	1 (F10) (LRR U)			Other (Explain in Remarks)		
Deple	ted Below Dark Surfac	æ (A11)		Dep	leted Orchric (F	11) (MLRA 151	)			
Thick Dark Surface (A12)				Iron	-Manganese Ma	sses (F12) (LR	R O, P,T)	31111		
	Coast Prairie Redox (A16) (MLRA 150A)		DA) .	Uml	bric Surface (F13	3) (LRR P, T, U		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or		
Sandy	Mucky Mineral (S1) (	LRR O. SI		Delta Orchric (F17) (MLRA 151)				problematic.		
	Gleyed Matrix (S4)	<b>- ,</b>		Red	luced Vertic (F18	3) (MLRA 150A	. 150B)			
	Redox (S5)		•	<del></del>	lmont Floodplain	, ,				
	ed Matrix (\$6)		•				) (MLRA 149A, 153C	:. 153D)		
	Surface (S7) (LRR P.	C T III	•			, (	, , , , , , , , , , , , , , , , , , , ,	, ,		
	e Layer (If observed)						1			
	e Layer (ii observed) Type:	•								
	Depth (inches):						Hydric Soil Presen	it? Yes ✓ No		
Remarks:	Depti (inches)						Invalic Son Fresen	iti res_ / NO		
T COMBINS.										
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Project/Site: Levy Nuclear Plant - Transmission L	City/County: Hillsborough Sampling Date: 10/21/09			: 10/21/09		
Applicant/Owner: Progress Energy Florida, Inc.	State: FL Sampling Point: 126			t: 126		
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range: 6 28S 22E				
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, con	vex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.081611	1 Long:82.1	141098	(	Datum: WGS84	
Soil Map Unit Name: St. John's and Basinger fine	e sand		_NWI classification	ı: Freshwater e	mergent wetland	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	No	_ (If no, explain i	n Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstance		Yes <u>No ✓</u>	
Are Vegetation, Soil,			(If needed, explain	n any answers in	Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	ortant feature	es, etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes/_I	No	
Wetland Hydrology Present?	YesNo					
Remarks:		<b>-1</b> .			-	
į						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of	two required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	getated Concave	s Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)Dry-Season Water Table (C2)			2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bu	rrows (C8)		
Drift Deposits (B3)	Presence of Reduced In	ron (C4)	Saturation \	/isible on Aerial I	magery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	uitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutra	l Test (D5)		
Field Observations:						
Surface Water Present?	Yes No		_			
Water Table Present?	Yes No	_ Depth (inches):0	<u> </u>			
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)			Present?	Yes <u>-</u> ✓I	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:				
		•				
Remarks:						
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Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status			
1. 2.				Number of Dominant Species That Are OBL, FACW, or Face of the second sec		(A)
3.				Total Number of Dominant		/B)
4.				Species Across All Strata:	<u>9</u>	(B)
5.				Percent of Dominant Specie	00.03	(A/B)
6.				That Are OBL, FACW, or FA	AU:	
7.	- —	- t-10:		Prevalance Index worksho	<del></del>	
Sapling Stratum (Plot size:		= Total Cov	er	Total % Cover of: OBL species	Multiply by: x1=	
1. Salix spp.	20	yes	FACW	FACW species	x2=	_
Acer rubrum	10	yes	OBL	FAC species	x3=	_
Sapium sebiferum	2	no	FAC	FACU species	x4=	_
Quercus virginiana	2	no	FACU	UPL species	x5=	_
5. Quercus laurifolia	2	no	FACW	Column Totals:	(A)	_(B)
6.				<b></b>		
7.	- ———		- ——	Prevalance Index = B//		
	36	= Total Cov	er	Hydrophytic Vegetation In		
Shrub Stratum (Plot size:	<u></u>			✓ Dominance Test is 5		
Myrica cerifera	2	yes	FAC	Prevalence Index is		
2. Sambucus canadensis	2	yes	<u>FACW</u>	Problematic Hydropi	nytic Vegetation¹ (Exp	olain)
3.	- —			<b>.</b>		_
4.			- ——	Indicators of hydric soil and		nust
5. 6.			-	be present, unless disturbed		
7.	- ———			Definitions of Vegetation	Strata:	
<u>  / .                                    </u>	4	= Total Cov	·or	T W/ by planta, avaludir		
Herb Stratum (Plot size:)		= TOtal Cov	eı	Tree- Woody plants, excluding approximately 20 ft (6m) or m		76
Ludwigia peruviana	50	yes	OBL	cm) or larger in diameter at b	-	(1.0
Juncus effusus	20	yes	FACW	Sapling- Woody plants, exclu	• , ,	
Eupatorium capillifolium	2	no	FACU	approximately 20 ft (6m) or m		than 3
Andropogon glomeratus	2	no	FACW	in. (7.6 cm) DBH.	•	
5. Hydrocotyle spp.	2	no	OBL	Shrub- Woody plants, exclud	ling woody vines,	
6. Setaria spp.	2	no	FAC	approximately 3 to 20 ft (1 to		
7. Tilia sp.	2	no	FACU	Herb- All herbaceous (non-w	oodv)plants, including	
8. Stachys floridana	2	no	FAC	herbaceous vines, regardless		ody
9.				plants, except woody vines, le	ess than approximately	y 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines	, regardless of height.	
12.				1	•	
Woody Vine Stratum (Plot size:	82	= Total Cov	er			
Parthenocissus quinquefolia	2	yes	FAC			
Ampelopsis arborea	2	yes	FAC	1		
3. Rubus spp.	2	yes	FACU			
4.				Hydrophytic		
5.	·			<b>-1</b>	Yes <u>√</u> No	<u>.</u>
	6	= Total Cov				
Remarks: (If observed, list morph						

Profile Description: (Description: (Description: (Description: (Description: Color (motet))  Marix Redox Factures Redox Factures Redox Factures Redox Factures Remarks    Doctor (motet)   %   Color (motet)   %   Type'   Loc'   Texture   Doctor (motet)   Social (Mark Section of the section of	SOIL											Samp	ling Point:	126
(inches) Color (moist) % Color (moist) % Type' Loc' Texture Remarks  6-10 YR 2/1  6-12 10 YR 3/2  12-29 10 YR 6/2  23-36 10 YR 2/1  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=C			to the dep	oth needed to doc			confirm the ab	sence of indicators	i.)					
Decided Note				0-1(			1 004	T 4				D		
12-29   10 YR 3/2				Color (moist)		iype	Loc	I exture	C			Remar	KS	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   Turns														
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.									<u> </u>				and	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Hydric Soil Indicators: Histol (A1) Histol (A2) Histol (A2) Histol (A2) Histol (A3) Histol (A3) Histol (A3) Histol (A3) Histol (A3) Histol (A3) Histol (A3) Histol (A4)											ray tine	sand		
Hydric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Some Muck (A9) (LRR P, T, U) Depleted Dark Surface (F1) Depleted Dark Surface (F7) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Matrix (F1) (LRR O, P,T) Depleted Below Dark Surface (A12) Depleted Matrix (F10) (LRR D, P,T) Depleted Surface (F13) (LRR O, P,T) Depleted Surface (A12) Depleted Orchric (F13) (LRR P, T, U) Depleted Orchric (F13) (LRR P, T, U) Depleted Surface (F13) (LRR D, P,T) Depleted Surface (A12) Depleted Surface (F13) (LRR D, T, U) Depleted Surface (A15) Depleted Surface (F13) (LRR D, T, U) Depleted Surface (F13) (LRR D, P,T) Depleted Surface (A15) Surface (A15) Surface (A15) Surface (A15) Surface (A15) Surface	29-36	10 YR 2/1							black fit	ne sand				
Hydric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Some Muck (A9) (LRR P, T, U) Depleted Dark Surface (F1) Depleted Dark Surface (F7) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Matrix (F1) (LRR O, P,T) Depleted Below Dark Surface (A12) Depleted Matrix (F10) (LRR D, P,T) Depleted Surface (F13) (LRR O, P,T) Depleted Surface (A12) Depleted Orchric (F13) (LRR P, T, U) Depleted Orchric (F13) (LRR P, T, U) Depleted Surface (F13) (LRR D, P,T) Depleted Surface (A12) Depleted Surface (F13) (LRR D, T, U) Depleted Surface (A15) Depleted Surface (F13) (LRR D, T, U) Depleted Surface (F13) (LRR D, P,T) Depleted Surface (A15) Surface (A15) Surface (A15) Surface (A15) Surface (A15) Surface		. ———												
Hydric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Some Muck (A9) (LRR P, T, U) Depleted Dark Surface (F1) Depleted Dark Surface (F7) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Below Dark Surface (A12) Depleted Matrix (F1) (LRR O, P,T) Depleted Below Dark Surface (A12) Depleted Matrix (F10) (LRR D, P,T) Depleted Surface (F13) (LRR O, P,T) Depleted Surface (A12) Depleted Orchric (F13) (LRR P, T, U) Depleted Orchric (F13) (LRR P, T, U) Depleted Surface (F13) (LRR D, P,T) Depleted Surface (A12) Depleted Surface (F13) (LRR D, T, U) Depleted Surface (A15) Depleted Surface (F13) (LRR D, T, U) Depleted Surface (F13) (LRR D, P,T) Depleted Surface (A15) Surface (A15) Surface (A15) Surface (A15) Surface (A15) Surface														
Histol (A1)			letion, RM	=Reduced Matrix, (	CS=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po						
Histic Epidon (A2) Black Histic (A3) Loarny Mucky Mineral (F1) (LRR O) Peddmont Floodplain Soils (F19) (LRR T, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T) Peddmont Floodplain Soils (F19) (LRR P, S, T, U) Pepleted Dark Surface (F1) Pepleted Dark Surface (F7) Ped Parent Material (TF2) Per Shallow Dark Surface (TF12) (LRR T, U) Pepleted Below Dark Surface (A11) Pepleted Below Dark Surface (A11) Pepleted Below Dark Surface (A11) Pepleted Below Dark Surface (A11) Pepleted Below Dark Surface (A12) Pepleted Orchric (F11) (MLRA 151) Pepleted Orchric (F11) (MLRA 151) Pepleted Orchric (F11) (MLRA 151) Pepleted Orchric (F17) (MLRA 151) Pepleted Orchric (F17) (MLRA 151) Pepleted Orchric (F17) (MLRA 151) Pepleted Orchric (F17) (MLRA 151) Pepleted Orchric (F17) (MLRA 151) Pepleted Orchric (F17) (MLRA 151) Pepleted Orchric (F18) (MLRA 150A, 150B) Pendmont Floodplain Soils (F19) (MLRA 149A) Per Mucky Mineral (S1) (LRR P, S, T, U) Per Mucky Mineral (S1) (LRR P, S, T, U) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Pepleted Orchric (F18) (MLRA 149A, 153C, 153D) Peple												•	ric Soils *:	:
Black Histic (A3)  Hydrogen Suffide (A4)  Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Suffide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Seminary Mucky Mineral (A7) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T)  Depleted Dark Surface (F8)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Loamy Mucky Mineral (F1) (LRR O, Anomalous Bright Loamy Soils (F20)  Anomalous Bright Loamy Soils (F19) (LRR O, P, T)  Piedmont Floodplain Soils (F19) (LRR O, P, T)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Reduced Vertic (F18) (MLRA 150A)  Piedmont Floodplain Soils (F20)  Manomalous Bright Loamy Soils (F20)  MICRA 153B)  Anomalous Bright Loamy Soils (F20)  Piedmont Floodplain Soils (F20)  MIRA 150A, B)  Piedmont Floodplain Soils (F20)  MIRA 153B)  Reduced Vertic (F18) (MLRA 150A)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	_								_					
Loarry Gleyed Matrix (F2)										•	, ,			
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A7) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2)  Legeleted Dark Surface (F7) Redox Depressions (F8) Legeleted Dark Surface (F7) Narl (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Liron-Manganese Masses (F12) (LRR O, P,T) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No  Anomalous Bright Loamy Soils (F20) (MLRA 153B) CMRRA 153B)  Anomalous Bright Loamy Soils (F20) (MLRA 153B) CMRRA 153B)  Anomalous Bright Loamy Soils (F20) (MLRA 153B) CMRRA 153B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Later Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	Black	Histic (A3)						1						
Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Red Parent Material (TF2)  Red Parent Material (TF2)  Redox Depressions (F8)  Other (Explain in Remarks)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S7)  Dark Surface (S7) (LRR P, T, U)  Redox Dark Surface (F1)  Marl (F10) (LRR U)  Depleted Dark Surface (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Junctic Surface (F13) (LRR P, T, U)  Poleta Orchric (F13) (LRR P, T, U)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	Hydro	gen Sulfide (A4)			Loai	ny Gleyed Matr	ix (F2)		Piedm	nont Floo	dplain	Soils (F	19) (LRR P	P, S, T)
	Stratif	ied Layers (A5)			Dep	leted Matrix (F3	)		Anom	alous Br	ight Lo	amy So	ils (F20)	
	Organ	nic Bodies (A6) (LRR I	P, T, U)		Red	ox Dark Surface	e (F6)		(ML	RA: 153E	3)			
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jendicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Neduced Vertic (F18) (MLRA 150A)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No  No  Norther (F12) (LRR T, U)  Other (Explain in Remarks)  Jendicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Reduced Vertic (F18) (MLRA 150A) 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A), 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No  No				i	Dep	leted Dark Surfa	ace (F7)		Red F	Parent M	aterial	(TF2)		
							, ,					` '	TF12\ /I RF	2 T 11)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Problematic.  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No  No  No			0,				(10)						,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 0,
Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Coast Prairie Redox (A16) (MLRA 150A) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type:			00 (411)				11) (MI RA 151)	1		(— · (- · · · · · · · · · · · · · · · · ·		,		
Coast Prairie Redox (A16) (MLRA 150A)  Umbric Surface (F13) (LRR P, T, U)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Stripped Matrix (S6)  Delta Orchric (F17) (MLRA 150A, 150B)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No														
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Problematic.  Reduced Vertic (F17) (MLRA 151)  problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  No											tland			
	Coast	Prairie Redox (A16) (	MLRA 150	DA)	Umbric Surface (F13) (LRR P, T, U)		)				or			
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Park Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	Sandy	Mucky Mineral (S1) (	LRR O, S)	•	Delt	a Orchric (F17)	(MLRA 151)		problematic.					
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	Sandy	Gleyed Matrix (S4)			Red	uced Vertic (F1	8) (MLRA 150A,	, 150B) .						
	Sandy	Redox (S5)			Pied	lmont Floodplaii	3 Soils (F19) (MI	LRA 149A)						
Restrictive Layer (If observed):         Type:           Depth (inches):         Hydric Soil Present?         Yes ✓ No	Stripp	ed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20	) (MLRA 149A, 153	C, 153D)					
Type:           Depth (inches):         Hydric Soil Present? Yes _ ✓ No														
Depth (inches): Hydric Soil Present? Yes _ V No	Restrictiv	e Layer (If observed)	):											
		Type:												
Remarks:		Depth (inches):						Hydric Soil Prese	nt?	Yes	_ ✓	No_		
	Remarks:													
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Project/Site: Levy Nuclear Plant - Transmission L	nes	City/County: Hillsborou	Sampling Date: 10/21/09			
Applicant/Owner: Progress Energy Florida, Inc.	State: FL		Sampling Point: 127			
Investigator(s): Mike Arrants, Lianne Ramos	-Mofienski					
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv				
Subregion (LRR or MLRA): LRR U	Lat: 28.081191	Long: <u>-82.1</u>	47121			
Soil Map Unit Name: Basinger fine sand		•		Freshwater emergent wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_ No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances			
	or Hydrology		(If needed, explain	any answers in Remarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>			ransects, impo	rtant features, etc.		
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	YesNo			
Wetland Hydrology Present?	† · · · — — — — — — — — — — — — — — — —					
Remarks:						
<u> </u>	·					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)		
Primary Indicators (minimum of one is required; c	neck all that apply)		Surface Soil (	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (E	39)Sparsely \		etated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tems (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LRI	R U)	Moss Trim Li			
Water Marks (B1)	Hydrogen Sulfide Odor (	•	Dry-Season V	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)Crayfis		sh Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	-		sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic I			
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aquit			
✓ Inundation Visible on Aerial Imagery (87)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-24				
Water Table Present?	Yes No					
Saturation Present?		Depth (inches): 0-12	Wetland Hydrology			
(includes capillary fringe)			Present?	Yes No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	1			
l v v		. "				
Remarks:						
			•			

'EGETATION - Use scientific names of plants	Sampling Point:	12

	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u>	(A)
3.				Total Number of Dominant	•	(D)
4.				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species	100.00	(A /D)
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.	·			Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				<u> </u>	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	_(B)
6.				j		
7.				Prevalance Index = B/A =		
	0	= Total Cove	er	Hydrophytic Vegetation Indica	itors:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	•	
1				Prevalence Index is ≤3.0		
2.				Problematic Hydrophytic	Vegetation' (Exp	olain)
3.				1		
4.				Indicators of hydric soil and we		nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ta:	
7.				1		
l.,	0	= Total Cove	er	Tree- Woody plants, excluding wo		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more i		(7.6
1. Thalia spp.	40	yes	OBL	cm) or larger in diameter at breast	• •	
2. Panicum repens	30	yes	FACW	Sapling- Woody plants, excluding		
3. Ludwigia peruviana	15	no	OBL	approximately 20 ft (6m) or more i in. (7.6 cm) DBH.	n height and less	than 3
4. Ludwigia octovalvis	10	no	OBL	i '		
5. Juncus effusus	10	no	FACW	Shrub- Woody plants, excluding v	•	
6. Cyperus spp.	2	no	FACW	approximately 3 to 20 ft (1 to 6 m)	-	
7. Alternanthera philoxeroides	2	no	OBL	Herb- All herbaceous (non-woody		
8. Polygonum punctatum	- 2	no	FACW	herbaceous vines, regardless of s plants, except woody vines, less to		
9. Commelina spp.	2	no	FACW	m) in height.	nan approximater	y 3 it (1
10. Phyla nodiflora 11. Eichhornia sp.	2 2	no	FACW OBL	<u> </u>	andless of beimbt	
	2	no		Woody vine- All woody vines, reg	aruless of fleight.	
12. Aster spp.		no - Total Cava	FAC	4	• •	
   Woody Vine Stratum (Plot size:	119 )	= Total Cove	er .			
1.						
2.				1		
3.	-			1		
4.				Hydrophytic		
5.				<b>-</b>	No	<u> </u>
	0	= Total Cove	er	1		
Remarks: (If observed, list morph	ological adapta					
Percent cover estimates based or	-		roader co	mmunity.		

%	Color (moist)	Redox Fee	or Coated Sand Grain e Below Surface (S8) k Surface (S9) (LRR	s. <sup>2</sup> Location: PL=	Remarks black fine sand gray fine sand  brown and grayish brown fine sand light brownish gray fine sand  Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:		
etion, RM=I		%  CS=Covered  Polyvalu  Thin Dar  Loamy M	or Coated Sand Grain e Below Surface (S8) k Surface (S9) (LRR	s. <sup>2</sup> Location: PL=	black fine sand gray fine sand  brown and grayish brown fine sand light brownish gray fine sand  Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:		
etion, RM=I		CS=Covered Polyvalu Thin Dar Loamy M	or Coated Sand Grain e Below Surface (S8) k Surface (S9) (LRR ducky Mineral (F1) (L	s. <sup>2</sup> Location: PL=	black fine sand gray fine sand  brown and grayish brown fine sand light brownish gray fine sand  Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	gray fine sand  brown and grayish brown fine sand light brownish gray fine sand  Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils 3:		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	brown and grayish brown fine sand light brownish gray fine sand  Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	light brownish gray fine sand  Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	light brownish gray fine sand  Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	Indicators for Problematic Hydric Soils 3:		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	Indicators for Problematic Hydric Soils 3:		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	Indicators for Problematic Hydric Soils 3:		
r, T, U) RR P,T,U)	Reduced Matrix,	Polyvalu Thin Dar Loamy M	e Below Surface (S8) k Surface (S9) (LRR fucky Mineral (F1) (Li	(LRR S, T, U)	Indicators for Problematic Hydric Soils 3:		
RR P,T,U)		Thin Dar Loamy M Loamy G	k Surface (S9) (LRR /lucky Mineral (F1) (L				
RR P,T,U)		Thin Dar Loamy M Loamy G	k Surface (S9) (LRR /lucky Mineral (F1) (L				
RR P,T,U)		Loamy N	lucky Mineral (F1) (L	C T III	1 cm Muck (a9) (LRR O)		
RR P,T,U)		Loamy G		3, 1, 0)	2 cm Muck (A10) (LRR S)		
RR P,T,U)				RR O)	Reduced Vertic (F18) (outside MLRA 150A, B)		
RR P,T,U)		Denletec	Hydrogen Sulfide (A4)Loamy Gleyed Matrix (F2)				
RR P,T,U)		Debieted	Stratified Layers (A5)Depleted Matrix (F3)				
		Organic Bodies (A6) (LRR P, T, U)Redox Dark Surface (F6)			(MLRA 153B)		
	5 cm Mucky Mineral (A7) (LRR P.T.U)Depleted Dark Surface (F7)				Red Parent Material (TF2)		
✓ Muck Presence (A8) (LRR U)  Redox Depressions (F8)				Very Shallow Dark Surface (TF12) (LRR T, U)			
1 cm Muck (A9) (LRR V)Marl (F10) (LRR U)							
			, , ,		Other (Explain in Remarks)		
e (A11)		Depleted	Orchric (F11) (MLR	A 151)			
		Iron-Man	ganese Masses (F12	) (LRR O, P,T)	R O, P,T)  3Indicators of hydrophytic vegetation and wetland		
MLRA 150A	A)	Umbric S	Surface (F13) (LRR P	, T, U)	hydrology must be present, unless disturbed or		
.RR O, S)		Delta On	chric (F17) (MLRA 1	<b>31</b> )	problematic.		
, .,			Vertic (F18) (MLRA	•			
					53C 153D)		
			da Diigiil Loaniy Ook	5 (1 20) (MENA 143A, 1	55C, 155D)		
6, T, U)							
				l			
				Hydric Soil Pre	esent? Yes _ ✓ No		
6, T	΄, υ)	, u)	Piedmor Anomalo	Piedmont Floodplain Soils (F1 Anomalous Bright Loamy Soils	Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 1		

Project/Site: Levy Nuclear Plant - Transmission L	City/County: Hillsborough Sampling Date: 10			10/21/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 12			128	
Investigator(s): Mike Arrants, Lianne Ramos	-Mofienski	_ Section, Township, Range: 6 28S 22E				
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	Slo	ope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.080835	Long:82,1	49763	Da	atum: WGS84	
Soil Map Unit Name: St. John's fine sand			_NWI classification	: Freshwater em	ergent wetland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ _ No			
Are Vegetation, Soil,	•		Are circumstances		sNo ✓	
Are Vegetation, Soil,			(If needed, explain		temarks)	
SUMMARY OF FINDINGS - Attach sit			•	•		
Hydrophytic Vegetation Present?	YesNo		, , , , , , , , , , , , , , , , , , , ,		, =	
Hydric Soil Present?	YesNo	Is the Sampled Area w	rithin a Wetland?	Yes <u>√</u> No	·	
Wetland Hydrology Present?	YesNo					
Remarks:	<del></del>					
L						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of tv	wo required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concave S	Surface (B8)	
High Water Table (A2)				Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)		Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	·		on Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•	rows (C8)			
Drift Deposits (B3)	Presence of Reduced Ire			isible on Aerial Im	agery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in			Position (D2)	-9-7(7	
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral			
Field Observations:		,	T			
Surface Water Present?	Yes/ No	Depth (inches): 0-12				
Water Table Present?	Yes No		1			
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)	140	F (	Hydrology Present?	Yes ✓ No		
Describe Recorded Data (stream gauge, monitori	ng well aerial photos previous	inspections) if available:	Fresenti	163 <u>*</u>	<u> </u>	
Remarks:						
					•	
1						

VEGETATION - Use scientific na	mes of plants				Sampling Point:	128
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshe	et:	
1.				Number of Dominant Specie That Are OBL, FACW, or Fa		(A)
3.				Total Number of Dominant	•	<b>(D)</b>
4.				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Specie	es 100.00	(A/B)
6.				That Are OBL, FACW, or FA	AC: 100.00	(٨७)
7.				Prevalance Index worksho	eet:	
Sapling Stratum (Plot size:	)	= Total Cove	r	Total % Cover of: OBL species	Multiply by: x1=	
1.				FACW species	x2=	_
2.			••••	FAC species	x3=	_
3.				FACU species	x4=	
4.				UPL species	x5=	
5.	-			Column Totals:	(A)	- (В)
6.						
7.				Prevalance Index = B//		
	0	= Total Cove	r	Hydrophytic Vegetation In		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 5		
1.				Prevalence Index is		
2.				Problematic Hydroph	nytic Vegetation¹ (Exp	olain)
3.	<u> </u>					
4.				Indicators of hydric soil and		nust
5. 6				be present, unless disturbed		
7.				Definitions of Vegetation	Strata:	
1.		= Total Cove	<u> </u>	Tran Mandu alanta avaludin	aaadiaaa	
Herb Stratum (Plot size:)	U	- Total Cove	1	Tree- Woody plants, excluding approximately 20 ft (6m) or m		<b>(7.6</b>
Juncus effusus	40	ves	FACW	cm) or larger in diameter at b	-	(7.0
Ludwigia peruviana	15	yes	OBL	Sapling- Woody plants, exclu		
Hydrocotyle spp.	10	no	OBL	approximately 20 ft (6m) or m		than 3
Ludwigia octovalvis	10	no	OBL	in. (7.6 cm) DBH.		
5. Panicum repens	10	no	FACW	Shrub- Woody plants, exclud	ing woody vines,	
6. Pontederia cordata	5	no	OBL	approximately 3 to 20 ft (1 to	6 m) in height.	
7. Thalia spp.	5	no	OBL	Herb- All herbaceous (non-w	oody)plants, including	
8. Eupatorium capillifolium	2	no	FACU	herbaceous vines, regardless		dy
9. Setaria spp.	2	no	FAC	plants, except woody vines, le	ess than approximately	/ 3 ft (1
10. Setaria spp.	2	no	FAC	m) in height.		
11. Panicum hemitomon	2	no	OBL	Woody vine- All woody vines	, regardless of height.	
12. Alternanthera philoxeroides	2	no	OBL			
, Woody Vine Stratum (Plot size:	105 )	= Total Cove	r			
1.						
2.						
3.						
2. 3. 4. 5.				Hydrophytic		
5.				Vegetation Present?	YesNo	<del></del>
	0	= Total Cove	r	ĺ		

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

SOIL Sampling Point: 128 Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features Color (moist) 10 YR 2/1 Color (moist) Loc2 (inches) Texture Remarks black fine sand 0-6 10 YR 3/2 very dark grayish brown fine sand 6-12 12-29 10 YR 6/2 light brownish gray fine sand 29-36 10 YR 2/1 black fine sand Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: \_1 cm Muck (a9) (LRR O) \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Thin Dark Surface (S9) (LRR S, T, U) \_Histic Epidon (A2) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) \_Hydrogen Sulfide (A4) \_Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Stratified Layers (A5) \_Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Depleted Dark Surface (F7) Red Parent Material (TF2) 5 cm Mucky Mineral (A7) (LRR P,T,U) \_Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) \_Redox Depressions (F8) \_Marl (F10) (LRR U) Other (Explain in Remarks) \_1 cm Muck (A9) (LRR P,T) Depleted Orchric (F11) (MLRA 151) Depleted Relow Dark Surface (A11)

Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)	Iron-Manganese Masses (F12) (LRR O, P,T) Umbric Surface (F13) (LRR P, T, U) Delta Orchric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed):		
Type:		
Depth (inches):	Hydric Soil	Present? Yes No

County/soil: Hillsborough- St. Johns

Project/Site: Levy Nuclear Plant - Transmission L	ines		City/County: Hillsborough Sampling Date: 10/21/0			10/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 129			129	
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski		Section, Township, Range: 6 28S 22E			
Landform (hillslope, terrace, etc.): N/A			Local relief (concave, con	vex, none): none	Sic	ppe (%):
Subregion (LRR or MLRA): LRR U		Lat: 28.080461	Long:82.1	153158	Da	tum: <u>WGS84</u>
Soil Map Unit Name: St. John's fine sand				_NWI classification:		ergent wetland
Are climatic / hydrologic conditions on the site typ	ical for this tim	e of year?	Yes <u></u> ✓	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology_		significantly disturbed?	Are circumstances	normal? Ye	s No 🗸
Are Vegetation, Soil,	or Hydrology_		naturally problematic?	(If needed, explain	any answers in R	emarks)
SUMMARY OF FINDINGS - Attach sit	te map sho	wing samplii	ng point locations, t	ransects, impo	rtant features	, etc.
Hydrophytic Vegetation Present?	Yes/	. No		•		
Hydric Soil Present?	Yes✓	. No	Is the Sampled Area v	vithin a Wetland?	Yes <u>✓</u> No	
Wetland Hydrology Present?	Yes✓	. No				
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indicate	ors (minimum of tw	vo required)
Primary Indicators (minimum of one is required; of	heck all that ag	opły)		Surface Soil	Cracks (B6)	_
✓ Surface Water (A1)	Water-S	Stained Leaves (E	39)	Sparsely Veg	getated Concave S	Surface (B8)
High Water Table (A2)	Aquatic	Fauna (B13)		Drainage Pat	tterns (B10)	
✓ Saturation (A3)	Marl De	posits (B15) (LR	R U)	Moss Trim Li	nes (B16)	
Water Marks (B1)		en Sulfide Odor (	•		Water Table (C2)	
Sediment Deposits (B2)	Oxidize	d Rhizospheres o	on Living Roots (C3)	Crayfish Burn	rows (C8)	
Drift Deposits (B3)	Present	ce of Reduced Iro	on (C4)	Saturation Vi	sible on Aerial Ima	agery (C9)
Algal Mat or Crust (B4)	Recent	Iron Reduction in	Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Mu	ick Surface (C7)		Shallow Aqui	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (E	Explain in Remark	ks)	FAC Neutral	Test (D5)	
Field Observations:		-	•	-		
Surface Water Present?	Yes	No	Depth (inches): 0-24	_		
Water Table Present?			Depth (inches): 0	İ		
Saturation Present?			Depth (inches): 0-12	Wetland		
(includes capillary fringe)				Hydrology Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial	photos, previous	inspections), if available:	1.1000		
Pomorko:						
Remarks:						
						1

VEGETATION - Use scientific na	mes of plants			Sa	impling Point:	129
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshee	t:	
1.	•			Number of Dominant Species	3	(4)
2.				That Are OBL, FACW, or FA	C: <u>3</u>	(A)
3.				Total Number of Dominant	2	(D)
4.				Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species	3 100.00	(A (D)
6.	-			That Are OBL, FACW, or FA	11,00,000	(A/B)
7.				Prevalance Index workshee	et:	
Sapling Stratum (Plot size:	)	= Total Cov	er	<u>Total % Cover of:</u> OBL species	Multiply by: x1=	
Acer rubrum	2	yes	OBL	FACW species	x2=	_
2.				FAC species	x3=	_
3.			<del></del>	FACU species	x4=	<del></del>
4.				UPL species	x5=	_
5.				Column Totals:	(A)	— (B)
6.						_ (-/
7.				Prevalance Index = B/A	=	
	2	= Total Cov	er	Hydrophytic Vegetation Ind	licators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50		
1. Baccharis sp.	2	yes	FAC	Prevalence Index is ≤	3.0 <sup>1</sup>	
2.				Problematic Hydrophy	tic Vegetation <sup>1</sup> (Ex	plain)
3.						
4.				Indicators of hydric soil and	wetland hydrology i	must
5.				be present, unless disturbed	or problematic.	
6.				Definitions of Vegetation S	trata:	
7.						
Herb Stratum (Plot size:)	2	= Total Cov	er	Tree- Woody plants, excluding approximately 20 ft (6m) or mo	•	. (7.6
1. Typha spp.	60	yes	OBL	cm) or larger in diameter at bre	east height (DBH).	
2. Juncus effusus	15	no	FACW	Sapling- Woody plants, exclud	ling woody vines,	
<ol><li>Ludwigia peruviana</li></ol>	15	no	OBL	approximately 20 ft (6m) or mo	re in height and less	than 3
Eupatorium capillifolium	2	no	FACU	in. (7.6 cm) DBH.		
<ol><li>Commelina spp.</li></ol>	2	no	FACW	Shrub- Woody plants, excludir		
Polygonum punctatum	2	no	FACW	approximately 3 to 20 ft (1 to 6	m) in height.	
7. Panicum hemitomon	2	no	OBL	Herb- All herbaceous (non-woo	ody)plants, including	
8. Alternanthera philoxeroides	2	no	OBL	herbaceous vines, regardless		
<ol><li>Hydrocotyle spp.</li></ol>	2	no	OBL	plants, except woody vines, les	ss than approximatel	y 3 ft (1
10. Andropogon glomeratus	2	no	FACW	m) in height.		
11. Phyllanthus urinaria	2	no	FAC	Woody vine- All woody vines,	regardless of height	•
12. Cyperus surinamensis	2	no	FACW	]		
Woody Vine Stratum (Plot size:_	108	= Total Cov	er			
1.				]		
2.						
3.						
4.				Hydrophytic		
5.					es <u>√</u> No_	<del></del>
		= Total Cov	er	1		

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

Countylooile	Hillsborough-	C+	lahas

SOIL								Sampling Point:12
Profile De	scription: (Describe t	to the dep	th needed to doc	ument th	e indicator or	confirm the ab	sence of indicators	s.)
Depth	Matrix	•		Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0-6	10 YR 2/1							black fine sand
6-12	10 YR 3/2						-	very dark grayish brown fine sand
12-29	10 YR 6/2							light brownish gray fine sand
29-36	10 YR 2/1							black fine sand
Type: C=	Concentration, D=Depl	etion, RM=	Reduced Matrix, (	CS=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
Hydric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol				Potv	alue Below Su	rface (S8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)
	Epidon (A2)					S9) (LRR S, T, L		2 cm Muck (A10) (LRR S)
	Histic (A3)				•	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				y Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	', T, U)		Redo	x Dark Surface	e (F6)		(MLRA 153B)
5 cm	Mucky Mineral (A7) (LF	RR P.T.U)		Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR I				x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
	, ,,	-,			•	. ,		
1 cm	Muck (A9) (LRR P,T)			man	(F10) (LRR U)			Other (Explain in Remarks)
Deple	ted Below Dark Surfac	e (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
	Dark Surface (A12)	- (,		Iron-I	Manganese Ma	sses (F12) (LRF	O.PT)	2
	. ,				-			<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (!	VILRA 150	A)	Umbi	ic Surface (Fi	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (L	RR O. S)		Delta	Orchric (F17)	(MLRA 151)		problematic.
	Gleyed Matrix (S4)	-,-,		Redu	ced Vertic (F1)	B) (MLRA 150A,	150B)	
	Redox (S5)					Soils (F19) (ML		
	ed Matrix (S6)				•	. , ,	) (MLRA 149A, 153	C 153D)
	, ,				iaious bright L	Dailiy Solis (1.20	/ (WILITA 143A, 133	oc, 133D)
	Surface (S7) (LRR P, S							
Restrictiv	e Layer (if observed):							
	Type:							
	Depth (inches):						Hydric Soil Prese	ent? Yes ✓ No .
Remarks:	- 1 \							
								,
	•							

Soil Map Unit Name: Paisley fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation, Soil, or Hydrology significantly disturbed? Are circumstances normal? Yes No  Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No  Is the Sampled Area within a Wetland? Yes No  Wetland Hydrology Present?	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 1			: 10/22/09
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none   Slope (%): Subregion (LRR or MLRA): LRR U Lat: 28.079930 Long: -82.160266 Datum: WGSB/Soli Map Unit Name: Paistey fine sand   NWI classification: NL   NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: NI NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Ni NWI classification: Niterative Ni	Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 130			t: <u>130</u>
Subregion (LRR or MLRA): LRR U Lat: 28.079930 Long: -82.160266 Datum: WGS84 Soil Map Unit Name: Paisley fine sand Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Fare Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks) Are Vegetation Present?  Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present?  Yes No Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  Surface Water (A1) Aquatic Fauna (B13) Drainage Patterns (B10)  V Saturation (A3) Mard Deposits (B15) (LRR U) Drainage Patterns (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation (Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent for Reduction in Titled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches) Depth (inches)  Water Table Present?  Yes No Depth (inches) Depth (inches)  Water Table Present?	Investigator(s): Mike Arrants, Lianne Ramo	s-Mofienski	_Section, Township, Range: 1 28S 21E			
Soil Map Unit Name: Paisley fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Frimary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  High Water Table (A2)	Landform (hillslope, terrace, etc.): N/A	<b>1</b>	Local relief (concave, convex, none): none Slope (%):			Slope (%):
Are VegetationSoil or Hydrologysignificantly disturbed? Are circumstances normal? Yes No	Subregion (LRR or MLRA): LRR U	Lat: 28.079930	)Long: <u>-82.1</u>	160266		Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrology location Present? Yes No Is the Sampled Area within a Wetland? Yes No I	Soil Map Unit Name: Paisley fine sand			_NWI classification	: <u>NL</u>	
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Its the Sampled Area within a Wetland? Yes No Its	Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes _ ✓	_ No	_ (If no, explain i	n Remarks)
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Its the Sampled Area within a Wetland? Yes No Its	Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance:	s normal?	/es <u>No √</u>
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Yes				(If needed, explain	n any answers in	Remarks)
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Water (A1)  Surface Water (A1)  Water-Stained Leaves (B9)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology				ransects, impo	ortant feature	es, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drill Deposits (B2)  Drill Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Hydrophytic Vegetation Present?		]			
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Vater Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron D	Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes/I	No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water (A1)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Hydrology  Wetland  Hydrology	Wetland Hydrology Present?	Yes No	]			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)	Remarks:		•			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)	HYDROLOGY					
Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)				Secondary Indicat	lors (minimum of	two required)
Surface Water (A1)		check all that apply)				
High Water Table (A2) Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Mater Marks (B1)  Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Algal Mater Marks (B5)  Iron Deposits (B5) Algal Mater Crust (B4) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B5) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B10) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B4) Algal Mater Crust (B10) Algal Mater Crust (B10) Algal Mater Crust (B10) Algal Mater Crust (B10) Algal Mater Crust (B10) Algal Mater Crust (B10) Algal Mater Crust (B10) Algal Mater Crust (B10) Algal Mater Table (C2) Algal			'B9)			e Surface (B8)
✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes       No       Depth (inches):       Wetland         Water Table Present?       Yes       No       Depth (inches):       User Metland         Saturation Present?       Yes       No       Depth (inches):       User Depth (inches):	<del></del>		,,		-	
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	<del></del> -	,	2R III			
Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Water Table Present?  Saturation Visible on Aerial Imagery (C9)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology	<del></del>		•		• •	2)
Drift Deposits (B3)	<del></del>		· · · · · · · · · · · · · · · · · · ·			-/
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Thin Muck Surface (C7)Shallow Aquitard (D3)Thin Muck Surface (C7)Shallow Aquitard (D3)	<del></del>					magery (C9)
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNo✓ Depth (inches): Water Table Present? YesNo Depth (inches):  Saturation Present? Yes✓ No Depth (inches): Hydrology	· · · · · ·		, ,			magery (55)
✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)   Field Observations: Surface Water Present? YesNo✓Depth (inches):	<del></del> •	· <del></del>	• •			
Field Observations:           Surface Water Present?         Yes No Depth (inches):					, ,	
Surface Water Present?         Yes No						<u> </u>
Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes ✓ No Depth (inches):  Hydrology		Yes No <u>✓</u>	_ Depth (inches):			
Saturation Present? Yes No Depth (inches):0-12 Hydrology				-		
				1		
(modele capital) imige)			_	1	Yes ✓ I	No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		ing well, aerial photos, previous	inspections) if available:	i roomer	100	
	Remarks:	· · · · · · · · · · · · · · · · · · ·		·		
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Remarks:						

VEGETATION - Use scientific na	mes of plants			Sampling Poin	nt:130
Trop Stratum (Blat size)	Absolute %	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status	Number of Deminent Species	
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u> (A)
2.					
3.				Total Number of Dominant	<u>4</u> (B)
4.				Species Across All Strata:	
5.				Percent of Dominant Species 7	75.00 (A/B)
6.				That Are OBL, FACW, or FAC:	
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	)	= Total Cove	er	Total % Cover of: Multi OBL species x1=	ply by:
1.				FACW species x2=	
2.				FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	
5.	-			Column Totals: (A)	(B)
6.	• ———			· ′	` ′
7.	· <del></del>			Prevalance Index = B/A =	
		= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)		•	✓ Dominance Test is 50%	
Sambucus canadensis	2	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.	·		TAOW	Problematic Hydrophytic Vegetation	on <sup>1</sup> (Evolain)
3.				Troblematic Hydrophytic Vegetatic	ii (Explaiii)
4.					
5.				Indicators of hydric soil and wetland hyd	
6.	·			be present, unless disturbed or problema  Definitions of Vegetation Strata:	liC.
7.				Definitions of Vegetation Strata.	
1.		- T-4-1 C			
Herb Stratum (Plot size:)	2	= Total Cove		Tree- Woody plants, excluding woody vines approximately 20 ft (6m) or more in height a	and 3 in. (7.6
Alternanthera philoxeroides	40	yes	OBL	cm) or larger in diameter at breast height (D	ън).
Ludwigia peruviana	15	yes	OBL	Sapling- Woody plants, excluding woody vi	
<ol><li>Commelina spp.</li></ol>	5	no	FACW	approximately 20 ft (6m) or more in height a	ind less than 3
Eupatorium capillifolium	2	no	FACU	in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vine	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, in	cluding
8.				herbaceous vines, regardless of size. Inclu-	des woody
9.				plants, except woody vines, less than appro	ximately 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of	f height.
12.		<u></u>			
	62	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
Ipomoea sp.	40	yes	FACU		
2.				1	
3.	· ——				
4.				  Hydrophytic	
5.		<del></del>		Vegetation Present? Yes✓	No .
-	40	= Total Cove	r	Togotation Heachtt 100	
Remarks: (If observed, list morph			,	I	
Percent cover estimates based or			roader cor	mmunity	

SOIL	l: Hillsborough- Paisle				<del></del>		Sampling Point:1
		to the de	pth needed to doc			sence of indicators.)	,
Depth (inches)	Matrix Color (moist)		Color (moist)	Redox Features % Type		Texture	Remarks
0-2	10 YR 3/1	70	Color (ITIOISI)	- % 13pc		rexture	very dark gray fine sand
2-4	10 YR 5/2		<del></del>				grayish brown fine sand
	10 111 012	•		<del></del>		few fine distinct	grayion provincial control
4-24	10 YR 5/1		10 YR 5/4			mottles	gray sandy clay
<u> </u>	10 /// 0//	- —	10			common medium	gray ou,,
24-52	10 YR 6/1		10 YR 5/6			distinct mottles	light gray sandy day
	10						
		- —					
	Concentration, D=Dep	letion, RM	=Reduced Matrix, (	CS=Covered or Cor	ated Sand Grains.	<sup>2</sup> Location: PL=Pore	
	il Indicators:			Difference Deb	2		Indicators for Problematic Hydric Soils 3:
Histol	· /				ow Surface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)				face (S9) (LRR S, T, U	-	2 cm Muck (A10) (LRR S)
_	Histic (A3)			_ , ,	Mineral (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)			Loamy Gleyed			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)			Depleted Matri			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR F	P, T, U)		Redox Dark Su	urface (F6)		(MLRA 153B)
5 cm f	Mucky Mineral (A7) (L	RR P,T,U	Λ	Depleted Dark	. Surface (F7)	,	Red Parent Material (TF2)
	Presence (A8) (LRR		,	Redox Depress			Very Shallow Dark Surface (TF12) (LRR T, U)
		Ο,		Marl (F10) (LR	, ,	-	Other (Explain in Remarks)
	Muck (A9) (LRR P,T)				•	-	Other (Explain in Remains)
Deplet	ted Below Dark Surfac	æ (А11)			nric (F11) (MLRA 151)	•	
Thick	Dark Surface (A12)			Iron-Manganer	se Masses (F12) (LRI	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
	Prairie Redox (A16) (	MI RA 15	inΔ)	Umbric Surfac	ce (F13) (LRR P, T, U)		hydrology must be present, unless disturbed or
		-	•				problematic.
	Mucky Mineral (S1) (	LRR O, S	)		(F17) (MLRA 151)	·	problematic.
	Gleyed Matrix (S4)				ic (F18) (MLRA 150A,		
	Redox (S5)				odplain Soils (F19) (MI	•	
Strippe	ed Matrix (S6)			Anomalous Bri	ight Loamy Soils (F20	O) (MLRA 149A, 153C,	, 153D)
Dark S	Surface (S7) (LRR P,	S. T, U)					
	e Layer (If observed)					T	
	Type:					ļ	
1	Depth (inches):					Hydric Soil Present	nt? Yes <u></u> ✓ No
Remarks:	,					11:7-:::-	<u></u>
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date	10/22/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: 131			t: <u>131</u>
Investigator(s): Mike Arrants, Lianne Ramos	s-Mofienski	Section, Township, Range: 1 28S 21E			
Landform (hillslope, terrace, etc.): N/A	·	Local relief (concave, conv	vex, none): none	8	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.079665	Long: <u>-82.1</u>	63664		Datum: WGS84
Soil Map Unit Name: Seffner fine sand			_NWI classification:	NL	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain is	n Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	/esNo ✓
	or Hydrology		(If needed, explain	any answers in	Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant feature	es, etc.
Hydrophytic Vegetation Present?	Yes No				•
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland?	Yes/	No
Wetland Hydrology Present?	Yes No				
Remarks:					
		\			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of	two required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil (		two rodanou <sub>j</sub>
✓ Surface Water (A1)	Water-Stained Leaves (	B9)		etated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	,	Drainage Pat		,
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir		
Water Marks (B1)	Hydrogen Sulfide Odor (			Vater Table (C2	יו
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burn		•
Drift Deposits (B3)	Presence of Reduced Ire	-		sible on Aerial Ir	magery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic I		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral		
Field Observations:			<u>T</u>		
Surface Water Present?	Yes✓ No	Depth (inches): 0-10	]		
Water Table Present?	Yes No		j		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)		•	Hydrology Present?	Yes _ <n< td=""><td>ło</td></n<>	ło
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			
Remarks:					
·					
	•				
İ					

VEGETATION - Use scientific na	mes of plants				Sampling Po	oint:	131
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Works	heet:		
2.				Number of Dominant Spe That Are OBL, FACW, or		<u>2</u>	(A)
3.				Total Number of Domina			
4.				Species Across All Strata		<u>2</u>	(B)
5.			_	Percent of Dominant Spe			
6.				That Are OBL, FACW, or		<u>100.00</u>	(A/B)
7.	•			Prevalance Index work			
	0	= Total Cove	er	Total % Cover of:	<u>Mu</u>	ultiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=		_
1.				FACW species	x2=		_
2.				FAC species	x3=		
3.				FACU species	×4=		_
4.				UPL species	x5=		<b>-</b> , <b>_</b> ,
5.				Column Totals:	(A)		_(B)
6. 7.				Danielan er la danie.	D/A		
1.		= Total Cove		Prevalance Index = Hydrophytic Vegetation			
Shrub Stratum (Plot size:	)	- Total Cove	;1	✓ Dominance Test i			
1.	<del></del> /			Prevalence Index			
2.				Problematic Hydro		ation <sup>1</sup> (Exr	nlain)
3.				1 Toblematic Tryan	oprijno vegen	1001 (LA)	Jiairi,
4.				<sup>1</sup> Indicators of hydric soil	and wetland h	vdrology n	nust
5.				be present, unless distur			···uot
6.			-	Definitions of Vegetation			
7.							
	0	= Total Cove	er	Tree- Woody plants, exclu	ıding woody vir	nes,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) o	•		(7.6
Ludwigia leptocarpa	35	yes	OBL	cm) or larger in diameter a	at breast height	(DBH).	
Ludwigia octovalvis	35	yes	OBL	Sapling- Woody plants, e.			
Commelina spp.	15	no	FACW	approximately 20 ft (6m) o	r more in heigh	nt and less	than 3
Cyperus surinamensis		no	FACW	in. (7.6 cm) DBH.			
5. Typha spp.	- <u>5</u>	no	OBL	Shrub- Woody plants, exc approximately 3 to 20 ft (1			
<ul><li>6. Richardia spp.</li><li>7.</li></ul>		no	NL	1 ''	, -		
8.				Herb- All herbaceous (nor herbaceous vines, regardl	•		odv
9.	• ———			plants, except woody vines			
10.				m) in height.	-,	•	, (.
11.				Woody vine- All woody vi	nes, regardless	of height.	
12.						ŭ	
	102	= Total Cove	r				
Woody Vine Stratum (Plot size:_	)			1			
1.							
2.							
3.						-	
4.				Hydrophytic			
5.				Vegetation Present?	Yes <u></u> ✓	No	<u>.</u>
	0	= Total Cove	r	1			

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/so	il; Hillsborough- Seffne	er						Sampling Point: 131	
	escription: (Describe	to the de	pth needed to doc	ument tl	he indicator of	or confirm the at	sence of indicators	)	
Depth	Matrix				k Features				
(inches)	Color (moist)	%_	Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	Remarks	
0-9	10 YR 3/1							very dark gray fine sand	
9-13	10 YR 3/1		10 YR 4/2				few medium distinct mottles	very dark gray fine sand	
13-21	10 YR 4/1		10 YR 5/3; 10 YR 3/1				commom medium distinct mottles	dark gray fine sand	
13-21	10 11 4/1	- —	113/1				common medium	dark gray line sand	
			5 YR 5/8; 10 YR				and distinct		
21-35	10 YR 7/3		8/2				mottles	very pale brown fine sand	
				_					
								**************************************	
	Concentration, D=Dep	letion, RN	M=Reduced Matrix, (	CS=Cove	ered or Coated	d Sand Grains.	*Location: PL=Po	re Lining, M=Matrix.	
	oil Indicators:			Dob	sudua Dalauu G	Surface (S8) (LRF	3 C T III	Indicators for Problematic Hydric Soils 3: 1 cm Muck (a9) (LRR O)	
Histo	: Epidon (A2)			_ ′		e (S9) (LRR S, T,		2 cm Muck (A10) (LRR S)	
_							•	Reduced Vertic (F18) (outside MLRA 150A, B)	
Black Histic (A3)Loamy Mucky Mineral (F1) (LRR Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)					,	Piedmont Floodplain Soils (F19) (LRR P, S, T)			
	fied Layers (A5)				leted Matrix (F			Anomalous Bright Loamy Soils (F20)	
	nic Bodies (A6) (LRR	P, T, U)			ox Dark Surfa			(MLRA 153B)	
5 cm Mucky Mineral (A7) (LRR P,T,U)Depleted Dark Surface (F7)				ırface (F7)		Red Parent Material (TF2)			
	Presence (A8) (LRR		-,	Redox Depressions (F8)				Very Shallow Dark Surface (TF12) (LRR T, U)	
	Muck (A9) (LRR P.T)	-,		Marl (F10) (LRR U)				Other (Explain in Remarks)	
_	. ,					-, (F11) (MLRA 151			
	eted Below Dark Surfa	ce (A11)					•		
	Dark Surface (A12)			_	-	Masses (F12) (LR		<sup>3</sup> Indicators of hydrophytic vegetation and wetland	
Coas	t Prairie Redox (A16)	(MLRA 1	50A)	Umi	onc Surface (F	F13) (LRR P, T, U	J)	hydrology must be present, unless disturbed or	
Sand	y Mucky Mineral (S1) (	LRR O, S	5)	Delt	a Orchric (F17	7) (MLRA 151)		problematic.	
Sand	y Gleyed Matrix (S4)				•	18) (MLRA 150A			
	y Redox (S5)			_		ain Soils (F19) (M	•		
Stripp	ed Matrix (S6)			Ano	malous Bright	Loamy Soils (F20	0) (MLRA 149A, 1530	C, 153D)	
	Surface (S7) (LRR P,								
Restrictiv	e Layer (If observed	):							
	Type:		<del></del>					nt? Ves √ No	
	Depth (inches):						Hydric Soil Prese	nt? Yes <u>✓</u> No	
Remarks:									
1									

Are Vegetation, Soil, or Hydrology,  SUMMARY OF FINDINGS - Attach site map sho  Hydrophytic Vegetation Present? Yes/	Section, Township, Range: 1 28S 21E  Local relief (concave, convex, none):  Lat: 28.079140  Long: -82.166395  NWI class e of year?  Yes ✓ No  significantly disturbed?  Are circum	none Slope (%):
Landform (hillslope, terrace, etc.): N/A  Subregion (LRR or MLRA): LRR U  Soil Map Unit Name: Basinger fine sand  Are climatic / hydrologic conditions on the site typical for this tim  Are Vegetation Soil or Hydrology.  Are Vegetation Soil or Hydrology.  SUMMARY OF FINDINGS - Attach site map sho  Hydrophytic Vegetation Present?	Local relief (concave, convex, none): _  Lat: 28.079140	none Slope (%):
Subregion (LRR or MLRA): LRR U  Soil Map Unit Name: Basinger fine sand  Are climatic / hydrologic conditions on the site typical for this time. Are Vegetation Soil or Hydrology. Are Vegetation Soil or Hydrology.  SUMMARY OF FINDINGS - Attach site map shool Hydrophytic Vegetation Present?  Yes ✓	Lat:         28.079140         Long:        82.166395           NWI class           e of year?         Yes         ✓         No          significantly disturbed?         Are circum	Datum: WGS84  ification: Freshwater emergent wetland  (If no, explain in Remarks)
Soil Map Unit Name: <u>Basinger fine sand</u> Are climatic / hydrologic conditions on the site typical for this time. Are Vegetation, Soil, or Hydrology. Are Vegetation, Soil, or Hydrology. SUMMARY OF FINDINGS - Attach site map show Hydrophytic Vegetation Present?  Yes	NWI class e of year? Yes✓ Nosignificantly disturbed? Are circum	ification: Freshwater emergent wetland (If no, explain in Remarks)
Are climatic / hydrologic conditions on the site typical for this time.  Are Vegetation, Soil, or Hydrology.  Are Vegetation, Soil, or Hydrology.  SUMMARY OF FINDINGS - Attach site map sho  Hydrophytic Vegetation Present?  Yes	e of year? YesNosignificantly disturbed? Are circum	(If no, explain in Remarks)
Are Vegetation, Soil, or Hydrology, Are Vegetation, Soil, or Hydrology, SUMMARY OF FINDINGS - Attach site map sho Hydrophytic Vegetation Present?  Yes	significantly disturbed? Are circum	
Are Vegetation, Soil, or Hydrology,  SUMMARY OF FINDINGS - Attach site map sho  Hydrophytic Vegetation Present? Yes/	significantly disturbed? Are circum	
Are Vegetation, Soil, or Hydrology,  SUMMARY OF FINDINGS - Attach site map sho  Hydrophytic Vegetation Present? Yes/		nstances normal? YesNo ✓
SUMMARY OF FINDINGS - Attach site map sho Hydrophytic Vegetation Present?  Yes  Yes	naturally problematic? (if needed,	, explain any answers in Remarks)
Hydrophytic Vegetation Present? Yes		, important features, etc.
	No	
Hydric Soil Present? Yes✓	No Is the Sampled Area within a Wet	land? YesNo
Wetland Hydrology Present? Yes ✓	No	
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:	Sacandan	Indicators (minimum of two required)
· · · · · · · · · · · · · · · · · · ·		y Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a		ace Soil Cracks (B6)
		rsely Vegetated Concave Surface (B8)
	<del></del>	nage Patterns (B10)
	· · · · · · · · · · · · · · · · · · ·	s Trim Lines (B16)
· · ·		Season Water Table (C2)
<del></del>	· · · · · · · · · · · · · · · · · · ·	fish Burrows (C8)
Drift Deposits (B3)Presen	ce of Reduced Iron (C4)Satu	ration Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)Recent	fron Reduction in Tilled Soils (C6)Geor	morphic Position (D2)
Iron Deposits (B5)Thin Mo	ck Surface (C7)Shall	low Aquitard (D3)
✓ Inundation Visible on Aerial Imagery (B7)Other (	Explain in Remarks)FAC	Neutral Test (D5)
Field Observations:		
	No Depth (inches): 0-12	
Water Table Present? Yes✓	No Depth (inches):0	
Saturation Present? Yes <u>✓</u>	No Depth (inches): 0-12 Wetland Hydrology	v
(includes capillary fringe)	Present?	Yes <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:	
Remarks:		
incinaixs.		

1	32

<b>VEGETATION</b> - Use scientific nan	nes of plants				Sampling Point:	132
T. Observer (District)	Absolute %	Dominant	Indicator	Dominance Test Worksh	neet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		•	
1.				Number of Dominant Spec		(A)
2.			. <del></del>	That Are OBL, FACW, or	FAC.	`
3.				Total Number of Dominan	- 3	(B)
4.	<u> </u>			Species Across All Strata:	:	()
5.				Percent of Dominant Spec	cies 100.00	(A/B)
6.				That Are OBL, FACW, or	FAC: 100.00	(/////
7.			•	Prevalance Index works	heet:	
	0	= Total Cov	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1. Salix spp.	10	yes	FACW	FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	— <sub>(В)</sub>
6.	,		-	- Column Totals.	(^)	_('')
				- December 1 aday - E	3/4 _	
7.		- Tatal Cau		Prevalance Index = E		
S:	, 10	= Total Cov	er	Hydrophytic Vegetation		I
Shrub Stratum (Plot size:	<u>-)                                    </u>			✓ Dominance Test is		
Baccharis sp.	10	yes	FAC	Prevalence Index is		
Myrica cerifera	2	no	FAC	Problematic Hydro	phytic Vegetation <sup>1</sup> (Exp	plain)
3.						
4.			·	Indicators of hydric soil a		nust
5.			· <del></del> -	be present, unless disturb	ed or problematic.	
6.			. —	Definitions of Vegetation		
7.				1		
	12	= Total Cov	er	Tree- Woody plants, exclud	lina woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or		. (7.6
Ludwigia peruviana	50	yes	OBL	cm) or larger in diameter at		•
Eupatorium capillifolium	10	no	FACU	Sapling- Woody plants, exc	cluding woody vines,	
3. Salvinia minima	3	y no	OBL	approximately 20 ft (6m) or		than 3
4. Lemna spp.	3	no	OBL	in. (7.6 cm) DBH.		
5. Azola spp.	3	no	OBL	Shrub- Woody plants, exclu	uding woody vines,	
6. Carex spp.	2	no	FACW	approximately 3 to 20 ft (1 t		
7. Cyperus surinamensis	2	no	FACW	Herb- All herbaceous (non-		
8. Hydrocotyle spp.	2	no	OBL	herbaceous vines, regardle		
9. Commelina spp.		no	FACW	plants, except woody vines,		
10. Andropogon spp.	2	no	FAC	m) in height.	, loca man approx	, ,
11. Panicum hemitomon	2	no	OBL	Woody vine- All woody vine	es renardless of height	
				Twoody ville- All woody ville	es, regardiess of neight.	
12.		T-4-1 C-11	. ——	4		
Woody Vine Stratum (Plot size:	. 81	= Total Cov	er			
· <del>- '</del>						
1. 2.				4		
2.		<del></del>		<del> </del>		
3.			- ——	4		
4.				Hydrophytic		
5.				Vegetation Present?	YesNo	
	0_	= Total Cov				
Remarks: (If observed, list morpho						
Percent cover estimates based on	າ meandering s	survey of the I	broader cor	mmunity.		

	noi (moist) % Type	Loc Texture	Remarks
0-7 10 YR 2/1			black fine sand
7-28 10 YR 6/1			gray fine sand
10 YR 5/3; 10 YR			
28-42 5/2			brown and grayish brown fine sand
42-80 10 YR 6/2			light brownish gray fine sand
L			
Type: C=Concentration, D=Depletion, RM=Red	uced Matrix, CS=Covered or Coated S	and Grains. Location: PL=Po	ore Lining, M=Matrix.
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)		face (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (\$		2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Miner		Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matri		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface	(F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surfa	ce (F7)	Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions	(F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F	11) (MLRA 151)	
Thick Dark Surface (A12)	Iron-Manganese Ma	sses (F12) (LRR O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13	3) (LRR P, T, U)	hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17)	(MLRA 151)	problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18	3) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain	Soils (F19) (MLRA 149A)	
Stripped Matrix (S6)	Anomalous Bright Lo	pamy Soils (F20) (MLRA 149A, 153	C, 153D)
Dark Surface (S7) (LRR P, S, T, U)			
Restrictive Layer (If observed):			
Type:			
Depth (inches):	<u> </u>	Hydric Soil Prese	ent? Yes <u>√</u> No
Remarks:			
1			
}			
		,	
		·	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Pinellas		Sampling Date: 9/21/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:F	L	Sampling Point: A	
Investigator(s): Justin Styer, Blake Meineck	(e	_ Section, Township, Rang	e: 12 28S 16E		
Landform (hillslope, terrace, etc.): N/A	Α	Local relief (concave, cor	nvex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U		04 Long: <u>-82.</u>	654475	<u> </u>	Datum: WGS84
Soil Map Unit Name: Wabasso soils			NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u></u> ✓	No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	Yes/No
	or Hydrology		(If needed, explain	any answers in Remarks)	
SUMMARY OF FINDINGS - Attach sit	e map showing samp	ling point locations, t	ransects, impor	tant features, etc.	
Hydrophytic Vegetation Present?	Yes ✓ No				
Hydric Soil Present?	Yes No	Is the Sampled Area	within a Wetland?	Yes	No
Wetland Hydrology Present?	Yes No				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required	D
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	s (B9)	Sparsely Veg	getated Concave Surface (B8	3)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	ttems (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (	LRR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizosphere	es on Living Roots (C3)	Crayfish Buri	rows (C8)	
Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Saturation Vi	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C	7)	Shallow Aqui	tard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	narks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		4		
Water Table Present?	Yes No		_   		
Saturation Present?	Yes No	Depth (inches): 0			
i e	110		- Hydrology		
			–   Hydrology		

VEGETATION - Use scientific nam	es of plants			Sampling Point:	A
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1				Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
				· ' '	
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	· , ,
7.				Prevalance Index worksheet:	
	0	= Total Cove	er	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.				FACW species x2=	_
2.				FAC species x3=	_
3.				FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	— <sub>(B)</sub>
6,	<del></del>			(A)	— (D)
7.				Described as Index: - D/A	
<u> </u>				Prevalance Index = B/A =	
	Ü	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	.)			✓ Dominance Test is 50%	
Cephalanthus occidentalis	5	yes	OBL	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.					
4.				Indicators of hydric soil and wetland hydrology r	must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				1	
Herb Stratum (Plot size: )	5	= Total Cove	er	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in	<i>(</i> 7.6
Eleocharis cellulosa	30		OBL	cm) or larger in diameter at breast height (DBH).	. (7.0
		yes			
Amphicarpum muhlenbergianu		yes	FACW	Sapting- Woody plants, excluding woody vines,	0
3. Panicum repens	15	no	FACW	approximately 20 ft (6m) or more in height and less in. (7.6 cm) DBH.	s than 3
4. Sesbania spp.	5	no	FAC	` '	
Rhynchospora colorata	5	no	OBL	Shrub- Woody plants, excluding woody vines,	
6. Cyperus odoratus	5	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Ludwigia repens	5	no	OBL	Herb- All herbaceous (non-woody)plants, including	
Sagittaria lancifolia	5	no	OBL	herbaceous vines, regardless of size. Includes wo	ody
9. Bacopa caroliniana	5	no	OBL	plants, except woody vines, less than approximatel	y 3 ft
10.				(1 m) in height.	
11.				Woody vine- All woody vines, regardless of height	
12.					
Woody Vine Stratum (Plot size:1.		= Total Cove	er		
2.					
3.		<del></del>			
4.				l literatura de la composición	
5.				Hydrophytic	
<del>[3.</del>		- T-4-1 O		Vegetation Present? Yes <u> </u>	<del></del>
		= Total Cove	er	<u> </u>	
Remarks: (If observed, list morpho Percent cover estimates based on		•	roader cor	mmunity.	

County/soil: Pinellas- Wabasso SOIL

SOIL			Sampling Point:A
	needed to document the indicator or confir	m the absence of indicators	.)
Depth Matrix R	Redox Features		
(inches) Color (moist) %	Color (moist) % Type'	Loc <sup>2</sup> Texture	Remarks
0-5 10 YR 2/1			black fine sand
5-27 10 YR 6/1		<del></del>	gray fine sand
27-32 5 YR 2/1			black fine sand
		common	
32-38 7.5 YR 3/2 5	YR 2/1	fragments	dark brown fine sand
	educed Matrix, CS=Covered or Coated Sand C	Frains. Location: PL=Po	re Lining, M=Matrix.
Hydric Soil Indicators:	Data also Data Confess (	CO) // DD C T II)	Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (		1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (L		2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1)	(LRRO)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)Redox Dark Surface (F6)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)			(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7	7)	Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (M	LRA 151)	
Thick Dark Surface (A12)	Iron-Manganese Masses (	F12) (LRR O, P,T)	3
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LR	R P, T, U)	·
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA	A 151)	
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (ML	RA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils		
Stripped Matrix (S6)	·	Soils (F20) (MLRA 149A, 1530	C. 153D)
Dark Surface (S7) (LRR P, S, T, U)			•
Restrictive Layer (If observed):		1	
Type:		l	
Depth (inches):	<del></del>	Hydric Soil Prese	nt? Yes ✓ No .
Remarks:		Invalic Son Frese	165 <u>, 10 </u> ,
Remarks.			
'			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Pinellas		_Sampling Date:	9/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	В
Investigator(s): Justin Styer, Blake Meineck	е	Section, Township, Range	: 12 28S 16E		
Landform (hillslope, terrace, etc.):N//	<b>\</b>	Local relief (concave, convex, none): none Slope (%):			pe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.058894	Long:82.6	51942	Dat	tum: WGS84
Soil Map Unit Name: Wabasso soils			NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	(If no, explain in F	Remarks)
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes	sNo
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Re	emarks)
SUMMARY OF FINDINGS - Attach sit		ng point locations, tr	ansects, impor	tant features,	etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	ithin a Wetland?	Yes✓No	
Wetland Hydrology Present?	Yes/ No	]			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	-	o required)
Primary Indicators (minimum of one is required; of			Surface Soil		
Surface Water (A1)	Water-Stained Leaves	(B9)		getated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa		
Saturation (A3)	Marl Deposits (B15) (LI	· ·	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor	` '	— '	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur		
Drift Deposits (B3)	Presence of Reduced I			isible on Aerial Ima	igery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	` '		Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		.		
Water Table Present?		_ Depth (inches):	Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)		·····	Present?	Yes <u>✓ No</u>	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			
Remarks:					
					*

VEGETATION - Use scientific na	mes of plants			Sa	mpling Point:	В
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
Taxodium distichum	60	yes	OBL	Number of Dominant Species	<u>5</u>	(A)
Quercus laurifolia	20	yes	FACW	That Are OBL, FACW, or FAC:	₹	(, ,)
Acer rubrum	20	yes	OBL	Total Number of Dominant	<u>5</u>	(B)
4.				Species Across All Strata:	<u> </u>	(5)
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	100.00	(140)
7.				Prevalance Index worksheet:		
	100	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1. Schinus terebinthifolius	15	yes	FAC	FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	
4.	• ———			1 <u> </u>	x5=	_
5.	- —			· '	(A)	(B)
6.					· ·	_ (-,
7.	. —			Prevalance index = B/A =		
<del></del>	15	= Total Cove		Hydrophytic Vegetation Indica	tors:	
Shrub Stratum (Plot size:	1	10101 0010	•	✓ Dominance Test is 50%		
1				Prevalence Index is ≤3.0	1	
2.	. ——			Problematic Hydrophytic		lain)
3.				Froblematic Hydrophytic	vegetation (exp	nanı,
4.	- —			11		
5.	- ——			Indicators of hydric soil and wet be present, unless disturbed or p		nust
6.				Definitions of Vegetation Strat		
7.				Definitions of Vegetation Strat	a.	
7.				l		
Hash Stratum (Blat sine:	U	= Total Cove	ır.	Tree- Woody plants, excluding wo approximately 20 ft (6m) or more in		/7 G
Herb Stratum (Plot size:)	45		E40141	cm) or larger in diameter at breast		(7.0
Blechnum serrulatum	15	yes	FACW	ļ ′ •	• , ,	
2.				Sapling- Woody plants, excluding		
3.				approximately 20 ft (6m) or more in in. (7.6 cm) DBH.	n neight and less	ınan 3
4.				4 ' '		
5.				Shrub- Woody plants, excluding w		
6.				approximately 3 to 20 ft (1 to 6 m)	in height.	
7.				Herb- All herbaceous (non-woody)		
8.				herbaceous vines, regardless of si		
9.				plants, except woody vines, less th	nan approximately	3 ft
10.				(1 m) in height.		
11.	_			Woody vine- All woody vines, reg.	ardless of height.	
12.						
	15	= Total Cove	r			
Woody Vine Stratum (Plot size:	)					
1.				j		
2.						
3.						
4.			_	Hydrophytic		
5.				Vegetation Present? Yes	No	
		= Total Cove	r	1		
Remarks: (If observed, list morph	ological adapta	tions below).				
Percent cover estimates based of	• .		roader coi	mmunity		

ofile Description: (Describe to the c		ument th	e indicator or c	onfirm the ab	sence of indicators.)	)
pth Matrix ches) Color (moist) %	Redox Features Color (moist)	%	Type	Loc²	Texture	Remarks
10 YR 2/1						black fine sand
7 10 YR 6/1						gray fine sand
32 5 YR 2/1					·	black fine sand
<u> </u>					common	
38 7.5 YR 3/2	5 YR 2/1				fragments	dark brown fine sand
	-				•••••	
pe: C=Concentration, D=Depletion, F dric Soil Indicators:	(M=Reduced Matrix, L	S=Cover	ed or Coated Sa	ina Grains.	Location: PL=Pore	Indicators for Problematic Hydric Soils 3:
Histol (A1)		Poly	alue Below Surf	ace (S8) (1 RR		1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	,		Dark Surface (S			2 cm Muck (A10) (LRR S)
_Black Histic (A3)	•		ny Mucky Minera			Reduced Vertic (F18) (outside MLRA 150A, B)
_Hydrogen Sulfide (A4)	•		ny Gleyed Matrix		·	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	•		eted Matrix (F3)	(, 2)	•	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)			x Dark Surface	(F6)	•	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P.T.	.U)	Deple	eted Dark Surfac	e (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)			x Depressions (	. ,	•	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	•		(F10) (LRR U)	. 0,	•	Other (Explain in Remarks)
_ , ,, ,,				4) /BH DA 454		Other (Explain in New arks)
_Depleted Below Dark Surface (A11)	•		eted Orchric (F1			_
_Thick Dark Surface (A12)			Manganese Mas			<sup>3</sup> I
_Coast Prairie Redox (A16) <b>(MLRA</b> 1	·		ric Surface (F13)		)	
_Sandy Mucky Mineral (S1) (LRR O,	S)	Delta	Orchric (F17) (I	VILRA 151)		
_Sandy Gleyed Matrix (S4)			iced Vertic (F18)			
_Sandy Redox (S5)			nont Floodplain			
_Stripped Matrix (S6)		Anon	nalous Bright Lo	amy Soils (F20	) (MLRA 149A, 153C	, 153D)
_Dark Surface (S7) (LRR P, S, T, U)	·					
strictive Layer (If observed):						
Туре:						
Depth (inches):					Hydric Soil Presen	t?Yes <u>_</u> √No

Landform (hillslope, terrace, etc.):	NWI classification: NA  Yes _ / No (If no, explain in Remarks) significantly disturbed? Are circumstances normal? Yes _ / No _ naturally problematic? (If needed, explain any answers in Remarks)  mpling point locations, transects, important features, etc.  Is the Sampled Area within a Wetland? Yes _ / No  Secondary Indicators (minimum of two required)Surface Soil Cracks (B6) aves (B9)Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)Moss Trim Lines (B16)
Landform (hillslope, terrace, etc.):	Section, Township, Range: 12 28S 16E Local relief (concave, convex, none): none Slope (%): S8691 Long: _82.650702 NWI classification: _NA Yes No (if no, explain in Remarks) significantly disturbed? Are circumstances normal? Yes No naturally problematic? (if needed, explain any answers in Remarks) mpling point locations, transects, important features, etc.  Is the Sampled Area within a Wetland? Yes No  Surface Soil Cracks (B6) aves (B9) Sparsely Vegetated Concave Surface (B8) 13) Drainage Patterns (B10) 15) (LRR U) Moss Trim Lines (B16) Odor (C1) Dry-Season Water Table (C2)
Subregion (LRR or MLRA): LRR U Lat: 28.058  Soil Map Unit Name: Wabasso soils  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology  Are Vegetation Soil or Hydrology  SUMMARY OF FINDINGS - Attach site map showing same Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Water-Stained Leav High Water Table (A2) Aquatic Fauna (B13)  Water Marks (B1) Hydrogen Sulfide Or Sediment Deposits (B2) Oxidized Rhizosphe Drift Deposits (B3) Presence of Reduce Algal Mat or Crust (B4) Recent Iron Reducti Iron Deposits (B5) Thin Muck Surface (	NWI classification: NA   Yes _ ✓ No (if no, explain in Remarks)
Soil Map Unit Name: Wabasso soils  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation, Soil, or Hydrology  Are Vegetation, Soil, or Hydrology  SUMMARY OF FINDINGS - Attach site map showing same the same showing same typically same showing same typically same showing same the same showing same typically same showing same typically same showing same typically same showing same typically same showing same typically same showing same typically same showing same typically same showing s	NWI classification: NA  Yes _ / _ No (If no, explain in Remarks) significantly disturbed? Are circumstances normal? Yes _ / _ No _ naturally problematic? (If needed, explain any answers in Remarks)  mpling point locations, transects, important features, etc.  Is the Sampled Area within a Wetland? Yes _ / _ No  Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) aves (B9) Sparsely Vegetated Concave Surface (B8) 13) Drainage Patterns (B10) 15) (LRR U) Moss Trim Lines (B16) Odor (C1) Dry-Season Water Table (C2)
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology  SUMMARY OF FINDINGS - Attach site map showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing same the same showing	Yes
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are circumstances normal? Yes _ No
Are VegetationSoil, or HydrologySUMMARY OF FINDINGS - Attach site map showing sam Hydrophytic Vegetation Present? Yes/No	naturally problematic? (If needed, explain any answers in Remarks)  mpling point locations, transects, important features, etc.  Is the Sampled Area within a Wetland? Yes
Are VegetationSoilor HydrologySUMMARY OF FINDINGS - Attach site map showing sam Hydrophytic Vegetation Present? Yes No	naturally problematic? (If needed, explain any answers in Remarks)  mpling point locations, transects, important features, etc.  Is the Sampled Area within a Wetland? Yes/No  Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) aves (B9)Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Odor (C1)Dry-Season Water Table (C2)
Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydric Soil Present?  Wetland Hydrology Present?  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13)  Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (A2) Tyes No  Yes No  Yes No  Yes	Secondary Indicators (minimum of two required)   Surface Soil Cracks (B6)   Sparsely Vegetated Concave Surface (B8)   Drainage Patterns (B10)   Moss Trim Lines (B16)   Odor (C1)   Dry-Season Water Table (C2)
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Wes No  Yes No  Yes No  Yes No  Yes	Secondary Indicators (minimum of two required)   Surface Soil Cracks (B6)   Sparsely Vegetated Concave Surface (B8)   Drainage Patterns (B10)   Moss Trim Lines (B16)   Odor (C1)   Dry-Season Water Table (C2)
Wetland Hydrology Present?  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (	Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  aves (B9)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Odor (C1)  Dry-Season Water Table (C2)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  - Surface Water (A1)	
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Water-Stained Leav High Water Table (A2) Aquatic Fauna (B13)  Saturation (A3) Marl Deposits (B15)  Water Marks (B1) Hydrogen Sulfide Od Sediment Deposits (B2) Oxidized Rhizosphe Drift Deposits (B3) Presence of Reduce Algal Mat or Crust (B4) Recent Iron Reducti	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Water-Stained Leav High Water Table (A2) Aquatic Fauna (B13)  Saturation (A3) Marl Deposits (B15)  Water Marks (B1) Hydrogen Sulfide Od Sediment Deposits (B2) Oxidized Rhizosphe Drift Deposits (B3) Presence of Reduce Algal Mat or Crust (B4) Recent Iron Reducti	
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)	
✓ Surface Water (A1)     Water-Stained Leav       High Water Table (A2)     Aquatic Fauna (B13       ✓ Saturation (A3)     Marl Deposits (B15)       Water Marks (B1)     Hydrogen Sulfide Or       Sediment Deposits (B2)     Oxidized Rhizosphe       Drift Deposits (B3)     Presence of Reduce       Algal Mat or Crust (B4)     Recent Iron Reducti       Iron Deposits (B5)     Thin Muck Surface (	aves (B9)Sparsely Vegetated Concave Surface (B8)  13)Drainage Patterns (B10)  15) (LRR U)Moss Trim Lines (B16)  Odor (C1)Dry-Season Water Table (C2)
High Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Agal Mat or Crust (B4)  Iron Deposits (B5)  Aquatic Fauna (B13)  Aquatic Fauna (B13)  Aquatic Fauna (B13)  Aquatic Fauna (B13)  Aquatic Fauna (B13)  Aquatic Fauna (B13)  Aquatic Fauna (B13)  Aproposits (B5)  Presence of Reduce Recent Iron Reduction Thin Muck Surface (B13)	Drainage Patterns (B10)
Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Marl Deposits (B16)  Hydrogen Sulfide Oc Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti	Moss Trim Lines (B16) Odor (C1)Dry-Season Water Table (C2)
Water Marks (B1)Hydrogen Sulfide Od Sediment Deposits (B2)Oxidized Rhizosphe Drift Deposits (B3)Presence of Reduce Algal Mat or Crust (B4)Recent Iron Reducti Iron Deposits (B5)Thin Muck Surface (	Odor (C1)Dry-Season Water Table (C2)
Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Sediment Deposits (B2)  Presence of Reduce Recent Iron Reducti Thin Muck Surface (	<del></del>
Drift Deposits (B3)         Presence of Reduce           Algal Mat or Crust (B4)         Recent Iron Reducti           Iron Deposits (B5)         Thin Muck Surface (	neres on Living Roots (C3)Crayiish Burrows (C8)
Algal Mat or Crust (B4) Recent Iron Reducti Iron Deposits (B5) Thin Muck Surface (	Seturation (C4)
Iron Deposits (B5)Thin Muck Surface (	
	· · · · · · · · · · · · · · · · · · ·
, , , , , , , , , , , , , , , , , , , ,	Remarks) FAC Neutral Test (D5)
Field Observations:	Double Grantes V. O.C.
Surface Water Present?         Yes_✓ No           Water Table Present?         Yes_✓ No	
	Depth (inches):0 Hydrology
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	Present? Yes <u>✓ No</u>

VEGETATION - Use scientific na	mes of plants			Sampling Point:	<u></u> C
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Ulmus americana	33	yes	FACW	Number of Dominant Species	A)
2.				That Are OBL, FACW, or FAC:	ער
3.	- ——			Total Number of Dominant	D\
4.				Species Across All Strata:	B)
5.				Percent of Dominant Species	A (D)
6.				That Are OBL, FACW, or FAC:	A/B)
7.				Prevalance Index worksheet:	
	3	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.				FACW species x2=	
2.				FAC species x3=	
3.	- —		-	FACU species x4=	
4.				UPL species x5=	
5.	- — —			• · · · · · · · · · · · · · · · · · · ·	B)
6.				(1)	٥,
7.				Prevalance Index = B/A =	
<i>/</i> .		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:		- Iolai Cove	•1	✓ Dominance Test is 50%	
1	<del>-</del> -/			Prevalence Index is ≤3.0 <sup>1</sup>	
		<del></del>			
2.				Problematic Hydrophytic Vegetation¹ (Explain	n)
3.				<b>.</b>	
4.				Indicators of hydric soil and wetland hydrology mus	st
5.	-	<del></del>		be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				4	
l., . a	0	= Total Cove	:r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7.	.6
Spartina bakeri	25	yes	FACW	cm) or larger in diameter at breast height (DBH).	
Thalia geniculata	25	yes	OBL	Sapling- Woody plants, excluding woody vines,	
Sesbania spp.	25	yes	FAC	approximately 20 ft (6m) or more in height and less that	an 3
4. Typha spp.	5	no	OBL	in. (7.6 cm) DBH.	
5. Eupatorium capillifolium	5	no	FACU	Shrub- Woody plants, excluding woody vines,	
Panicum repens	5	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Ludwigia peruviana	5	no	OBL	Herb- All herbaceous (non-woody)plants, including	
Andropogon spp.	5	no	FAC	herbaceous vines, regardless of size. Includes woody	
9.				plants, except woody vines, less than approximately 3	ft
10.				(1 m) in height.	
11.	_			Woody vine- All woody vines, regardless of height.	
12.					
	100	= Total Cove	er		
Woody Vine Stratum (Plot size:	)			į	
1.					
2.				1	
3.					
4.				Hydrophytic	
5.				Vegetation Present? YesNo	
··-		= Total Cove			
Remarks: (If observed, list morph			•	1	
			roader es	mmunity	
Percent cover estimates based o	n meandening s	survey or the b	ioauei co	ininuraty.	

County/soil: Pinellas- Wabasso SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) Color (moist) Type Loc' Remarks black fine sand 10 YR 2/1 10 YR 6/1 5-27 gray fine sand 27-32 5 YR 2/1 black fine sand common 32-38 7.5 YR 3/2 5 YR 2/1 fragments dark brown fine sand Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Black Histic (A3) \_Hydrogen Sulfide (A4) Piedmont Floodplain Soils (F19) (LRR P, S, T) Loamy Gleyed Matrix (F2) Stratified Layers (A5)
Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) \_Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) (MLRA 153B) \_5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) Redox Depressions (F8) \_1 cm Muck (A9) (LRR P,T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Orchric (F11) (MLRA 151) Depleted Below Dark Surface (A11) Iron-Manganese Masses (F12) (LRR O, P,T) \_Thick Dark Surface (A12) \_Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Delta Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 149A) Sandy Redox (S5) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? No Yes Remarks:

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Pinellas		Sampling Date: 9/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: D
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range	12 28S 16E	
Landform (hillslope, terrace, etc.): N/A	٩	Local relief (concave, conv	ex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.059499	Long:82.6	50527	Datum: WGS84
Soil Map Unit Name: Wabasso soils			NWI classification:	NA
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes_✓_No
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit		ng point locations, tr	ansects, import	tant features, etc.
Hydrophytic Vegetation Present?	Yes✓ No			
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes✓ No	]		
Remarks:				
	,			
			,	
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of two required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil (	
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tems (B10)
Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	nes (B16)
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season V	Vater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	ows (C8)
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic I	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	tard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No	· · · · · — — — — — — — — — — — — — — —		
Water Table Present?	Yes No	Depth (inches): 0	194-41	
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology	
(includes capillary fringe)			Present?	Yes <u>✓ No</u>
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:		
·				
Remarks:	#: # III II I I I I I I I I I I I I I I			
i .				

VEGETATION - Use scientific nar	mes of plants			S	ampling Point:	<u>D</u>
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
	Covei	opedies:	Sialus	Number of Demineral Casaina		
1				Number of Dominant Species	<u>5</u>	(A)
2.				That Are OBL, FACW, or FAC:	_	` ′
3.				Total Number of Dominant	6	(B)
4.				Species Across All Strata:	0	(0)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>83.33</u>	(A/B)
7.				Prevalance Index worksheet:		
7.						
		= Total Cove	er .	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:				OBL species	_x1=	-
Salix spp.	5	yes	FACW	FACW species	_x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	
4.				UPL species	x5=	_
5.				Column Totals:	(A)	- (B)
6.					- ( , ,	- `-′
7.				Prevalance Index = B/A =		
7.					-4	
	5	= Total Cove	er	Hydrophytic Vegetation India		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.	0¹	
2.				Problematic Hydrophytic	c Vegetation <sup>1</sup> (Exp	lain)
3.						
4.				Indicators of hydric soil and we	etland hydrology m	nuet
5.				be present, unless disturbed or		lust
6.	<del></del>			Definitions of Vegetation Stra		
				Deminions of Vegetation Str	ata.	
7.				4		
	0	= Total Cove	er	Tree- Woody plants, excluding w		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Panicum hemitomon	20	yes	OBL	cm) or larger in diameter at brea	st height (DBH).	
Eupatorium capillifolium	20	yes	FACU	Sapling- Woody plants, excluding	a woodv vines.	
Sesbania spp.	20	yes	FAC	approximately 20 ft (6m) or more		than 3
Cladium jamaicense	20	yes	OBL	in. (7.6 cm) DBH.	Ü	
	20		FACW	4 ' '	aaduulaaa	
		yes	FACVV	Shrub- Woody plants, excluding approximately 3 to 20 ft (1 to 6 n		
6.				<b>∮</b> ''	,	
7.	·			Herb- All herbaceous (non-wood		
8.				herbaceous vines, regardless of		
9.				plants, except woody vines, less	than approximately	/3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines, re	gardless of height.	
12.	•			1		
·	100	= Total Cove		1		
Woody Vine Stratum (Plot size:		10101 0010		1		
, , <u> </u>						
1.				4		
2.						
3.				]		
4.				Hydrophytic		
5.					s <u>_ √No</u>	
	<u> </u>	= Total Cove		1 -		
Remarks: (If observed, list morph				J		
Percent cover estimates based or	-		roader co	mmunity.		

h	Matrix olor (moist) R 2/1 R 6/1	% the dep	Redox Features Color (moist)	ment the	Type'	Loc <sup>2</sup>	sence of indicators.) Texture	Remarks
10 YF 10 YF 2 5 YR	R 2/1 R 6/1 2/1	<u>%</u>		%	Type¹	Loc²	Texture	Remarks
10 YF 10 YF 2 5 YR	R 2/1 R 6/1 2/1		Color (moist)	<u> </u>	Туре'	Loc <sup>2</sup>	Texture	Remarks
10 YR 5 YR	R 6/1 2/1						Тожито	
10 YR 5 YR	R 6/1 2/1							black fine sand
5 YR	2/1							gray fine sand
								black fine sand
7.5 YI	D 3/2						common	
			5 YR 2/1				fragments	dark brown fine sand
e: C=Concent	tration, D=Deple	tion, RM	=Reduced Matrix, C	S=Cover	ed or Coated S	and Grains.	*Location: PL=Pore	Lining, M=Matrix.
ic Soil Indica	ators:		· · · · · · · · · · · · · · · · · · ·		***************************************		1	ndicators for Problematic Hydric Soils 3:
Histol (A1)				Polyv	alue Below Sur	face (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
listic Epidon	(A2)			Thin (	Dark Surface (S	9) (LRR S, T, I	J)	2 cm Muck (A10) (LRR S)
Black Histic (A			-		y Mucky Minera		-	Reduced Vertic (F18) (outside MLRA 150A, B
Hydrogen Sul			-		y Gleyed Matrix		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Laye			•		ted Matrix (F3)	. ()	-	Anomalous Bright Loamy Soils (F20)
	es (A6) (LRR P,	T, U)	-		x Dark Surface	(F6)	-	(MLRA 153B)
-	Mineral (A7) (LR				ted Dark Surfa			Red Parent Material (TF2)
-			•				-	
	nce (A8) (LRR U	''	-		x Depressions	(FØ)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
•	49) (LRR P,T)		-		(F10) (LRR U)		-	Other (Explain in Remarks)
	ow Dark Surface	e (A11)	-		eted Orchric (F1			
Thick Dark Su					Manganese Mas			1
	Redox (A16) (N				ic Surface (F13		1	
	Mineral (S1) (L	RR O, S)	-		Orchric (F17) (			
Sandy Gleyed			-		ced Vertic (F18			
Sandy Redox			-		nont Floodplain			
Stripped Matr	rix (S6)		-	Anom	nalous Bright Lo	amy Soils (F20	) (MLRA 149A, 153C,	153D)
	(S7) (LRR P, S							
•	r (if observed):							
Type: _								
Depth (	(inches):						Hydric Soil Present	? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Pinellas	_ Sampling Date: 9/21/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FI	Sampling Point: E		
Investigator(s): Justin Styer, Blake Meined	cke	. Section, Township, Range	e: 12 28S 16E		
Landform (hillslope, terrace, etc.): N	/A	Local relief (concave, cor	vex, none): none	Slope (%);	
Subregion (LRR or MLRA): LRR U		5Long: <u>-82.</u>	650469	Datum: WGS84	
Soil Map Unit Name: Wabasso soils			NWI classification:	NA	
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil	or Hydrology	_ significantly disturbed?	Are circumstances	normal? Yes_ ✓ No	
			(If needed, explain	any answers in Remarks)	
			ransects, import	ant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	YesNo	Is the Sampled Area	Yes No		
Wetland Hydrology Present?	YesNo				
Remarks:					
HYDROLOGY Westland Hydrology Indicators:			Secondary Indicato	rs (minimum of two required)	
•	check all that apply)				
		(B9)	<del></del>		
<del></del>					
		•	. ,		
<del></del>	<del></del>	<del></del> ;			
		<del>-</del>			
	<del></del>	• •			
	<del></del>	' '			
		•			
re Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks) BUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.					
	Yes ✓ No	Depth (inches): 0-6			
				Yes ✓ No	
, , , , ,	oring well, aerial photos, previou	s inspections), if available:	1		
Pemarks:					
ivernarks.					
<u>.</u>					

VEGETATION - Use scientific nar	mes of plants			Si	ampling Point:	E	
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:			
Tree Stratum (Plot size:)	Cover	Species?	Status				
Acer rubrum	30	yes	OBL	Number of Dominant Species			
Quercus laurifolia	20	ves	FACW	That Are OBL, FACW, or FAC:	<u>3</u>	(A)	
3. Pinus elliottii	5	no	FACW	Total Number of Dominant			
4.				Species Across All Strata:	<u>4</u>	(B)	
5.	· ———			<b>†</b> '			
6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>75.00</u>	(A/B)	
7.				Prevalance Index worksheet:			
<u></u>	55	= Total Cove		Total % Cover of:			
Sapling Stratum (Plot size:		- Total Cove	;1	OBL species	Multiply by: x1=		
	<i>'</i>			· · —		-	
1.				FACW species	_x2=	-	
2.				FAC species	_x3=	_	
3.				FACU species	_x4=	_	
4.				UPL species	_x5=	_	
5.				Column Totals:	_(A)	_(B)	
6.							
7.				Prevalance Index = B/A =			
	0	= Total Cove	er	Hydrophytic Vegetation Indic	ators:		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%			
Serenoa repens	80	ves	FACU	Prevalence Index is ≤3.0	) <sup>1</sup>		
2.				Problematic Hydrophytic	: Vegetation 1 (Exp	lain)	
3.						,	
4.	-			1Indicators of hydric soil and we	stland hydrology m	nuct.	
5.				be present, unless disturbed or		iusi	
6.	· ——			Definitions of Vegetation Stra			
7.				Tomations of regulation our			
,	80	= Total Cove					
Harb Stratum (Blot size:	80 - Iotal Cover			Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6			
Herb Stratum (Plot size:)	•	54014		cm) or larger in diameter at breast height (DBH).			
Thelypteris spp.	3	yes	FACW	1 ' ·	• , ,		
2.				Sapling- Woody plants, excludin			
3.				approximately 20 ft (6m) or more in height and less than 3			
4.				in. (7.6 cm) DBH.			
5.				Shrub- Woody plants, excluding woody vines,			
6.				approximately 3 to 20 ft (1 to 6 m	i) in height.		
7.				Herb- All herbaceous (non-wood	y)plants, including		
8.				herbaceous vines, regardless of			
9.				plants, except woody vines, less	than approximately	3 ft	
10.				(1 m) in height.			
11.				Woody vine- All woody vines, re	gardless of height.		
12.	-			]			
	3	= Total Cove	r	1			
Woody Vine Stratum (Plot size:	)						
1.							
2.				1			
3.							
4.				Hydrophytic			
5.				1 * ' *	√ No		
Jo.	· <del></del>	= Total Cove		Vegetation Present? Yes		<del></del>	
Domestra: //f changed list			:1	L			
Remarks: (If observed, list morph		•					
Percent cover estimates based or	n meandering s	survey of the b	roader co	mmunity.			

County/soil: Pinellas- Wabasso SOIL

SOIL Profile Description: (Describe to the depth r	needed to document the indicator or confirm the abs	ence of indicators.)	
·	dox Features	·	
	Color (moist) % Type <sup>t</sup> Loc <sup>2</sup>	Texture	Remarks
-5 10 YR 2/1			black fine sand
-27 10 YR 6/1			gray fine sand
7-32 5 YR 2/1			black fine sand
	<del></del>	common	
2-38 7.5 YR 3/2 5 Y		fragments	dark brown fine sand
Type: C=Concentration, D=Depletion, PM=Pe	duced Matrix, CS=Covered or Coated Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining M=Matrix
lydric Soil Indicators:	daded Matrix, 00-00vered or Oblica Garia Grains.		ndicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8) (LRR S		1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S, T, U)		2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	·	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F2)	-	_ , , , , , , , , , , , , , , , , , , ,
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	-	Anomalous Bright Loamy Soils (F20)
	. ,		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)	_	Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)	_	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)	_	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR	O, P,T) 3 <sub>1</sub>	
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)		
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)		
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 1	I50B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLF	RA 149A)	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20)		153D)
Dark Surface (S7) (LRR P, S, T, U)			
Restrictive Layer (If observed):			
Type:			•
Depth (inches):	<del></del>	Hydric Soil Present	? Yes ✓ No .
Remarks:		,	
contains.			
	•		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Pinellas		Sampling Date:	9/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range			
	Α.	Local relief (concave, con		SI	ope (%):
Subregion (LRR or MLRA): LRR U		,			atum: WGS84
Soil Map Unit Name: Wabasso soils			NWI classification:		-
Are climatic / hydrologic conditions on the site typ	sical for this time of year?	Yes ✓	_ No		Remarks)
	or Hydrology		Are circumstances		es ✓ No
,		_ naturally problematic?	(If needed, explain	Tion Tion	
SUMMARY OF FINDINGS - Attach sit		-		-	•
Hydrophytic Vegetation Present?	YesNo	ng point locations, ti	ansects, impor	tant leatures	, etc.
Hydric Soil Present?	YesNo	Is the Sampled Area w	vithin a Wetland?	Ves ✓ Nr	,
*		is the Sampled Area w	num a vvenano:	163140	<i></i>
Wetland Hydrology Present? Remarks:	Yes✓ No				
INADBOLOGA					
HYDROLOGY			Canadaastadiaat	(	
Wetland Hydrology Indicators:	-hlWither areal A		Secondary Indicate		wo requirea)
Primary Indicators (minimum of one is required; of		(50)	Surface Soil		0 ( (00)
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)			` '	
Saturation (A3)	Marl Deposits (B15) (L1	•	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	• •	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres				
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Saturation V	isible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No	_ Depth (inches):0	Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	o
Describe Recorded Data (stream gauge, monitor Remarks:	ing well, aerial photos, previou	s inspections), if available:			_

VEGETATION - Use scientific nam	nes of plants			Sampling Point:F
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1100 011010111 (1 101 0120:	00.0.	Ороблоб.	Oluluo	Number of Dominant Species
1.				That Are OBL, FACW, or FAC: 3 (A)
2.				4
3.				Total Number of Dominant
4.				Species Across All Strata:
5.				Percent of Dominant Species 100.00 (A/B)
6.				That Are OBL, FACW, or FAC:
7.				Prevalance Index worksheet:
<u>                                     </u>				
Sapling Stratum (Plot size:	)	= Total Cove	er.	Total % Cover of: Multiply by: OBL species x1=
Sabal palmetto	10	yes	FAC	FACW species x2=
2.			*****	FAC species x3=
				·
3.		<del></del>		FACU speciesx4=
4.				UPL speciesx5=
5.				Column Totals:(A)(B)
6.				
7.				Prevalance Index = B/A =
<u></u>	10	= Total Cove		Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:	١.	10101 0010	•	✓ Dominance Test is 50%
	J			
1.				Prevalence Index is ≤3.01
2.				Problematic Hydrophytic Vegetation¹ (Explain)
3.				
4.				Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7.				Deminions of Vegetation Strata.
7				,
Herb Stratum (Plot size:)	0	= Total Cove	er .	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6
Amphicarpum muhlenbergianu	ıı 35		FACW	cm) or larger in diameter at breast height (DBH).
		yes		1 ' ' '
Panicum hemitomon	30	yes	OBL	Sapling- Woody plants, excluding woody vines,
Cladium jamaicense	10	no	OBL	approximately 20 ft (6m) or more in height and less than 3
Panicum repens	10	no	FACW	in. (7.6 cm) DBH.
5. Eupatorium capillifolium	3	no	FACU	Shrub- Woody plants, excluding woody vines,
6. Sesbania spp.	3	no	FAC	approximately 3 to 20 ft (1 to 6 m) in height.
7. Rhyncospora spp.	3	no	FACW	Herb- All herbaceous (non-woody)plants, including
8. Diodia virginiana	2	no	FACW	herbaceous vines, regardless of size. Includes woody
9. Crinum americanum	2	no	OBL	plants, except woody vines, less than approximately 3 ft
				(1 m) in height.
10. Fimbristylis spp.	2	no	FACW	1` ' "
11.				Woody vine- All woody vines, regardless of height.
12.				
	100	= Total Cove	r	
Woody Vine Stratum (Plot size:	)			
1.				
2.				1
3.				
4.				Hydrophytic
5.				Vegetation Present? YesNo
	0	= Total Cove	r	1
Remarks: (If observed, list morpho				1
Percent cover estimates based on	•	·-	roader cor	mmunity.

County/soil: Pinellas- Wabasso Sampling Point: SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Color (moist) Loc Texture Remarks (inches black fine sand 10 YR 2/1 5-27 10 YR 6/1 gray fine sand 27-32 5 YR 2/1 black fine sand common 5 YR 2/1 7.5 YR 3/2 fragments dark brown fine sand 32-38 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: Hydric Soil Indicators: Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR O) Histol (A1) \_2 cm Muck (A10) (LRR S) Thin Dark Surface (S9) (LRR S, T, U) \_Histic Epidon (A2) Reduced Vertic (F18) (outside MLRA 150A, B) Loamy Mucky Mineral (F1) (LRR O) \_Black Histic (A3) \_Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) \_Stratified Layers (A5) \_Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2) \_5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P,T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Orchric (F11) (MLRA 151) \_Depleted Below Dark Surface (A11) Iron-Manganese Masses (F12) (LRR O, P,T) \_Thick Dark Surface (A12) Umbric Surface (F13) (LRR P, T, U) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date:			9/21/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: (			<u>G</u>	
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range: 7 28S 17E				
Landform (hillslope, terrace, etc.): N/.	Α	Local relief (concave, con	vex, none): none	Slope	e (%):	
Subregion (LRR or MLRA): LRR U	Lat: _28,062510	0 Long:82.	646421	Datur	m: WGS84	
Soil Map Unit Name: Malabar fine sand			NWI classification:	Freshwater Pond	·	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Re	marks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		✓No	
	or Hydrology		(If needed, explain	any answers in Rem	narks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impor	rtant features, e	tc.	
Hydrophytic Vegetation Present?	Yes✓ No					
Hydric Soil Present?	Is the Sampled Area v	vithin a Wetland?	Yes/ No			
Wetland Hydrology Present?	Yes✓ No	]				
Remarks:						
HADBOLOGA						
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two	required)	
Primary Indicators (minimum of one is required;	thack all that anniv		Surface Soil		required)	
✓ Surface Water (A1)	Water-Stained Leaves	/R0\		getated Concave Sur	face (BR)	
High Water Table (A2)	Aquatic Fauna (B13)	(50)	Drainage Pa	=	1400 (50)	
✓ Saturation (A3)	Marl Deposits (B15) (LI	DD III	Moss Trim L	, ,		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	, ,		
Drift Deposits (B3)	Presence of Reduced I			isible on Aerial Image	env (CQ)	
Algal Mat or Crust (B4)	Recent Iron Reduction			Position (D2)	Si <b>y</b> (OS)	
Iron Deposits (B5)	Thin Muck Surface (C7	, ,	Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	•	FAC Neutral	, ,		
Field Observations:			1	1001 (20)		
Surface Water Present?	Yes✓ No	Depth (feet): 6-8				
Water Table Present?	Yes✓No					
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)			Hydrology Present?	Yes <u>✓</u> No _		
Describe Recorded Data (stream gauge, monitor Remarks:	ing well, aerial photos, previous	s inspections), if available:				
-						

	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status	Dominance real Workshoot.		
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u>	(A)
3.				Total Number of Dominant		
4.	. ———			Species Across All Strata:	1	(B)
5.			***************************************	Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
Sapling Stratum (Plot size:		= Total Cove	r	<u>Total % Cover of:</u> OBL species	Multiply by: x1=	
1.				FACW species	x2=	_
2.	·			FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	(B)
6.						_ ` `
7.				Prevalance Index = B/A =		
		= Total Cove	r	Hydrophytic Vegetation Indica	itors:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.	•			Prevalence Index is ≤3.0	1	
2.	- — —			Problematic Hydrophytic		olain)
3.				· · ·	• • •	•
4.	· ——			Indicators of hydric soil and we	tland hydrology n	nust
5.	•			be present, unless disturbed or		,,,,,,
6.	. ——			Definitions of Vegetation Stra		
7.				1		
Herb Stratum (Plot size:)	0	= Total Cove	r	Tree- Woody plants, excluding wo approximately 20 ft (6m) or more		(7.6
Pontederia cordata	30	yes	OBL	cm) or larger in diameter at breas	t height (DBH).	
2. Panicum repens	5	no	FACW	Sapling- Woody plants, excluding	woody vines,	
3. Phyla nodiflora	2	no	FACW	approximately 20 ft (6m) or more	in height and less	than 3
Sagittaria lancifolia	2	no	OBL	in. (7.6 cm) DBH.		
5. 6.				Shrub- Woody plants, excluding vapproximately 3 to 20 ft (1 to 6 m)		
7.				Herb- All herbaceous (non-woody	)plants. including	
8.				herbaceous vines, regardless of s		dy
9.				plants, except woody vines, less t	han approximately	/ 3 ft
10.				(1 m) in height.		
11.	<del></del>			Woody vine- All woody vines, reg	ardless of height.	
12.	-					
	39	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)			İ		
1.						
2.				1		
3.						
4.	·			Hydrophytic		
5.	- ——				_ ✓ No_	
		= Total Cove	r	1		
	U	- 10141 0010				

Depth inches)	ription: (Describe to Matrix							Sampling Point:
inches)	Makin	o the de	pth needed to doci	ıment th	e indicator or	confirm the ab	sence of indicators	.)
			Redox Features					
0-4 1	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc	Texture	Remarks
,	10 YR 4/1							dark gray fine sand
1-12 1	10 YR 6/2							light grayish brown fine sand
	10 YR 6/6							
	10 YR 6/3							brownish yellow fine sand
00-00 1	10 1 1 0/3							pale brown fine sand
Type: C=Cor	ncentration, D=Deple	tion, RM	=Reduced Matrix, C	S=Cove	red or Coated S	and Grains.	Location: PL=Por	e Lining, M=Matrix.
lydric Soil I		•						Indicators for Problematic Hydric Soils 3:
Histol (A	1)			Poly	alue Below Sur	face (S8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)
Histic Ep	oidon (A2)		•			9) (LRR S, T, L		2 cm Muck (A10) (LRR S)
Black His	stic (A3)		•		•	el (F1) (LRR O)	,	Reduced Vertic (F18) (outside MLRA 150A, B)
	n Sulfide (A4)		-		ny Gleyed Matrix	. , . ,		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		-		eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,	T, U)			x Dark Surface			(MLRA 153B)
5 cm Mu	cky Mineral (A7) (LR	R P.T.U	`	Deple	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)
	esence (A8) (LRR U		-		x Depressions	` '		Very Shallow Dark Surface (TF12) (LRR T, U)
	ck (A9) (LRR P,T)	,	-	Marl (F10) (LRR U)				Other (Explain in Remarks)
	Below Dark Surface	(A11)	-			1) (MLRA 151)		
	rk Surface (A12)	(Δ11)	-		•	sses (F12) (LRF		3.
	rairie Redox (A16) (N	II DA 151	- ۱۸۸		=	) (LRR P, T, U)		<sup>3</sup> l
			· -		· ·			
	lucky Mineral (S1) (L	KK U, 5)	-		Orchric (F17) (	· ·		
	leyed Matrix (S4)		-		•	) (MLRA 150A,	•	
	edox (S5)		_		•	Soils (F19) (ML		
	Matrix (\$6)		-	Anon	nalous Bright Lo	amy Soils (F20)	) (MLRA 149A, 1530	C, 153D)
	face (S7) (LRR P, S	, T, U)						
	.ayer (If observed):							•
-	pe:							
De Remarks:	epth (inches):						Hydric Soil Preser	nt? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ah	_Sampling Date:	9/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range	7 28S 17E	, ,	
Landform (hillslope, terrace, etc.): N//		Local relief (concave, conv		S	lope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.062767	7 Long: <u>-82.6</u>			atum: WGS84
Soil Map Unit Name: Malabar fine sand		v	NWI classification:	: NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes _✓	_ No		Remarks)
	or Hydrology	significantly disturbed?	Are circumstances		esNo
		_ naturally problematic?	(If needed, explain		Remarks)
SUMMARY OF FINDINGS - Attach sit		= ::	-	-	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes/_N	lo
Wetland Hydrology Present?	Yes✓ No				
Remarks:					
11/0001 001/					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate		two required)
Primary Indicators (minimum of one is required; of			Surface Soil		
Surface Water (A1)	Water-Stained Leaves (	(B9)		getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Pa			
Saturation (A3)	Marl Deposits (B15) (LF	•	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	• • •	Crayfish Bur	, ,	
Drift Deposits (B3)	Presence of Reduced In	• •		isible on Aerial In	nagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	, ,		Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	- ' ' '	1		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> N	lo
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			
Remarks:					
			,		
		•			

VEGETATION - Use scientific na	mes of plants			Sampling Point:
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1 too ottatam (1 tot size)	00101	ороскоо.	Cuitao	Number of Deminant Species
1.				Number of Dominant Species That Are ORL FACIN or FAC: 3 (A)
2.				That Are OBL, FACW, or FAC:   → (^)
3.				Total Number of Dominant 3 (B)
4.				Species Across All Strata:
5.				Percent of Dominant Species 400.00 (A/I
6.				That Are OBL, FACW, or FAC:
7.	- ——			Prevalance Index worksheet:
		= Total Cove		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:	<del>-</del>		•	OBL species x1=
1.				FACW species x2=
2.				FAC species x3=
3.				FACU species x4=
4.				
				UPL speciesx5=
5.				Column Totals:(A)(B)
6.				
7.				Prevalance Index = B/A =
	0	= Total Cove	er	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%
Baccharis glomeruliflora	/ 5	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>
		yes	FACVV	<del></del>
2.				Problematic Hydrophytic Vegetation¹ (Explain)
3.				1
4.				Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7.				1
<u></u>		= Total Cove		Tree- Woody plants, excluding woody vines,
Herb Stratum (Plot size:)	·	. 510. 5576	•	approximately 20 ft (6m) or more in height and 3 in. (7.6
Pontederia cordata	40	ves	OBL.	cm) or larger in diameter at breast height (DBH).
2. Laportea sp.	20	yes	FACW	Sapling- Woody plants, excluding woody vines,
				approximately 20 ft (6m) or more in height and less than
Polygonum punctatum	15	no	FACW	in. (7.6 cm) DBH.
Ludwigia peruviana	15	no	OBL	` '
5. Typha spp.	5	no	OBL	Shrub- Woody plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7.				Herb- All herbaceous (non-woody)plants, including
8.				herbaceous vines, regardless of size. Includes woody
9.				plants, except woody vines, less than approximately 3 ft
				(1 m) in height.
10.	<del></del>			1` '
11.	_			Woody vine- All woody vines, regardless of height.
12.				
	95	= Total Cove	er	
Woody Vine Stratum (Plot size:	)			
1.				j
2.				1
3.				
4.				Lindranbudia
5.	· <del></del>			Hydrophytic
5.				Vegetation Present? Yes <u>√</u> No
	0	= Total Cove	er	
Remarks: (If observed, list morph		,	rooder co	mmunity

SOIL								Sampling Point:
Profile De	scription: (Describe	to the de	pth needed to doci	ument t	he indicator or	confirm the abs	sence of indicators.)	
Depth	Matrix		Redox Features					
inches)	Color (moist)	%	Color (moist)	_%_	Type <sup>1</sup>	Loc²	Texture	Remarks
1-4	10 YR 4/1							dark gray fine sand
-12	10 YR 6/2							light grayish brown fine sand
2-30 30-50	10 YR 6/6	- —						brownish yellow fine sand
50-50	10 YR 6/3							pale brown fine sand
			<del></del>					
Time: C=	Concentration, D=Dep	detion DM	- Dadusad Matrix C	S=Co	arad or Coatad S	and Crains	<sup>2</sup> Location: PL=Pore	Linina MaMotriu
	concentration, D=Depoil Indicators:	neuon, Riv	=Reduced Matrix, C	,5=C0V	ered or Coaled 8	sand Grains.		Indicators for Problematic Hydric Soils 3:
Histol				Dok	audius Bolow Cu	face (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)		-			59) (LRR <b>S</b> , T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)		-		my Mucky Miner			Reduced Vertic (F18) (outside MLRA 150A, B)
			-				-	
	ogen Sulfide (A4) fied Layers (A5)		-		my Gleyed Matri bleted Matrix (F3		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	nic Bodies (A6) (LRR	P T III	•		lox Dark Surface		-	Anomalous Bright Loamy Soils (F20)
	, ,,							(MLRA 153B)
	Mucky Mineral (A7) (L		) .		eleted Dark Surfa	` ,	-	Red Parent Material (TF2)
<u>✓</u> Muck	Presence (A8) (LRR	U)	-	Rec	lox Depressions	(F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Mar	1 (F10) (LRR U)			Other (Explain in Remarks)
Deple	ted Below Dark Surfa	ce (A11)		Der	oleted Orchric (F	11) (MLRA 151)		
	Dark Surface (A12)	,	•			sses (F12) (LRF		· ·
	Prairie Redox (A16)	/MI DA 45	٠.		-			T .
	, ,	•				3) (LRR P, T, U)	ļ!	
Sand	y Mucky Mineral (S1) (	(LRR O, S	) .	Delt	ta Orchric (F17)	(MLRA 151)		
Sand	y Gleyed Matrix (S4)			Rec	luced Vertic (F1	B) (MLRA 150A,	150B)	
Sand	y Redox (S5)			Pied	dmont Floodplair	Soils (F19) (ML	_RA 149A)	
Stripp	ed Matrix (S6)			And	malous Bright L	oamy Soils (F20)	) (MLRA 149A, 153C,	, 153D)
Dark	Surface (S7) (LRR P,	S, T, U)						
Restrictiv	e Layer (If observed	1:						
	Type:	,-						
	Depth (inches):						Hydric Soil Present	t? Yes ✓ No .
Remarks:							11.74.10 00.11 1000.1	

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Hillsborough Sampling Date: 9/21			9/21/09			
Applicant/Owner: Progress Energy Florida, Inc		State: FL						
Investigator(s): Justin Styer, Blake Meined								
Landform (hillslope, terrace, etc.):N		Local relief (concave, con-			e (%):			
Subregion (LRR or MLRA): LRR U	·	·			ım: WGS84			
Soil Map Unit Name: Malabar fine sand			NWI classification:					
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes _ ✓	_ No		emarks)			
· ·	or Hydrology		Are circumstances		/No			
Are Vegetation, Soil				any answers in Rer				
SUMMARY OF FINDINGS - Attach si				•	-			
Hydrophytic Vegetation Present?	Yes✓No							
Hydric Soil Present?	ydrophlytto Vogottation i 1000m.			Is the Sampled Area within a Wetland? Yes No				
Wetland Hydrology Present?	YesNo							
Remarks:		<b>-1</b>						
		101.00						
HYDROLOGY								
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two	required)			
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave Su	ırface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)					
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	•					
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)						
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)				
Drift Deposits (B3)	Presence of Reduced Is	ron (C4)	Saturation V	isible on Aerial Imag	ery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic	Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqui	itard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)				
Field Observations:								
Surface Water Present?	Yes No		-					
Water Table Present?	Yes No	_ Depth (inches):	Wetland					
Saturation Present?	Yes No	_,Depth (inches):0	Hydrology					
(includes capillary fringe)			Present?	Yes <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes</a> <a href="Yes">Yes&lt;</a>				
Describe Recorded Data (stream gauge, monito	pring well, aerial photos, previou	us inspections), if available:						
Remarks:								
		,						
		•						
<u> </u>								

VEGETATION - Use scientific na	mes of plants		_	S	ampling Point:	ļ
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
,	0010.	ориили.		Number of Dominant Species		
1.				That Are OBL, FACW, or FAC:	<u>1</u>	(A)
2.						
3.				Total Number of Dominant	1	(B)
4.				Species Across All Strata:	-	(-)
5.				Percent of Dominant Species	400.00	(A (D)
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cove		Total % Cover of:	Multiply but	
01: 011 (01-1-:		= Total Cove	:1		Multiply by:	
Sapling Stratum (Plot size:	<i>)</i>			OBL species	x1=	_
1.	·			FACW species	_x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	
4.				UPL species	x5=	_
5.				Column Totals:	(A)	(B)
6.					- (	_ (_,
	· ——			B		
7.		T. 1.10		Prevalance index = B/A =	-4	
		= Total Cove	:r	Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0	) <sup>1</sup>	
2.				Problematic Hydrophytic	Vegetation <sup>1</sup> (Exp	lain)
3.						•
4.	- — —			l	alaad budaalaac	
	<del></del>	<del></del>		Indicators of hydric soil and we		iust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ita:	
7.				]		
	0	= Total Cove	er	Tree- Woody plants, excluding w		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Sagittaria lancifolia	90	yes	OBL	cm) or larger in diameter at breas	st height (DBH).	
2. Panicum repens	5	no	FACW	Sapling- Woody plants, excludin	a woodv vines.	
Ludwigia repens	3	no	OBL	approximately 20 ft (6m) or more		than 3
4. Juncus effusus	2	no	FACW	in. (7.6 cm) DBH.	ŭ	
5.			17.011	Shrub- Woody plants, excluding	woodu vinos	
				approximately 3 to 20 ft (1 to 6 m		
6.				1 ''		
7.				Herb- All herbaceous (non-wood)		
8.				herbaceous vines, regardless of		
9.				plants, except woody vines, less	than approximately	/ 3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines, re	gardless of height.	
12.	-			1	<b>5</b>	
12.		= Total Cove		1		
   Woody Vine Stratum (Plot size:		- Total Cove	;1			
1.				]		
2.				I		
3.						
4.				Hydrophytic		
5.	- — —			4 * * * *	✓ No	
<del> </del>		- Total Com		Vegetation Present? Yes		<del></del>
		= Total Cove	er			
Remarks: (If observed, list morph Percent cover estimates based o			roader co	mmunity.		

County/soil: Hillsborough- Malabar Sampling Point: SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) Color (moist) 10 YR 4/1 dark gray fine sand 10 YR 6/2 4-12 light grayish brown fine sand 12-30 10 YR 6/6 brownish yellow fine sand 30-50 10 YR 6/3 pale brown fine sand Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: Hydric Soil Indicators: Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR O) \_ \_Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Loamy Gleyed Matrix (F2)
Depleted Matrix (F3) \_Hydrogen Sulfide (A4) Piedmont Floodplain Soils (F19) (LRR P, S, T) \_Stratified Layers (A5) \_Organic Bodies (A6) (LRR P, T, U) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Red Parent Material (TF2) ✓ Muck Presence (A8) (LRR U) Redox Depressions (F8) \_Very Shallow Dark Surface (TF12) (LRR T, U) \_1 cm Muck (A9) (LRR P,T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) \_Iron-Manganese Masses (F12) (LRR O, P,T) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) \_Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:

Project/Site: <u>Levy Nuclear Plant</u> - Transmission L	ines	City/County: Hillsborou	ınh Sa	ampling Date: 9/21/09		
Applicant/Owner: Progress Energy Florida, Inc.	1100	State: FL		ampling Point: J		
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range		amping route		
Landform (hillslope, terrace, etc.): N//		Local relief (concave, con		Slope (%):		
, , , ,	Lat: _28.063455	•		Datum: WGS84		
Soil Map Unit Name: Basinger fine sand		<u> </u>		reshwater Emergent Wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes ✓		f no, explain in Remarks)		
	or Hydrology		Are circumstances no			
<del>-</del>		naturally problematic?		y answers in Remarks)		
SUMMARY OF FINDINGS - Attach sit		_		•		
Hydrophytic Vegetation Present?	YesNo		une,p -			
Hydric Soil Present?	Yes_ ✓ No	Is the Sampled Area within a Wetland? Yes No				
Wetland Hydrology Present?	Yes/No	1				
Remarks:		<b>-</b>				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators	(minimum of two required)		
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil Cra	acks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)	` '	Drainage Patterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Wa	, ,		
Sediment Deposits (B2)	Oxidized Rhizospheres	• •	Crayfish Burrow	` '		
Drift Deposits (B3)	Presence of Reduced I	- · · · · — · · · · · · · · · · · · · ·				
Algal Mat or Crust (B4)	Recent Iron Reduction	- · ·		ic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7	, ,	Shallow Aquitar	· <i>'</i>		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	•	FAC Neutral Test (D5)			
Field Observations:						
Surface Water Present?	Yes No	_ Depth (inches): 0-4	]			
Water Table Present?	Yes No		]			
Saturation Present?	Yes No		Wetland - Hydrology			
(includes capillary fringe)		_ , , ,		es <u>-/</u> No		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:	12.3			
Remarks:						

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species	2	(A)
2.				That Are OBL, FACW, or FAC:	<u>2</u>	(^)
3.				Total Number of Dominant	2	(D)
4.				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species	100.00	(A/B
6.				That Are OBL, FACW, or FAC:	100.00	(AVE
7.	· ·			Prevalance Index worksheet:		
		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1. Salix spp.	2	yes	FACW	FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	
5.				· · —	(A)	(B)
6.						_ `-'
7.	-			Prevalance Index = B/A =		
		= Total Cove	er	Hydrophytic Vegetation Indica	itors:	
Shrub Stratum (Plot size:		•		✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0	1	
2.				Problematic Hydrophytic		nlain)
3.					rogotation (Exp	
4.	-			Indicators of hydric soil and we	Hand hydrology n	nuct
5.	-			be present, unless disturbed or		ilust
6.			-	Definitions of Vegetation Strat		
7.	· ——					
		= Total Cove		Tree- Woody plants, excluding wo	ndy vines	
Herb Stratum (Plot size:)	•		-	approximately 20 ft (6m) or more i		(7.6
Panicum hemitomon	70	yes	OBL	cm) or larger in diameter at breast		
2. Sesbania spp.	10	no	FAC	Sapling- Woody plants, excluding	woody vines	
Pontederia cordata	10	no	OBL	approximately 20 ft (6m) or more i		than 3
Polygonum punctatum	5	no	FACW	in. (7.6 cm) DBH.		
Rhynchospora inundata	5	no	OBL	Shrub- Woody plants, excluding v	voody vines	
6.	·		<u> </u>	approximately 3 to 20 ft (1 to 6 m)		
7.	· ——			Herb- All herbaceous (non-woody	•	
8.	·			herbaceous vines, regardless of s		ndv
9.	<del></del>	<del></del>		plants, except woody vines, less the		
10.				(1 m) in height.	ran approximator,	,
11.	. —			Woody vine- All woody vines, reg	ardless of height	
12.	-			i vocay vine viii needy vinee, reg	araioco er morgini.	
	100	= Total Cove				
Woody Vine Stratum (Plot size:		75.6.75070				
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	
		= Total Cove		ī		

	ed to document the indicator or confirm	in the absence of indicators	•)
	Features (moist) % Type L	Loc <sup>2</sup> Texture	Remarks
ries) Color (moist) % Color	(moist) /0 Type	Texture	
10 YR 2/1			black fine sand
8 10 YR 6/1			gray fine sand
10 YR 5/3; 10 YR			
42 5/2			brown and grayish brown fine sand
80 10 YR 6/2			light brownish gray fine sand
pe: C=Concentration, D=Depletion, RM=Reduce	d Matrix. CS=Covered or Coated Sand G	rains. <sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
dric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
_Histot (A1)	Polyvalue Below Surface (S	S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)	Thin Dark Surface (S9) (LF	RR S, T, U)	2 cm Muck (A10) (LRR S)
_Black Histic (A3)	Loamy Mucky Mineral (F1)	(LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B
_Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
_Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
_Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7	7)	Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
_Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MI	LRA 151)	
_Thick Dark Surface (A12)	Iron-Manganese Masses (F	F12) (LRR O, P,T)	3
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRF	R P, T, U)	
_Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA	\ 151)	
_Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLF		
Sandy Redox (S5)	Piedmont Floodplain Soils		
Stripped Matrix (S6)		Soils (F20) (MLRA 149A, 1530	C, 153D)
_Dark Surface (S7) (LRR P, S, T, U)		, ,,	•
strictive Layer (If observed):		· · · · · · · · · · · · · · · · · · ·	
Type:			
Depth (inches):	<del>_</del>	Hydric Soil Prese	nt? Yes ✓ No .
marks:			

Applicant/Owner: _Progress Energy Florida Inc.	Investigator(s):Justin Styer, Blake Meinecke Landform (hillslope, terrace, etc.):N/A Subregion (LRR or MLRA):LRR U Soil Map Unit Name: Basinger fine sand Are climatic / hydrologic conditions on the site typical for Are Vegetation, Soil, or Hy Are Vegetation, Soil, or Hy SUMMARY OF FINDINGS - Attach site ma Hydrophytic Vegetation Present?	this time of year?  drology_ drology_ p showing samplin  V No  No  No	Section, Township, Rar Local relief (concave, c Long: _8  Yessignificantly disturbed?naturally problematic? ng point locations,	ge: 7 28S 17E privex, none): none 2.643833  NWI classification:  No Are circumstances (If needed, explain transects, impor	Slope (%):
Landform (hillslope, terrace, etc.): N/A	Landform (hillslope, terrace, etc.): N/A  Subregion (LRR or MLRA): LRR U  Soil Map Unit Name: Basinger fine sand  Are climatic / hydrologic conditions on the site typical for Are Vegetation Soil or Hy  Are Vegetation Soil or Hy  SUMMARY OF FINDINGS - Attach site ma  Hydrophytic Vegetation Present? Yes_ Hydric Soil Present? Yes_ Wetland Hydrology Present? Yes_ Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a	this time of year?  drology_ drology_ p showing samplin  V No  No  No	Local relief (concave, c Long: _8  Yes< _significantly disturbed? _naturally problematic? ng point locations,	onvex, none): none  2.643833  NWI classification:  No  Are circumstances (If needed, explain transects, impor	Datum:WG: : Shrub Wetland _ (If no, explain in Remarks) s normal? Yes_ ✓No_ n any answers in Remarks) rtant features, etc.  Yes_ ✓No
Subregion (LRR or MLRA): LRR U Lat: 28.063361 Long: 62.643833 Datum: WGS84  Soil Map Unit Name: Basinger fine sand  **Rec climatic / hydrologic conditions on the site hybical for this time of year?  Are Vegetation	Subregion (LRR or MLRA): LRR U  Soil Map Unit Name: Basinger fine sand  Are climatic / hydrologic conditions on the site typical for Are Vegetation Soil or Hy  Are Vegetation Soil or Hy  SUMMARY OF FINDINGS - Attach site mal Hydrophytic Vegetation Present? Yes_ Hydric Soil Present? Yes_ Wetland Hydrology Present? Yes_ Remarks:  HYDROLOGY  Wettand Hydrology Indicators:  Primary Indicators (minimum of one is required; check a Surface Water (A1) High Water Table (A2)  Saturation (A3) Water Marks (B1)	this time of year?  drology p showing samplin	Yes significantly disturbed? naturally problematic? ng point locations,	2.643833  NWI classification:  No  Are circumstances (If needed, explain transects, impor	Datum:WG: : Shrub Wetland _ (If no, explain in Remarks) s normal? Yes_ ✓No_ n any answers in Remarks) rtant features, etc.  Yes_ ✓No
Soil Map Unit Name. Basinger fine sand Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problemate? Are circumstances normal? Yes No Bufface Explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present? Yes No Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required) Aquatic Fauna (B13) Surface Valer (A1) High Water Table (A2) Aquatic Fauna (B13) Agal Mat or Crust (B4) Agae Had To Are Surface (B7) Agae Had To Are Surface (B7) Agae Had To Crust (B4) Agae Had To Are Surface (B7) Agae Had To Crust (B4) Agae Had Agae Had To Crust (B4) Agae Had To Crust (B4) Agae Had To Crust (B4) Agae Had To Crust (B4) Agae Had To Crust (B4) Agae Had To Crust (B4) Agae Had To Crust (B4) Agae Had To Crust (B4) Agae Had Agae Had To Crust (B4) Agae Had Agae Had To Crust (B4) Agae Had Agae Had To Crust (B4) Agae Had Agae Had To Crust (B4) Agae Had	Soil Map Unit Name: Basinger fine sand  Are climatic / hydrologic conditions on the site typical for Are Vegetation, Soil, or Hy  Are Vegetation, Soil, or Hy  SUMMARY OF FINDINGS - Attach site may  Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes Remarks:  HYDROLOGY  Wettand Hydrology Indicators:  Primary Indicators (minimum of one is required; check a	this time of year?  drology p showing samplin	Yes significantly disturbed? naturally problematic? ng point locations,	NWI classification:  No Are circumstances (If needed, explain transects, impor	: Shrub Wetland _ (If no, explain in Remarks) s normal? Yes _ ✓ _ No_ n any answers in Remarks) rtant features, etc.  Yes _ ✓ _ No
Are Climatic / hydrologic conditions on the site hybical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No (If no, explain in Remarks)  Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Frimary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9)  Surface Water (A1) Superpose Surface (B8)  High Water Table (A2) Aquatic Faura (B13) Drainage Patterns (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)  Prin Deposits (B3) Presence of Reduced Iron (C4)  Apal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5) Thin Muck Surface (C7)  Saluration Present?  Yes No Depth (inches):  Under Oresent?  Yes No Depth (inches):  Oberrich (includes capillary fringe)  Wetland Hydrology  Present?  Yes No Depth (inches):  Oberrich (includes capillary fringe)  Wetland Hydrology  Present?  Yes No Depth (inches):  Oberrich (includes capillary fringe)  Wetland Hydrology  Present?  Yes No Depth (inches):  Oberrich (includes capillary fringe)  Wetland Hydrology  Present?  Yes No Depth (inches):  Oberrich (includes capillary fringe)	Are climatic / hydrologic conditions on the site typical for Are Vegetation, Soil or Hy Are Vegetation, Soil or Hy SUMMARY OF FINDINGS - Attach site may Hydrophytic Vegetation Present? Yes_Hydric Soil Present? Yes_Wetland Hydrology Present? Yes_Remarks:  HYDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check a	drologydrology p showing samplinNoNoNoNo	significantly disturbed? naturally problematic? ng point locations,	Are circumstances (If needed, explain transects, impor	_ (If no, explain in Remarks) s normal? Yes <u> </u>
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)  Hydrology Indicators: Secondary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Suffide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B3) Presence of Reduced from (C4) Saturation Visible on Aerial Imagery (C9)  Folial Mark Oroust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Folial Deposits (B5) Thin Muck Surface (C7) Shallow Aquatiar (D3)  Water Table Present? Yes No Depth (inches): O Wetland Hydrology Present? Yes No Depth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inches): O Bepth (inched): Agail and a standard (D3) Present? Yes No Depth (inches): O Bepth (inches): O Bepth (inched): Agail and a standard (D3) Present? Yes No Depth (inches): O Bepth (inches): O Bepth (inched): Agail and a standard (D3) Present? Yes No Depth (inches): O Bepth (inched): Agail and a standard (D3) Present? Yes No Depth (inches): O Bepth (inched): Agail and a standard (D3) Present? Yes No Depth (inches): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched): O Bepth (inched):	Are Vegetation, Soil, or Hy Are Vegetation, Soil, or Hy SUMMARY OF FINDINGS - Attach site ma Hydrophytic Vegetation Present? Yes_ Hydric Soil Present? Yes_ Wetland Hydrology Present? Yes_ Remarks:  HYDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check a  ✓ Surface Water (A1)  High Water Table (A2)  ✓ Saturation (A3)  Water Marks (B1)	drologydrology p showing samplinNoNoNoNo	significantly disturbed? naturally problematic? ng point locations,	Are circumstances (If needed, explain transects, impor within a Wetland?	s normal? Yes V No. n any answers in Remarks) rtant features, etc.  Yes V No.
Are Vegetation	Are Vegetation, Soil, or Hy SUMMARY OF FINDINGS - Attach site ma Hydrophytic Vegetation Present? Yes_ Hydric Soil Present? Yes_ Wetland Hydrology Present? Yes_ Remarks:  HYDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check a	drology	naturally problematic? ng point locations,	(If needed, explain transects, impor within a Wetland?	n any answers in Remarks) rtant features, etc.  YesNo
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Agal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Iron Deposit	Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a	p showing samplin  No No No No	ng point locations,	transects, impor	rtant features, etc.  YesNo
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Agal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Iron Deposit	Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a	p showing samplin  No No No No	ng point locations,	a within a Wetland?	YesNo
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Blained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Mand Deposits (B15) (LRR U)  Water Marks (B1)  Mard Deposits (B15)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Indidation Visible on Aerial Imagery (B7)  Indidation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology	Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a  ✓ Surface Water (A1)  High Water Table (A2)  ✓ Saturation (A3)  Water Marks (B1)	No No No No II that apply)	Is the Sampled Area		
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (B7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  FIeld Observations:  Surface Vater Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydrology Present?  Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a  ✓ Surface Water (A1)  High Water Table (A2)  ✓ Saturation (A3)  Water Marks (B1)	No No	Is the Sampled Area		
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Mart Deposits (B1)  Aguatic Fauna (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C8)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Saturation Present?  Yes ✓ No Depth (inches): Saturation Present?  Yes ✓ No Depth (inches): Other (Explain for evaluable)  Wetland Hydrology (March Present)  Wetland (March Present)  Wetland (Mar	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a  ✓ Surface Water (A1)  High Water Table (A2)  ✓ Saturation (A3)  Water Marks (B1)	Il that apply)		Secondary Indicato	are (minimum of two required)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9) — Sparsely Vegetated Concave Surface (B8) — High Water Table (A2) — Aquatic Fauna (B13) — Drainage Patterns (B10)  ✓ Saturation (A3) — Marl Deposits (B15) (LRR U) — Moss Trim Lines (B16) — Water Marks (B1) — Hydrogen Sulfide Odor (C1) — Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Drift Deposits (B3) — Presence of Reduced Iron (C4) — Algal Mat or Crust (B4) — Recent Iron Reduction in Tilled Soils (C6) — Iron Deposits (B5) — Thin Muck Surface (C7) — Inundation Visible on Aerial Imagery (B7) — Other (Explain in Remarks)  Field Observations:  Surface Water Pasent?  Yes ✓ No Depth (inches): 0 — Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0 — Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0 — Yes ✓ No Depth (inches): 0	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a  ✓ Surface Water (A1)  High Water Table (A2)  ✓ Saturation (A3)  Water Marks (B1)			Secondary Indicato	are (minimum of two required)
Wetland Hydrology Indicators: (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)			Secondary Indicato	are (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — High Water Table (A2) — Aquatic Fauna (B13) — Drainage Patterns (B10)  ✓ Saturation (A3) — Mart Deposits (B15) (LRR U) — Moss Trim Lines (B16) — Dry-Season Water Table (C2) — Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Drift Deposits (B3) — Presence of Reduced Iron (C4) — Algal Mat or Crust (B4) — Recent Iron Reduction in Tilled Soils (C6) — Iron Deposits (B5) — Thin Muck Surface (C7) — Inundation Visible on Aerial Imagery (B7) — Other (Explain in Remarks)  Surface Water Present?  Yes ✓ No Depth (inches): 0-8  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inches): 0  Hydrology Present?  Yes ✓ No Depth (inche	Primary Indicators (minimum of one is required; check a  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)				
✓ Surface Water (A1)	✓         Surface Water (A1)           High Water Table (A2)			Surface Soil	
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	High Water Table (A2)  Saturation (A3)  Water Marks (B1)		B9)		
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Water Marks (B1)			Drainage Pat	itterns (B10)
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Shallow Aquitard (D3)	<del></del>	Mart Deposits (B15) (LF	RR U)	Moss Trim Li	ines (B16)
Drift Deposits (B3)	Sediment Deposits (B2)	Hydrogen Sulfide Odor	(C1)	Dry-Season \	Water Table (C2)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)Shallow Aqu		Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	rows (C8)
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesY NoDepth (inches):O  Water Table Present? YesY NoDepth (inches):O  Saturation Present? YesY NoDepth (inches):O  Wetland Hydrology Present? YesY NoDepth (inches):O  (includes capillary fringe) Present? YesY No	<del></del>	<u>Presence of Reduced Ir</u>	on (C4)	Saturation Vi	isible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes _	Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)
Field Observations:  Surface Water Present?  Yes	Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	itard (D3)
Surface Water Present?  Water Table Present?  Yes _ ✓ _ No Depth (inches): _ 0 Wetland Hydrology Present?  Saturation Present?  Quantity Present?  Yes _ ✓ _ No Depth (inches): _ 0 Wetland Hydrology Present?  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)
Water Table Present? YesNoDepth (inches):0  Saturation Present? YesNoDepth (inches):0 Hydrology (includes capillary fringe) Present? YesNo	Field Observations:				
Saturation Present? Yes _ v No Depth (inches): _ 0	Surface Water Present? Yes_	✓ No	Depth (inches): 0-8		
Saturation Present? Yes No Depth (inches):0	Water Table Present? Yes_	✓ No	Depth (inches): 0	_	
(includes capillary fringe) Present? Yes <a href="Yes">Yes</a> <a href="No">No</a> <a href="No">Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:</a>	Saturation Present? Yes_	✓ No	Depth (inches): 0	1	
	(includes capillary fringe)				Yes <u>✓</u> No
	Describe Recorded Data (stream gauge, monitoring wel	l, aerial photos, previous	s inspections), if available	:	

VEGETATION - Use scientific nar	mes of plants			Sa	ampling Point:	K
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
Quercus laurifolia	40	yes	FACW	Number of Dominant Species	-	رم،
Taxodium distichum	30	yes	OBL	That Are OBL, FACW, or FAC:	<u>5</u>	(A)
Acer rubrum	10	no	OBL	Total Number of Dominant	_	. <u>.</u> .
4. Pinus elliottii	2	no	FACW	Species Across All Strata:	<u>5</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	82	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:		- 10101 0010	•	OBL species	x1=	
1.				FACW species	x2=	-
2.				FAC species	x3=	-
3.				FACU species	x4=	-
4.	· ———			· · · · · · · · · · · · · · · · · · ·		-
4. 5.	· <del></del>			UPL species	_x5=	
		<del></del>		Column Totals:	(A)	_(B)
6.				1		
7.		- Total Cave		Prevalance Index = B/A =	-4	-
Object Object of CDI-4-3	,	= Total Cove	·F	Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:				✓ Dominance Test is 50%	1	
Baccharis halimifolia	10	yes	FAC	Prevalence Index is ≤3.0		
Myrica cerifera	10	yes	FAC	Problematic Hydrophytic	: Vegetation ' (Exp	lain)
3.				4.		
4.				<sup>1</sup> Indicators of hydric soil and we		nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ıta:	
7.				]		
	20	= Total Cove	r	Tree- Woody plants, excluding w		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Osmunda regalis	15	yes	OBL	cm) or larger in diameter at breas	st height (DBH).	
2.				Sapling- Woody plants, excluding	g woody vines,	
3.				approximately 20 ft (6m) or more	in height and less	than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding	woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m	ı) in height.	
7.				Herb- All herbaceous (non-wood)	v)plants, including	
8.				herbaceous vines, regardless of		dy
9.				plants, except woody vines, less	than approximately	3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines, re-	gardless of height.	
12.	•			1	•	
<del></del>	15	= Total Cove		1		
Woody Vine Stratum (Plot size:			-			
1.						
2.				1		
3.						
4.	· <del></del>					
<del>4.</del> 5.	· ——			Hydrophytic	./ No	
J	· —	= Total Cove		Vegetation Present? Yes	No	<del></del>
Demorto, (If changed list			1			
Remarks: (If observed, list morph	•	,				
Percent cover estimates based or	n meandering s	survey of the b	roader co	mmunity.		

County/soil: Hillsborough- Basinger

SOIL								Sampling Point: K
	scription: (Describe	to the dep	th needed to docu	ment th	e indicator or	confirm the ab:	sence of indicators.)	· <del>-</del>
Depth	Matrix	•	Redox Features				,	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Locz	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							
28-42	5/2							brown and grayish brown fine sand
42-80	10 YR 6/2							light brownish gray fine sand
<b> </b>	<del></del>							
1T.ma. C=	Concentration, D=Depl	otion Dist	-Dadwood Matrix C	<del></del>	od on Cooked C	and Crains	Location: PL=Pore	Lining Manhantain
		etion, RM	Reduced Matrix, C	S=Cover	red or Coated S	and Grains,		0,
Histol	il Indicators:			Poha	ralija Balow Sur	face (S8) (LRR		ndicators for Problematic Hydric Soils <sup>3</sup> :  1 cm Muck (a9) (LRR O)
	Epidon (A2)		_			69) (LRR S, T, U		2 cm Muck (A10) (LRR S)
_	Histic (A3)		-			al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		_		ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		-		eted Matrix (F3)		-	Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P	, T, U)	_		x Dark Surface		-	(MLRA 153B)
5 cm f	Mucky Mineral (A7) (LI	RR P.T.U)		Deple	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)
_	Presence (A8) (LRR I		_		x Depressions		_	Very Shallow Dark Surface (TF12) (LRR T, U)
1	Muck (A9) (LRR P,T)	-,	_		(F10) (LRR U)	()	_	Other (Explain in Remarks)
Deplet	ted Below Dark Surfac	e (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
Thick	Dark Surface (A12)		_	lron-l	Manganese Ma	sses (F12) (LRF	R O, P,T) 3	1
Coast	Prairie Redox (A16) (J	MLRA 150	A) _	Umbi	ric Surface (F13	3) (LRR P, T, U)		•
1	Mucky Mineral (S1) (L			— Delta	Orchric (F17)	MI RA 151)		
ı— ·	Gleyed Matrix (S4)	, -,	-			) (MLRA 150A,	150R)	
	Redox (S5)		-			Soils (F19) (ML	•	
·	ed Matrix (S6)		_		•		) (MLRA 149A, 153C,	153D)
1	Surface (S7) (LRR P, 5	S T III	_	_	<b>-</b>		, ,,	<b>,</b>
	e Layer (If observed):						1	
1	Type:							
	Depth (inches):		•				Hydric Soil Present	? Yes ✓ No .
Remarks:							inyano com i recons	
1,011,011								
			4					
	•							
1								
1								
1								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 9/21/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: L
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range		
Landform (hillslope, terrace, etc.): N/A	4	Local relief (concave, conv		Slope (%):
	Lat: 28.06363	·		Datum: WGS84
Soil Map Unit Name: Basinger fine sand			NWI classification:	Shrub Wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normal? Yes/_No
	or Hydrology		(If needed, explain	any answers in Remarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>			ansects, impor	tant features, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes No	<u>]                                    </u>		
Remarks:		<del></del>		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)		getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	(50)	Drainage Pa	•
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR III	Moss Trim L	, ,
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	` ,	Crayfish Bur	• •
Drift Deposits (B3)	Presence of Reduced I	• , ,		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction		<del></del>	Position (D2)
<del></del> -				, ,
Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7	•	Shallow Aqu	
	Other (Explain in Rema	irks)	FAC Neutral	Test (UD)
Field Observations:	Van / No	Death (inchas), 0.24		
Surface Water Present?	Yes/ No		1	
Water Table Present?	Yes No		Wetland	
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ing well serial photos previou	e inenactione) if available:	Present?	Yes No
Describe Necolded Data (Stream gauge, monitor	ing well, aenai photos, previou	з іпэресионэ), іг ачанавіс.		
Remarks:				

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species	4	(A)
2.	·			That Are OBL, FACW, or FAC:	1	(A)
3.				Total Number of Dominant		(5)
4.				Species Across All Strata:	<u>1</u>	(B)
5.	· <del></del>			Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	-	- rotal cove	<b>,</b> 1		x1=	
1.				· —	x2=	-
2.		<del></del>		·	x3=	-
3.				· · —	x4=	-
	· ———			·		-
4.				' <del></del>	x5=	- (5)
5.				Column Totals:	(A)	_ (B)
6.						
7.				Prevalance Index = B/A =		
	0	= Total Cove	er	Hydrophytic Vegetation Indica	itors:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	_	
1.				Prevalence Index is ≤3.0		
2.				Problematic Hydrophytic	Vegetation <sup>1</sup> (Exp	lain)
3.						
4.				Indicators of hydric soil and we	tland hydrology m	nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Strat	ta:	
7.						
		= Total Cove	er	Tree- Woody plants, excluding wo	ody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Sagittaria spp.	25	yes	OBL	cm) or larger in diameter at breas	t height (DBH).	
Ludwigia spp.	2	no	OBL	Sapling- Woody plants, excluding	woody vines	
Alternanthera philoxeroides	2	no	OBL	approximately 20 ft (6m) or more		than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding v	woody vines	
6.				approximately 3 to 20 ft (1 to 6 m)		
7.	·			l'' ' '	•	
8.				Herb- All herbaceous (non-woody herbaceous vines, regardless of s		.d.
9.	· ——			plants, except woody vines, less the		
	·			(1 m) in height.	nan approximately	O II
10.				1, , ,	andless of boight	
11.	•			Woody vine- All woody vines, reg	jardiess of neight.	
12.	· ———					
		= Total Cove	er			
Woody Vine Stratum (Plot size:						
1.				1		
2.						
3.						
4.				Hydrophytic		
5.	-				No	
	0	= Total Cove	er	1		
Remarks: (If observed, list morph				L		

h Matrix	Redox Feat	document the indi	cutor or committee as	scrice of maleutors.	•1
es) Color (moist)	% Color (moi		ype¹ Loc²	Texture	Remarks
40 VP 2/4					blade for a seed
10 YR 2/1					black fine sand
10 YR 6/1					gray fine sand
10 YR 5/3; 10 YR					
2 5/2					brown and grayish brown fine sand
0 10 YR 6/2					light brownish gray fine sand
		<del></del>			
e: C=Concentration, D=Depl	etion, RM=Reduced Ma	trix, CS=Covered or	Coated Sand Grains.	<sup>2</sup> Location: PL=Poi	re Lining, M=Matrix.
ric Soil Indicators:					Indicators for Problematic Hydric Soils 3:
Histol (A1)		Polyvalue E	Below Surface (S8) (LRF	₹ S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)		Thin Dark S	Surface (S9) (LRR S, T,	U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)		Loamy Mud	cky Mineral (F1) (LRR O	)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)		Loamy Gle	yed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)		Depleted M	latrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P	P, T, U)	Redox Dar	k Surface (F6)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LF	RR P,T,U)	Depleted D	ark Surface (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR L	٦)	Redox Dep	ressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	•	Mart (F10)	(LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface	e (A11)	Depleted C	rchric (F11) (MLRA 151	}	
Thick Dark Surface (A12)	,		nese Masses (F12) (LF	•	3
Coast Prairie Redox (A16) (	MLRA 150A)		face (F13) (LRR P, T, U		
Sandy Mucky Mineral (S1) (L	•	<del></del>	ric (F17) (MLRA 151)	•	
Sandy Gleyed Matrix (S4)	., 0, 0,		ertic (F18) (MLRA 150A	150R)	
Sandy Redox (S5)			loodplain Soils (F19) (M		
Stripped Matrix (S6)			Bright Loamy Soils (F2)		C 153D)
Dark Surface (S7) (LRR P, S	S T 10		Dright Loanly Collo (1 L	) (III E 1 0 1 1 0 A, 1 0 0 C	5, 1882,
rictive Layer (If observed):	<u> </u>			T	
Type:	•				
Depth (inches):				Hydric Soil Presei	nt? Yes ✓ No
arks:					
					·
		•			

Applicant/Owner:   Progress Energy Florida   Inc.   Investigator(s):   Justin Shert, Blake Melnecke   Section, Township, Range:   7 285 17E   Justin Shert, Blake Melnecke   Section, Township, Range:   7 285 17E   Subregion (LRR or MLRA):   LRR U	Project/Site: Levy Nuclear Plant - Transmission I	ines	City/County: Hillsboro	ugh	_Sampling Da	te: 9/22/09
Local relief (concave, convex, none):none	Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Po	int:
Submeption (LRR or MLRA):   LRR U	Investigator(s): Justin Styer, Blake Meinec	ke	Section, Township, Range	e: 7 28S 17E		
Soil Map Unit Name: Open Water  Are climatic / hydrologic conditions on the site typical for this time of year?  Are vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are vegetation Soil or Hydrology naturally problematic?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No No Nerve Vegetation Present?  Hydrolophytic Vegetation Present? Yes No No No No No No No No No No No No No	Landform (hillslope, terrace, etc.): N/	Α	Local relief (concave, con-	vex, none): none		Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No No Hydrology Present? Yes No No No No No No No No No No No No No	Subregion (LRR or MLRA): LRR U	Lat: _28.064465	5 Long: <u>-82.6</u>	540981		Datum: WGS84
Are VegetationSoil or Hydrologysignificantly disturbed? Are circumstances normal? Yes No	Soil Map Unit Name: Open Water			NWI classification	: <u>NA</u>	
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrorybytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No Netland Hydrology Present?  Wetland Hydrology Present? Yes No No Netland Hydrology Indicators:  Remarks:  HYDROLOGY  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)  Yes Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Agal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Field Observations:  Surface Water Present? Yes No Depth (feet): 0.5  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes	_ No	_ (lf no, explair	n in Remarks)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydro Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required, check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Frim Euphopists (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Agal Mat or Crust (B4)  Filed Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal?	Yes_ ✓ No
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydro Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required, check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Frim Euphopists (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Agal Mat or Crust (B4)  Filed Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers	in Remarks)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water Table (A2)  Marl Deposits (B15) (LRR U)  Marl Deposits (B15)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Pyrimary Indicators (B2)  Oxidized Rhizospheres on Living Roots (C3)  Primary Indicators (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (B7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Indicators (minimum of two required)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Yes _ No _ Depth (inches); _ O  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	•			ransects, impo	rtant featur	es, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes  No  Depth (feet): 0-5  Wetland Hydrology  Wetland Hydrology	Hydrophytic Vegetation Present?	Yes✓No				
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Jorit Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Ageoent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Versum Ageoent Iron Reduction in Remarks)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (feet): 0-5  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Hydric Soil Present?	Yes✓ No	Is the Sampled Area v	vithin a Wetland?	Yes <u></u> ✓	_No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Mart Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drisage Patterns (B16)  — Dry-Season Water Table (C2)  — Crayfish Burrows (C8)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Agal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Hydrology  Wetland  Hydrology	Wetland Hydrology Present?	Yes ✓ No	]			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)	Remarks:					•
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)						
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Inundation Visible on Aerial Imagery (B7)  Ves_ ✓ No Depth (feet): 0-5  Saturation (Cashs (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (feet): 0-5  Wetland Hydrology	HYDROLOGY					
✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)         ✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)       _Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Inundation Visible on Aerial Imagery (B7)       _Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       _Yes✓ No Depth (feet):	Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum	of two required)
High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Inundation Visible on Aerial Imagery (B7)  Ves_ ✓ No Depth (feet): 0-5  Saturation Visible on Metand Hydrology  Wetland Hydrology	Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)	
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes✓ No Depth (feet):0.5         Wetland Hydrology	✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	getated Conca	ve Surface (B8)
Water Marks (B1)	High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)	
Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Fac Neutral Test (D5)  Water Table Present?  Yes _ / No _ Depth (inches): _ 0  Saturation Visible on Aerial Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology	✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)	
Drift Deposits (B3)	Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (	C2)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/_NoDepth (feet):0-5  Water Table Present? Yes/_NoDepth (inches):0  Saturation Present? Yes/_NoDepth (inches):0  Wetland Hydrology	Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	Tows (C8)	
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/ NoDepth (feet):0-5  Water Table Present? Yes/ NoDepth (inches):0  Saturation Present? Yes/ NoDepth (inches):0  Wetland Hydrology	Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	isible on Aeria	I Imagery (C9)
✓ Inundation Visible on Aerial Imagery (B7)         Other (Explain in Remarks)         FAC Neutral Test (D5)           Field Observations:         Surface Water Present?         Yes ✓ No Depth (feet):	Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Field Observations:           Surface Water Present?         Yes/No	Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	itard (D3)	
Surface Water Present?         Yes_ ✓ No	✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Water Table Present?         Yes_ ✓ No Depth (inches): 0         Wetland Hydrology           Saturation Present?         Yes_ ✓ No Depth (inches): 0         Hydrology	Field Observations:					
Saturation Present? Yes No Depth (inches): Hydrology	Surface Water Present?	Yes No	Depth (feet): 0-5			
Saturation Present? Yes No Depth (inches): Hydrology	Water Table Present?	Yes No	Depth (inches): 0			
· · · · · · · · · · · · · · · · · · ·	Saturation Present?			l .		
	(includes capillary fringe)				Yes <u></u> ✓	No
	Remarks:					
Remarks:						
Remarks:						
Remarks:			•			
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						

Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Cover	Species?	Status			
2	yes	OBL	Number of Dominant Species	2	(A)
			That Are OBL, FACW, or FAC:	₹	(//)
			Total Number of Dominant	•	<b>(D)</b>
			Species Across All Strata:	<u>2</u>	(B)
			Percent of Dominant Species		
				<u>100.00</u>	(A/B)
	= Total Cove			Multiply by:	
	10101 0010	•			
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<del></del>			4 ' <del></del>		-
			4 ·		– (B)
<del></del>	<del></del>			(^)	- (5)
			Providence Index = B/A =		
	= Total Cove	·		tors:	
)	- 10101 0010	••	1	1013.	
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					dain)
			F Toblematic i Tydrophlytic	vegetation (Exp	naiii)
<del></del>	<del></del>		la diantara at budaia anil and		
					nust
	·		<del></del>		
	<del></del>		1		
	= Total Cove		Trae Woody stants excluding we	ody vinos	
J	- 10121 0010	•,	1	•	(7.6
70	VAS	∩BI			(,,,,
			Sanling Woody plants excluding	woody vines	
					than 3
			in. (7.6 cm) DBH.	<b>g</b>	
		-	Shrub- Woody plants, excluding w	oody vines	
		17.077			
			Herb. All herbaceous (non-woody)	Inlante including	
					odv
			(1 m) in height.	,,	
			Woody vine- All woody vines, req	ardless of height.	
			1	3	
78	= Total Cove	r	1		
		-	i		
· ——			1		
			Hydronhytic		
				√ No	
			10		<del></del>
0	= Total Cove	er	1		
	2 	2 yes  2 = Total Cove  0 = Total Cove  70 yes  2 no 2 no 2 no 3 no 4 no 5 no 6 no 7 no 7 no 7 no 7 no 7 no 7 no 7 no 7	2 yes OBL  2 = Total Cover  0 = Total Cover  0 = Total Cover  70 yes OBL 2 no OBL 2 no OBL 2 no OBL 2 no FACW  78 = Total Cover	2 yes OBL Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalance Index worksheet: Total % Cover of: OBL species FAC species FAC species FAC species UPL species Column Totals:  Prevalance Index = B/A = Hydrophytic Vegetation Indica ✓ Dominance Test is 50% Prevalence Index is ≤3.0 Problematic Hydrophytic  Indicators of hydric soil and wet be present, unless disturbed or persent unless disturbed or persent unless disturbed or persent, unless disturbed or persent unless disturbed or persent unless disturbed or persent unless disturbed or persent unless disturbe	2 yes OBL That Are OBL, FACW, or FAC: 2 Total Number of Dominant 2 Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalance Index worksheet:  2 = Total Cover OBL species FACW species FACW species FAC uspecies FACU s

County/soil: Hillsborough- Water Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Depth Matrix Type' (inches) Color (moist) Color (moist) Texture Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains <sup>2</sup>Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) \_1 cm Muck (a9) (LRR O) \_Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) \_Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) \_Reduced Vertic (F18) (outside MLRA 150A, B) \_ Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) Organic Bodies (A6) (LRR P, T, U) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Red Parent Material (TF2) ✓ Muck Presence (A8) (LRR U) \_Very Shallow Dark Surface (TF12) (LRR T, U) Redox Depressions (F8) \_Other (Explain in Remarks) \_1 cm Muck (A9) (LRR P,T) Marl (F10) (LRR U) \_Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) \_Thick Dark Surface (A12) \_Iron-Manganese Masses (F12) (LRR O, P,T) \_Coast Prairie Redox (A16) (MLRA 150A) \_Umbric Surface (F13) (LRR P, T, U) \_Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) \_Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Sandy Redox (S5) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) \_Stripped Matrix (S6) \_Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	uah	Sampling Date:	9/22/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	
Investigator(s): Justin Styer, Blake Meineck	е	Section, Township, Range		Cumping rount.	
Landform (hillslope, terrace, etc.): N//		Local relief (concave, con		SI	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.06489				atum: <u>WGS84</u>
Soil Map Unit Name: Basinger fine sand	Lat. 20.00403	0 Long. <u>-02.0</u>	NWI classification:		- <del>- ++++++</del>
· · · · · · · · · · · · · · · · · · ·	i16 #i- #6	Yes ✓			Damada)
Are climatic / hydrologic conditions on the site typ	•		_ No		es ✓ No
<del></del>	or Hydrology	_ significantly disturbed?	Are circumstances	Tion Tion	
	or Hydrology	_ naturally problematic?	(If needed, explain	-	•
SUMMARY OF FINDINGS - Attach sit		ng point locations, ti	ransects, impor	tant features	, etc.
Hydrophytic Vegetation Present?		Is the Sampled Area v	Chaeltalla a Watland?	Von / N	
Hydric Soil Present?		is the Sampled Area v	vicilii a vveciano i	165 NO	<b>'</b> ——
Wetland Hydrology Present? Remarks:	Yes ✓ No				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of t	wo required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Veg	getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (L	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	rows (C8)	
Drift Deposits (B3)	Presence of Reduced 1	ron (C4)	Saturation Vi	isible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	")	Shallow Aqui	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	_ Depth (inches): 0-10	_]		
Water Table Present?	Yes No	Depth (inches):0	_		
Saturation Present?	Yes ✓ No		Wetland - Hydrology		
(includes capillary fringe)		_	Present?	Yes ✓ No	D
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:	1.		
Remarks:					
	1				

VEGETATION - Use scientific na	mes of plants			Sampling Po	int:
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Acer rubrum	5	yes	OBL	Number of Dominant Species	
2. Ulmus americana		yes	FACW	That Are OBL, FACW, or FAC:	<u>8</u> (A
3.				Total Number of Dominant	
4.			-	Species Across All Strata:	<u>8</u> (B
5.	- '			i '	
6.			• ———	Percent of Dominant Species 100	0.00 (A
7.				That Are OBL, FACW, or FAC:  Prevalance Index worksheet:	
	10	T-4-1 O			
Sapling Stratum (Plot size:		≃ Total Cov	er	Total % Cover of: Multiple OBL species x1=	IA DA.
Taxodium distichum		yes	OBL	FACW species x2=	
	3				
		yes	FACW	FAC speciesx3=	
3.	- ——			FACU speciesx4=	
4.	<del></del>			UPL speciesx5=	
5.				Column Totals:(A)	(E
6.	<del></del>				
7.				Prevalance Index = B/A =	
	8	⇒ Total Cov	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
Baccharis halimifolia	2	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
<ol><li>Myrica cerifera</li></ol>	2	yes	FAC	Problematic Hydrophytic Vegetation	า <sup>1</sup> (Explair
3.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydro	ology must
5.				be present, unless disturbed or problemati	
6.				Definitions of Vegetation Strata:	
7.				_	
Herb Stratum (Plot size:)	4	= Total Cov	er	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height ar	nd 3 in. (7.6
Pontederia cordata	35	yes	OBL	cm) or larger in diameter at breast height (DE	3H).
Cyperus spp.	15	yes	FACW	Sapling- Woody plants, excluding woody vin	es
Ludwigia spp.	10	no	OBL	approximately 20 ft (6m) or more in height ar	
Sesbania spp.	5	no	FAC	in. (7.6 cm) DBH.	
5. Panicum repens	5	no	FACW	Shrub- Woody plants, excluding woody vines	2
Eupatorium capillifolium	5	no	FACU	approximately 3 to 20 ft (1 to 6 m) in height.	٠,
7. Polygonum punctatum	- 5	no	FACW		li redien er
8.	· ———		17.011	Herb- All herbaceous (non-woody)plants, incl herbaceous vines, regardless of size. Include	
9.	· ——			plants, except woody vines, less than approx	
10.	· ——			(1 m) in height.	matery or
11,	· ———	<u> </u>		, ,	n al alba
12.	-			Woody vine- All woody vines, regardless of I	reignt.
12.		- 7-1-1-0-			
Mandy Vine Stratum (Blat size)	, 80	= Total Cov	er		
Woody Vine Stratum (Plot size:					•
1.		-			
2.					
3.					
				Hydrophytic	
4.		,			
5.		= Total Cov		Vegetation Present? Yes <u>√</u> I	No

-	oil: Hillsborough- Basing	jer						Consulting Delet
SOIL							**-#**-	Sampling Point:
	escription: (Describe	to the dep	•	ument the	indicator or	confirm the abs	sence of indicators.)	)
Depth	Matrix		Redox Features		<del></del>		<b></b> .	
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc²	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1	- —		·				gray fine sand
7-20	10 YR 5/3; 10 YR	-		<del></del>				gray line sand
28-42	5/2							brown and grayish brown fine sand
42-80	10 YR 6/2				<del></del>			light brownish gray fine sand
42-00	- 10 111 0/2	- —		<u> </u>			<del></del>	light brownshi gray tine sand
				<del></del> -				
Tvpe: C=	Concentration, D=Dep	letion, RM	=Reduced Matrix, (	S=Cover	ed or Coated 5	Sand Grains.	Location: PL=Pore	e Linina. M=Matrix.
,,	oil Indicators:			70				Indicators for Problematic Hydric Soils 3:
Histol				Polyv	alue Below Su	ırface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					(S9) (LRR S, T, L		2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)		•		ny Gleved Matri		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ified Layers (A5)		•		eted Matrix (F3		•	Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR F	P. T. U)	•		x Dark Surface		-	(MLRA 153B)
	Mucky Mineral (A7) (L				eted Dark Surfa			Red Parent Material (TF2)
								<del></del>
	k Presence (A8) (LRR	U)			x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl (	(F10) (LRR U)			Other (Explain in Remarks)
Deple	eted Below Dark Surfac	ce (A11)		Deple	ted Orchric (F	11) (MLRA 151)	)	
Thick	Dark Surface (A12)			iron-N	√langanese Ma	asses (F12) (LRF	R O, P,T)	3 <sub>1</sub>
Coas	t Prairie Redox (A16) (	MLRA 15/	.0Δ)			13) (LRR P, T, U)		,
		•					,	
	ly Mucky Mineral (S1) (I	LRK (), 5)	<i>)</i> .		Orchric (F17)	-		
	ly Gleyed Matrix (S4)				•	8) (MLRA 150A,	•	
	ly Redox (S5)				•	n Soils (F19) (ML		
	ped Matrix (S6)			Anom	alous Bright L	oamy Soils (F20	)) (MLRA 149A, 153C,	, 153D)
Dark	Surface (S7) (LRR P,	S, T, U)						
Restrictiv	ve Layer (If observed)	):						
	Туре:							
	Depth (inches):						Hydric Soil Present	nt? Yes <u>√</u> No
Remarks:								
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Investigator(s):Justin Styer, Blake Meinecke	Section, Township, Range: 8 28S 17E  Local relief (concave, convex, none):none Slope (%):
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (*Subregion (LRR or MLRA): LRR U Lat: 28.064801 Long: -82.631114 Datum: Soil Map Unit Name: Malabar fine sand NVI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks or Hydrology significantly disturbed? Are circumstances normal? Yes Are Vegetation, Soil or Hydrology significantly disturbed? Are circumstances normal? Yes Are Vegetation, Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No No Is the Sampled Area within a Wetland? Yes No No Is the Sampled Area within a Wetland? Yes No No	Local relief (concave, convex, none): _none Slope (%):
Subregion (LRR or MLRA): LRR U Lat: 28.064801 Long: 82.631114 Datum:  Soil Map Unit Name: Malabar fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Yes No	A): LRR U Lat: 28.064801 Long: -82.631114 Datum: _WGS84    labar fine sand
Soil Map Unit Name: Malabar fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Circumstances normal?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Present?  Are Vegetation Present?  Are Vegetation Present?  Yes _ No	NWI classification: NA   NWI classification: NA   Conditions on the site typical for this time of year?   Yes /_ No (If no, explain in Remarks)
Are climatic / hydrologic conditions on the site typical for this time of year?  Are VegetationSoil or Hydrology significantly disturbed?  Are circumstances normal? Yes	conditions on the site typical for this time of year?  Yes No (If no, explain in Remarks)  Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No No No (If needed, explain any answers in Remarks)  IDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Present?  Yes / No Is the Sampled Area within a Wetland? Yes / No No No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)  Is the Sampled Area within a Wetland? Yes / No (If needed, explain any answers in Remarks)
Are Vegetation, Soil or Hydrology significantly disturbed? Are circumstances normal? Yes Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remar SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Indicators:  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface High Water Table (A2) Aquatic Fauna (B13)	Soil
Are Vegetation	Soil
Are Vegetation	Soil
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (At)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Mater Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Is the Sampled Area within a Wetland? Yes_ ✓ No  Is the Sampled Area within a Wetland? Yes_ ✓ No  Is the Sampled Area within a Wetland? Yes_ ✓ No  Is the Sampled Area within a Wetland? Yes_ ✓ No  Secondary Indicators (minimum of two real forms and the Sampled Area within a Wetland? Yes_ ✓ No  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B9)  Sparsely Vegetated Concave Surface (B13)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Drift Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Secondary Indicators (minimum of two required)   Surface Soil Cracks (B6)   Sparsely Vegetated Concave Surface (B8)   Sparsely Vegetated Concave Surface (B10)   Marf Deposits (B15) (LRR U)   Moss Trim Lines (B16)   Mydrogen Sulfide Odor (C1)   Dry-Season Water Table (C2)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two records)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Field Observations:  Surface Water Present?  Yes No Depth (inches):	Secondary Indicators (minimum of two required)   Surface Soil Cracks (B6)   Sparsely Vegetated Concave Surface (B8)   Sparsely Vegetated Concave Surface (B8)   Mart Deposits (B15) (LRR U)   Moss Trim Lines (B16)   Mydrogen Sulfide Odor (C1)   Dry-Season Water Table (C2)
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two revenue Indicators (minimum of two revenue Indicators (minimum of two revenue Indicators (minimum of two revenue Indicators (minimum of one is required, check all that apply)  ✓ Surface Water (A1)  — High Water (A1)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Moss Trim Lines (B16)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Geomorphic Position (D2)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  — FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	licators:    Secondary Indicators (minimum of two required)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apphy)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (B7)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Field Observations:  Surface Water Present?  Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Imagery (B7)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B9)  Sparsely Vegetated Concave Surface (B10)  Moss Trim Lines (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)	licators:   Secondary Indicators (minimum of two required)     mum of one is required; check all that apply)   Surface Soil Cracks (B6)     11)   Water-Stained Leaves (B9)   Sparsely Vegetated Concave Surface (B8)     2 (A2)   Aquatic Fauna (B13)   Drainage Patterns (B10)     Marl Deposits (B15) (LRR U)   Moss Trim Lines (B16)     Hydrogen Sulfide Odor (C1)   Dry-Season Water Table (C2)
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two real Secondary Indicators (minimum of two reals (B6)  Surface Vater (A1)  Surface Vater (A1)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C7)  Sparsely Vegetated Concave Surface (C1)  Sparsely Vegetated Concave Surface (C1)  Sparsely Vegetated Concave (B10)  Sparsely Vegetated Concave (B	mum of one is required; check all that apply)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Hydrogen Sulfide Odor (C1)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two red)         Primary Indicators (minimum of one is required; check all that apply)	mum of one is required; check all that apply)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Hydrogen Sulfide Odor (C1)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two red)         Primary Indicators (minimum of one is required; check all that apply)	mum of one is required; check all that apply)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Hydrogen Sulfide Odor (C1)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Agal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Sparsely Vegetated Concave Surface  Praines (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)	mum of one is required; check all that apply)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Hydrogen Sulfide Odor (C1)  Dry-Season Water Table (C2)
✓ Surface Water (A1)	Water-Stained Leaves (B9)
High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Advance Fauna (B13) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16) Dry-Season Water Table (C2) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Field Observations: Surface Water Present?  Aquatic Fauna (B13) Drainage Patterns (B10) Moss Trim Lines (B16) Crayfish Burrows (C8) Source Iron Color (C4) Saturation Visible on Aerial Imagery (B7) FAC Neutral Test (D5)  Fac Neutral Test (D5)	Aquatic Fauna (B13) Drainage Patterns (B10) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16) Phydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?      Yes	Marl Deposits (B15) (LRR U)Moss Trim Lines (B16) Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)  Dry-Season Water Table (C2)
Sediment Deposits (B2)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Pron Deposits (B5) Thin Muck Surface (C7) Pron Deposits (B5) Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations: Surface Water Present?  Yes  No  Depth (inches): 0-8	ts (B2)Oxidized Rhizospheres on Living Roots (C3) Crayrish Burrows (C8)
Algal Mat or Crust (B4)	· · · · · · · · · · · · · · · · · · ·
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches):0-8	· — · · · · · · · · · · · · · · · · · ·
✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Surface Water Present?       Yes ✓ No Depth (inches):	
Field Observations: Surface Water Present?  Yes ✓ No Depth (inches): 0-8	· — · · · · · · · · · · · · · · · · · ·
Surface Water Present? Yes No Depth (inches):0-8	on Aenai imagery (B7)Other (Explain in Remarks) FAC Neutral Lest (US)
	Vas / Na Double (inches) U. C. C.
Water Table Present? Yes No Depth (inches): Wetland	(Wetland
Saturation Present? Yes No Depth (inches):0 Hydrology	Depth (inches): U   Hydrology
(includes capillary fringe) Present? Yes <a href="Ves-wl-">Present? Yes <a href="Ves-wl-">No</a> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:</a>	

VEGETATION - Use scientific na	mes of plants			Sa	ampling Point:	
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
Taxodium distichum	2	yes	OBL	Number of Dominant Species	4	/A)
2.				That Are OBL, FACW, or FAC:	<u>4</u>	(A)
3.	<del> </del>			Total Number of Dominant	•	(D)
4.	-			Species Across All Strata:	<u>4</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.	<del></del>			Prevalance Index worksheet:	****	
••		= Total Cov		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	_	- 10121 001	<b>.</b>	OBL species	x1=	
1. Salix spp.		yes	FACW	FACW species	x2=	-
2.				FAC species	x3=	_
3.	<del></del>			FACU species	x4=	-
4.	-		-	UPL species	x5=	_
5.				Column Totals:	(A)	 (B)
6.				Column Totals.	_(^)	- (D)
7.		<del></del>	. ———	Prevalance Index = B/A =		
		= Total Cov		Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:	`	- 10tai 00V	C1	✓ Dominance Test is 50%	ators.	
			E40	Prevalence Index is ≤3.0	.1	
Baccharis halimifolia	15	yes	FAC	<del></del>		1
Myrica cerifera	2	no	FAC	Problematic Hydrophytic	vegetation (Exp	olain)
3.				<b></b>		
4.				Indicators of hydric soil and we		nust
5.				be present, unless disturbed or		
6.	<del></del>			Definitions of Vegetation Stra	ita:	
7.						
	17	= Total Cov	er	Tree- Woody plants, excluding w		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		. (7.6
Panicum repens	80	yes	FACW	cm) or larger in diameter at brea	= ' '	
2. Ludwigia spp.	15	no	OBL	Sapling- Woody plants, excludin		
Pontederia cordata	10	no	OBL	approximately 20 ft (6m) or more	in height and less	than 3
Sesbania spp.	10	no	FAC	in. (7.6 cm) DBH.		
Andropogon glomeratus	5	no	FACW	Shrub- Woody plants, excluding		
6. Centella asiatica	5	no	FACW	approximately 3 to 20 ft (1 to 6 m	i) in height.	
7. Laportea sp.	5	no	FACW	Herb- All herbaceous (non-wood		
8. Typha spp,	2	no	OBL	herbaceous vines, regardless of		
9.				plants, except woody vines, less	than approximately	y 3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines, re	gardless of height.	
12.	·			]		
	132	= Total Cov	er	1		
Woody Vine Stratum (Plot size:_	)					
1.						
2.				1		
3.						•
4.				Hydrophytic		
5.		-			✓ No	
				1.0000000000000000000000000000000000000		
		= Total Cov	er	1		

County/soil: Hillsborough- Malabar

Color   Color	ion, D=Depletion, R	Redox Features Color (moist)  M=Reduced Matrix,	Polyvalue	Type' Loc or Coated Sand Grain e Below Surface (S8)		Remarks  dark gray fine sand light grayish brown fine sand brownish yellow fine sand pale brown fine sand  re Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:
pe: C=Concentrat dric Soil Indicato _Histoi (A1) _Histoi Epidon (A2 _Black Histoi (A3) _Hydrogen Sulfide	ion, D=Depletion, R		CS=Covered o	or Coated Sand Grain		dark gray fine sand light grayish brown fine sand brownish yellow fine sand pale brown fine sand
2 10 YR 6/ 30 10 YR 6/ 50 10 YR 6/ be: C=Concentrat fric Soil Indicato Histol (A1) Histic Epidon (A/ Black Histic (A3) Hydrogen Sulfide	ion, D=Depletion, R	M=Reduced Matrix,	Polyvalue	e Below Surface (S8)		light grayish brown fine sand brownish yellow fine sand pale brown fine sand
be: C=Concentrat  Iric Soil Indicato Histol (A1) Histic Epidon (A2 Black Histic (A3) Hydrogen Sulfide	ion, D=Depletion, R	M=Reduced Matrix,	Polyvalue	e Below Surface (S8)		brownish yellow fine sand pale brown fine sand  re Lining, M=Matrix.
pe: C=Concentrat ric Soil Indicato Histol (A1) Histic Epidon (A2 Black Histic (A3) Hydrogen Sulfide	ion, D=Depletion, R	M=Reduced Matrix,	Polyvalue	e Below Surface (S8)		pale brown fine sand  re Lining, M=Matrix.
pe: C=Concentrat ric Soil Indicato Histol (A1) Histic Epidon (A2 Black Histic (A3) Hydrogen Sulfide	ion, D=Depletion, R rs: 2)	M=Reduced Matrix,	Polyvalue	e Below Surface (S8)		re Lining, M=Matrix.
ric Soil Indicato Histol (A1) Histic Epidon (A2 Black Histic (A3) Hydrogen Sulfide	rs: 2)	M=Reduced Matrix,	Polyvalue	e Below Surface (S8)		
ric Soil Indicato Histol (A1) Histic Epidon (A2 Black Histic (A3) Hydrogen Sulfide	rs: 2)	M=Reduced Matrix,	Polyvalue	e Below Surface (S8)		
ric Soil Indicato Histol (A1) Histic Epidon (A2 Black Histic (A3) Hydrogen Sulfide	rs: 2)	м=кесисес матх,	Polyvalue	e Below Surface (S8)		
Histol (A1) Histic Epidon (A2 Błack Histic (A3) Hydrogen Sulfide	2)		Thin Dark	, ,		indicators for Froblematic riguric 30115 .
Histic Epidon (A2 Black Histic (A3) Hydrogen Sulfide			Thin Dark	, ,	O RR S. L. O	1 cm Muck (a9) (LRR O)
Black Histic (A3) Hydrogen Sulfide				Surface (S9) (LRR		2 cm Muck (A10) (LRR S)
_Hydrogen Sulfide			Loamy M	lucky Mineral (F1) (LI		Reduced Vertic (F18) (outside MLRA 150A, B
				leved Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
				Matrix (F3)		Anomalous Bright Loamy Soils (F20)
_Organic Bodies (	(A6) (LRR P, T, U)			ark Surface (F6)		(MLRA 153B)
5 cm Mucky Mine	eral (A7) (LRR P,T,I	U)	Depleted	Dark Surface (F7)		Red Parent Material (TF2)
_Muck Presence		•		epressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9)			_	)) (LRR U)		Other (Explain in Remarks)
	Dark Surface (A11)		`	Orchric (F11) (MLR	۸ 151)	,
Thick Dark Surfa				ganese Masses (F12	•	3
	dox (A16) (MLRA 1	50Δ)		urface (F13) (LRR P		1
-	, ,,	•				
	neral (S1) (LRR O,	5)		chric (F17) (MLRA 15	•	
Sandy Gleyed M				Vertic (F18) (MLRA		
_Sandy Redox (S: _Stripped Matrix (	,			t Floodplain Soils (F1		3 452D)
	•		Anomaio	us Bright Loamy Soli	s (F20) (MLRA 149A, 1530	s, 153D)
	7) (LRR P, S, T, U)					
strictive Layer (If	observed):				į	
Type:	h + +1.					nt? Yes √ No
Depth (inc narks:	nes):				Hydric Soil Prese	nt? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date: 9/22	7/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: P	
Investigator(s): Justin Styer, Blake Meineck	ie	Section, Township, Range		Outripling Form.	
Landform (hillslope, terrace, etc.): N//		Local relief (concave, con		Slope (%)	·
Subregion (LRR or MLRA): LRR U	Lat: 28,06828	· ·	•	Datum:	,
Soil Map Unit Name: Myakka fine sand	Lut. 20.00020	congoz.	NWI classification:		
Are climatic / hydrologic conditions on the site typ	sical for this time of year?	Yes ✓		(If no, explain in Remark	ke)
	or Hydrology	significantly disturbed?	Are circumstances		
	or Hydrology	_ naturally problematic?		any answers in Remarks	
SUMMARY OF FINDINGS - Attach sit				•	>)
Hydrophytic Vegetation Present?	YesNo		unocoto, impor	tunt icatarcs, etc.	
Hydric Soil Present?	YesNo	Is the Sampled Area v	vithin a Wetland?	Yes ✓ No	
Wetland Hydrology Present?	Yes✓No	1			
Remarks:		=		· · · · · · · · · · · · · · · · · · ·	
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two requ	uired)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave Surface	e (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (L	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Saturation V	isible on Aerial Imagery (	C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	")	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		4		
Water Table Present?	Yes No	Depth (inches):0	Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:			
Remarks:					

mes of plants			Sampling Point:	P
Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
			Number of Dominant Species	(A)
			That Are OBL, FACW, or FAC:	(A)
,			Total Number of Dominant	(D)
			Species Across All Strata:	(B)
			Percent of Dominant Species	
				(A/B)
			Prevalance Index worksheet:	
	= Total Cove	r	Total % Cover of: Multiply by:	
				_
•		-		_
				_
. ———				_
	<del></del>		· — —	— (B)
	<del></del>		Column rotals.	_(0)
			Dravelance Index - D/A -	
	= Total Cava			
`	- Total Cove	•		
)				
,				
			Problematic Hydrophytic Vegetation (Ex	plain)
			<sup>1</sup> Indicators of hydric soil and wetland hydrology r	nust
			Definitions of Vegetation Strata:	
0	= Total Cove	г	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in	. (7.6
10	yes	OBL	cm) or larger in diameter at breast height (DBH).	
10	yes	OBL	Sapling- Woody plants, excluding woody vines,	
5	yes	FACW	approximately 20 ft (6m) or more in height and less in. (7.6 cm) DBH.	than 3
			Shrub- Woody plants, excluding woody vines.	
. ———			approximately 3 to 20 ft (1 to 6 m) in height.	
			Harb. All herbaceous (non-woody)plants, including	
			, ,,,,	odv
. ——				
· <del></del>			(1 m) in height.	•
			Woody vine- All woody vines, regardless of height	
•			, , , ,	
25	= Total Cove			
			Vegetation Present? Yes <u>✓ No_</u>	
	= Total Cove		vegetation Fresent? TesNO	
	0 10 10 5	Absolute % Dominant Species?  0 = Total Cove  0 = Total Cove  10 yes 10 yes 5 yes  25 = Total Cove	Absolute % Dominant Indicator Species? Status  0 = Total Cover  0 = Total Cover  10 yes OBL 10 yes OBL 5 yes FACW	Absolute % Dominant Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC:    Total Number of Dominant Species That Are OBL, FACW, or FAC: 3

Depth   Matrix   Redox Features	RR S, T, U)1 cm Muck (a T, U)2 cm Muck (a O)Reduced VerPiedmont Flo	rown fine sand  C.  coblematic Hydric Soils <sup>3</sup> : a9) (LRR O)
10 YR 3/1   20	very dark gray gray fine sand black fine sand dark reddish b  *Location: PL=Pore Lining, M=Matrix Indicators for Pr RR S, T, U)	fine sand  c. coblematic Hydric Soils 3: a99 (LRR O) d10 (LRR S) tic (F18) (outside MLRA 150A, E codplain Soils (F19) (LRR P, S, T)
10 YR 6/1   15 N 2/0   10 5 YR 3/3   10   15 YR 3/3   10   15 YR 3/3   10   15 YR 3/3   10   15 YR 3/3   10   15 YR 3/3   10   15 YR 3/3   10   15 YR 3/3   10   15 YR 3/3   10   15 YR 3/3   10   15 YR 3/4   10   10   15 YR 3/4   10   10   10   10   10   10   10   1	gray fine sand black fine sand dark reddish black fine sand dark reddish black fine sand dark reddish black fine sand dark reddish black fine sand findicators for Property of the same sand findicators for Property of the same same sand findicators for Property of the same same same sand findicators for Property of the same same same same same same same sam	rown fine sand  coolematic Hydric Soils <sup>3</sup> : aga) (LRR O) A10) (LRR S) tic (F18) (outside MLRA 150A, E
E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ric Soil Indicators:  Histol (A1)	Location: PL=Pore Lining, M=Matrix  Location: PL=Pore Lining, M=Matrix  Indicators for Pr RR S, T, U)1 cm Muck (a T, U)2 cm Muck (vPiedmont FloAnomalous E (MLRA 153	c. coblematic Hydric Soils <sup>3</sup> : a9) (LRR O) dtic (F18) (outside MLRA 150A, E codplain Soils (F19) (LRR P, S, T)
5 YR 3/3  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ic Soil Indicators:	**Location: PL=Pore Lining, M=Matrix Indicators for Pr RR S, T, U)1 cm Muck (a T, U)2 cm Muck (a	c. c. coblematic Hydric Soils 3: a9) (LRR O) dic (F18) (burside MLRA 150A, E codplain Soils (F19) (LRR P, S, T)
e: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ic Soil Indicators:  distol (A1)	Location: PL=Pore Lining, M=Matrix Indicators for Pr RR S, T, U)1 cm Muck (a T, U)2 cm Muck (a O)Reduced VerPiedmont FloAnomalous E (MLRA 153	c. Poblematic Hydric Soils <sup>3</sup> : 199) (LRR O) 1410) (LRR S) 11ic (F18) (outside MLRA 150A, E 11ic (F18) (LRR P, S, T)
ic Soil Indicators:  iistol (A1)	Indicators for Pr RR S, T, U)1 cm Muck (a T, U)2 cm Muck (v O)Reduced VerPiedmont FloAnomalous E (MLRA 153	oblematic Hydric Soils <sup>3</sup> : a9) (LRR O) A10) (LRR S) tic (F18) (outside MLRA 150A, E oodplain Soils (F19) (LRR P, S, T)
ic Soil Indicators:  iistol (A1)	Indicators for Pr RR S, T, U)1 cm Muck (a T, U)2 cm Muck (v O)Reduced VerPiedmont FloAnomalous E (MLRA 153	oblematic Hydric Soils <sup>3</sup> : a9) (LRR O) A10) (LRR S) tic (F18) (outside MLRA 150A, E oodplain Soils (F19) (LRR P, S, T)
c Soil Indicators:         Polyvalue Below Surface (S8) (Istic Epidon (A2)           listic Epidon (A2)         Thin Dark Surface (S9) (LRR S)           lack Histic (A3)         Loamy Mucky Mineral (F1) (LR           lydrogen Sulfide (A4)         Loamy Gleyed Matrix (F2)           lydrogen Sulfide (A4)         Depleted Matrix (F3)           lydrogen Sulfide (A6)         Redox Dark Surface (F6)           lydrogen Sulfide (A4)         Depleted Matrix (F3)           lydrogen Sulfide (A4)         Depleted Matrix (F3)           lydrogen Sulfide (A4)         Depleted Dark Surface (F6)           lydrogen Sulfide (A4)         Depleted Dark Surface (F7)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A4)         Redox Depressions (F8)           lydrogen Sulfide (A5)	Indicators for Pr RR S, T, U)1 cm Muck (a T, U)2 cm Muck (v O)Reduced VerPiedmont FloAnomalous E (MLRA 153	oblematic Hydric Soils <sup>3</sup> : a9) (LRR O) A10) (LRR S) tic (F18) (outside MLRA 150A, I oodplain Soils (F19) (LRR P, S, T
Polyvalue Below Surface (S8) (  istic Epidon (A2)	RR S, T, U)1 cm Muck (a T, U)2 cm Muck (a O) Reduced VerPiedmont FloAnomalous E (MLRA 153	99) (LRR O) A10) (LRR S) tic (F18) (outside MLRA 150A, I oodplain Soils (F19) (LRR P, S, T
Itistic Epidon (A2)	T, U)2 cm Muck (/ O)Reduced VerPiedmont FlorAnomalous B (MLRA 153	A10) (LRR S) tic (F18) (outside MLRA 150A, I podplain Soils (F19) (LRR P, S, T
Alack Histic (A3)  Alack Histic (A3)  Alack Histic (A3)  Alack Histic (A3)  Alack Histic (A3)  Alack Histic (A3)  Alack Histic (A3)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Cem Mucky Mineral (A7) (LRR P, T, U)  Muck Presence (A8) (LRR U)  Cem Muck (A9) (LRR P, T)  Marl (F10) (LRR U)  Redox Dark Surface (F7)  Redox Depressions (F8)  Marl (F10) (LRR U)	O)Reduced VerPiedmont FloAnomalous E (MLRA 153	tic (F18) <b>(outside MLRA 150A,</b> I podplain Soils (F19) <b>(LRR P, S, T</b>
lydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Itratified Layers (A5)  Irganic Bodies (A6) (LRR P, T, U)  Cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Cm Muck (A9) (LRR P,T)  Marl (F10) (LRR U)  Marl (F10) (LRR U)	Piedmont Flo Anomalous E (MLRA 153	odplain Soils (F19) (LRR P, S, T
Stratified Layers (A5)  Depleted Matrix (F3)  Drganic Bodies (A6) (LRR P, T, U)  Com Mucky Mineral (A7) (LRR P,T,U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Com Muck (A9) (LRR P,T)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Marl (F10) (LRR U)	Anomalous E (MLRA 153	
Organic Bodies (Å6) (LRR P, T, U)	(MLRA 153	Idaht Loamy Soile (E20)
cm Mucky Mineral (A7) (LRR P,T,U)        Depleted Dark Surface (F7)           Muck Presence (A8) (LRR U)        Redox Depressions (F8)           cm Muck (A9) (LRR P,T)        Mart (F10) (LRR U)		
Aluck Presence (A8) (LRR U)        Redox Depressions (F8)           cm Muck (A9) (LRR P,T)        Mart (F10) (LRR U)	Red Parent N	
cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)		• •
	<del></del>	Dark Surface (TF12) (LRR T, U
		in in Remarks)
Depleted Below Dark Surface (A11)Depleted Orchric (F11) (MLRA		
hick Dark Surface (A12)Iron-Manganese Masses (F12)		
Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F13) (LRR P,	, U)	
Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17) (MLRA 151		
Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 1	DA, 150B)	
Sandy Redox (S5)Piedmont Floodplain Soils (F19		
Stripped Matrix (S6)Anomalous Bright Loamy Soils	20) (MLRA 149A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)		
rictive Layer (If observed):		
Type:	l	
Depth (inches):arks:	Hydric Soil Present? Yes	No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Da	te: 9/22/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Po	int:Q
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range	e: 8 28S 17E		
Landform (hillslope, terrace, etc.): N/.	Α	Local relief (concave, con	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.06848	1 Long:82.	629857		Datum: WGS84
Soil Map Unit Name: Myakka fine sand			NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site type	ical for this time of year?	Yes	_ No	(If no, explain	n in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	s normal?	YesNo
Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed, explain	any answers	in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant featur	es, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes✓	_No
Wetland Hydrology Present?	Yes No				
Remarks:					
		•			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum	of two required)
Primary Indicators (minimum of one is required; of	check all that apply)	•		Cracks (B6)	or two rodanear
✓ Surface Water (A1)	Water-Stained Leaves	(B9)			ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	(50)	Drainage Pa	-	(,
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (	C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	• •	Crayfish Bur	,	
Drift Deposits (B3)	Presence of Reduced I				I Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	• •	<del></del>	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema		FAC Neutral		
Field Observations:		<del></del>			
Surface Water Present?	Yes No	Depth (inches): 0-2			
Water Table Present?	Yes ✓ No	Depth (inches): 0			
Saturation Present?	Yes✓No		Wetland		•
(includes capillary fringe)			- Hydrology Present?	Yes ✓	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			
Remarks:					
Nemarks.					
``					

VEGETATION - Use scientific na	mes of plants			Si	ampling Point:	Q
Tree Stratum (Plot size: )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species		
2.				That Are OBL, FACW, or FAC:	<u>2</u>	(A)
3.				Total Number of Dominant		
4.	-			Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cove		Total % Cover of:		
Sapling Stratum (Plot size:	_	- Total Cove	<del>-</del> 1	OBL species	Multiply by: x1=	
				FACW species		_
1. 2.				FAC species	x2=	_
	<del>-</del> ———			· · · · · · · · · · · · · · · · · · ·		-
3.				FACU species	_ x4=	-
4.				UPL species	_ ×5=	<b>-</b>
5.	<del>-</del>			Column Totals:	_(A)	_ <sup>(B)</sup>
6.		<del></del>		<b>∤</b>		
7.				Prevalance index = B/A =		
	. 0	= Total Cove	er	Hydrophytic Vegetation Indic		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.		
2.				Problematic Hydrophytic	c Vegetation¹ (Exp	olain)
3.				1		
4.				<sup>1</sup> Indicators of hydric soil and w		nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ata:	
7						
	0	= Total Cove	er	Tree- Woody plants, excluding w	oody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		. (7.6
Ludwigia spp.	50	yes	OBL	cm) or larger in diameter at brea	st height (DBH).	
2. Panicum repens	30	yes	FACW	Sapling- Woody plants, excludir	ig woody vines,	
3. Rhyncospora spp.	5	no	FACW	approximately 20 ft (6m) or more	in height and less	than 3
Andropogon glomeratus	5	no	FACW	in. (7.6 cm) DBH.		
5. Centella asiatica	5	no	FACW	Shrub- Woody plants, excluding	woody vines,	
6. Ludwigia alata	5	no	OBL	approximately 3 to 20 ft (1 to 6 n	n) in height.	
7.				Herb- All herbaceous (non-wood	v)nlants including	
8.				herbaceous vines, regardless of		odv
9.				plants, except woody vines, less		
10.				(1 m) in height.		-
11.				Woody vine- All woody vines, re	gardless of height.	
12.	-			1	· • · · · · · · · · · · · · · · · · · ·	
	100	= Total Cove		1		
Woody Vine Stratum (Plot size:_		10141 0011	,,	1		
1.				1		
2.				1		
3.						
<u>3.</u> 4.	-			1,,,,,,,,,,,,,,,		
<u>4.</u> 5.				Hydrophytic	. / No	
J.		_ T-4-1 O		Vegetation Present? Yes	s <u>√</u> No	<del></del>
		= Total Cove	er	<u> </u>		
Remarks: (If observed, list morph Percent cover estimates based of		-	roader co	mmunity		
i ercent cover estiniates pased o	m meanuening s	survey of the t	nuauel col	mmunity.		

County/soil: Hillsborough- Myakka Sampling Point: SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches Color (moist) Color (moist) Remarks very dark gray fine sand 10 YR 3/1 10 YR 6/1 5-20 gray fine sand 20-25 N 2/0 black fine sand dark reddish brown fine sand 25-30 5 YR 3/3 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. \*Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: Hydric Soil Indicators: 1 cm Muck (a9) (LRR O) Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Thin Dark Surface (S9) (LRR S, T, U) Histic Epidon (A2) 2 cm Muck (A10) (LRR S) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Black Histic (A3) Loamy Gleyed Matrix (F2)
Depleted Matrix (F3) \_Hydrogen Sulfide (A4) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Red Parent Material (TF2) ✓ Muck Presence (A8) (LRR U) Redox Depressions (F8) \_Very Shallow Dark Surface (TF12) (LRR T, U) \_1 cm Muck (A9) (LRR P,T) \_Marl (F10) (LRR U) \_Other (Explain in Remarks) \_Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) \_Iron-Manganese Masses (F12) (LRR O, P,T) 3 \_Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Sandy Redox (S5) \_Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type Hydric Soil Present? Depth (inches): Yes No Remarks:

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date:	9/22/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	R
Investigator(s): Justin Styer, Blake Meineck	е	Section, Township, Range	: 8 28\$ 17E		
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, conv	vex, none): none	Slo	pe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.069045	5Long:82.6	28073	Dat	tum: WGS84
Soil Map Unit Name: Myakka fine sand			NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	(If no, explain in F	Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		sNo
Are Vegetation, Soil,		naturally problematic?	(If needed, explain	any answers in Re	emarks)
SUMMARY OF FINDINGS - Attach sit			ansects, impor	tant features,	etc.
Hydrophytic Vegetation Present?	YesNo		· •	·	
Hydric Soil Present?	YesNo	Is the Sampled Area·w	ithin a Wetland?	YesNo	
Wetland Hydrology Present?	Yes✓No				
Remarks:		<del></del>			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ore (minimum of tw	n required\
Primary Indicators (minimum of one is required; of	hock all that anniv)		Surface Soil		io required?
Surface Water (A1)	Water-Stained Leaves	(RQ)		etated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	(03)	Drainage Pat	•	dilace (Bo)
✓ Saturation (A3)	Marl Deposits (B15) (LI	DD 111	Moss Trim Li		
Water Marks (B1)	Nan Deposits (B13) (E1			Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burr		
Drift Deposits (B3)	Presence of Reduced I				acon (CO)
<del></del>		` ,	Saturation Visible on Aerial Imagery (Citils (C6)Geomorphic Position (D2)		
Algal Mat or Crust (84)	Recent Iron Reduction i	, ,		, ,	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui		
mandation violate on violatinagery (21)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:	v. No /	Double (Southern)			
Surface Water Present?	Yes No Yes No		-		
Water Table Present?			Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)		(	Present?	Yes ✓ No	
Describe Recorded Data (stream gauge, monitor	ing well, aenal photos, previous	s inspections), if available:			
Remarks:					
	•				

VEGETATION - Use scientific na	mes of plants			Şa	mpling Point:	F
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1		•		Number of Dominant Species	_	
2.				That Are OBL, FACW, or FAC:	<u>1</u>	(A)
		<del></del>		Total Number of Dominant		
3.				4	1	(B)
4.				Species Across All Strata:	_	
5.				Percent of Dominant Species	100.00	(A/B
6.				That Are OBL, FACW, or FAC:	100.00	(, , ,
7.				Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:			•	OBL species	x1=	
	<u> </u>			·		_
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	
5.				Column Totals:	(A)	(B)
6.					. ( )	_ \-'
7.				Prevalance Index = B/A =		
1.	- ——				-4	
	U	= Total Cove	r	Hydrophytic Vegetation Indica	ators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0	1	
2.				Problematic Hydrophytic	Vegetation <sup>1</sup> (Exp	lain)
3.				<del>                                     </del>	` ,	,
4.				Indicators of budgio sail and wa	Hand budralage m	
5.				Indicators of hydric soil and we		iust
				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ta:	
7.				]		
	0	= Total Cove	r	Tree- Woody plants, excluding we	oody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more	in height and 3 in.	(7.6
Pontederia cordata	25	yes	OBL	cm) or larger in diameter at breas	t height (DBH).	
2.				Sapling- Woody plants, excluding	woody vines	
				approximately 20 ft (6m) or more		than '
3.				in. (7.6 cm) DBH.	iii neigiit and iess	uiaii c
4.				4 ` ′		
5.				Shrub- Woody plants, excluding v		
6.				approximately 3 to 20 ft (1 to 6 m)	) in height,	
7.				Herb- All herbaceous (non-woody	oplants including	
8.	·			herbaceous vines, regardless of s		dv
9.	• ———			plants, except woody vines, less t		
<del></del>	-			(1 m) in height.		
10.				1` ' "		
11.				Woody vine- All woody vines, req	gardiess of height.	
12.				]		
	25	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)					
1				1		
2.	· ——			1		
۷.						
				4		
3.				Hydrophytic		
3. 4.				Ingarophytic		
					No	
4.		= Total Cove			No	<u></u>

	il: Hillsborough- Myakk	ка						Sampling Point:
SOIL	i-ti (Dib-	4-46-4-	-46			a and iwa the abo	names of indicators \	Sampling Point.
	escription: (Describe	to the de	•	ament ur	ie indicator or	CONTINUIUM and	Sence of Indicators.;	
Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	_%_	Type	Loc²	Texture	Remarks
0-5	10 YR 3/1							very dark gray fine sand
5-20	10 YR 6/1							gray fine sand
20-25	N 2/0							black fine sand
25-30	5 YR 3/3							dark reddish brown fine sand
		-						
	·	-						
Type: C=	Concentration, D=Dep	letion, RM	N=Reduced Matrix, (	CS=Cove	red or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore	<u> </u>
	oil Indicators:							ndicators for Problematic Hydric Soils 3:
Histol	i (A1)			Poly	value Below Su	urface (S8) (LRR	S, T, U) _	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (	(S9) <b>(LRR S, T, U</b>	J) _	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loan	ny Mucky Miner	ral (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	ogen Sulfide (A4)			Loan	my Gleyed Matri	ix (F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				leted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR F	P, T, U)		Redo	ox Dark Surface	é (F6)	-	(MLRA 153B)
5 cm	Mucky Mineral (A7) (L	RR P.T.U	A	Depl	leted Dark Surfa	ace (F7)		Red Parent Material (TF2)
i—	•				ox Depressions		-	Very Shallow Dark Surface (TF12) (LRR T, U)
	Presence (A8) (LRR				•	, ,	=	
	Muck (A9) (LRR P,T)				l (F10) (LRR U)		_	Other (Explain in Remarks)
	eted Below Dark Surface	ce (A11)				11) (MLRA 151)		
Thick	Dark Surface (A12)			Iron-	Manganese Ma	asses (F12) <b>(LRR</b>	R O, P,T) <sup>3</sup>	l
Coast	t Prairie Redox (A16) (	(MLRA 15	0A)	Umb	oric Surface (F1	13) (LRR P, T, U)	)	
Sand	y Mucky Mineral (S1) (	LRR O, S	a	Delta	a Orchric (F17)	(MLRA 151)		
	y Gleyed Matrix (S4)	L	,	_		8) (MLRA 150A,	150R)	
	y Redox (S5)					n Soils (F19) (ML		
	ped Matrix (S6)		-				) (MLRA 149A, 153C,	1630)
	Surface (S7) (LRR P.	ети	•		Haluus Dingin _	Dairiy Dono (,	) (MILION INVESTIGATE)	1830)
	ve Layer (If observed)	<u> </u>					1	
10000	Type:	<i>)-</i>						
	Depth (inches):						Hydric Soil Present	? Yes ✓ No .
Remarks:							myune oon i resens	160 7 110
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Applicant/Owner: Progress Energy Florida, Inc. State: F. Sampling Point: S. Investigator(s):iustin Styer, Blake Melnecke	Investigator(s):   Justin Styer, Blake Meinecke   Section, Township, Range:   28S 17E	Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Hillsborou	ıgh :	Sampling Date: 9/22/09
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): Subregion (LRR or MLRA): LRRU Lat: 28.069714 Long: _82.626383 Datum: _WGS& Soil Map Unit Name: _Myakka fine_sand	Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none):	Applicant/Owner: Progress Energy Florida, Inc.	State: FL Sampling Point: S			
Subregion (LRR or MLRA): LRR U Lat: 28.069714 Long: -82.626383 Datum: WGS8-Soil Map Unit Name: Myakka fine sand Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no. explain in Remarks) Are Vegetation Soil, or Hydrology significantly disturbed? Are circumstances normal? Yes No	Subregion (LRR or MLRA): LRR U	Investigator(s): Justin Styer, Blake Meined	ke	Section, Township, Range	: 8 28S 17E	
Soil Map Unit Name: Myakka fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Possible or Agriculture of the Soil or Hydrology present?  Are Vegetation Present? Yes No naturally problematic?  Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B16)  Water Marks (B1) Hydrologon Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Shallow Aquatiar (D3)  Field Observations:  Surface Water Present?  Yes No Depth (inches): 0-24  Wettand  Wettand  Wettand  Wettand  Wettand  Wettand  Wettand  Wettand  Wettand  Wettand  NWI classification: NA  Are circumstances normal? Yes No Depth (inches): 0-24  Wets	Soil Map Unit Name: Makka fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation  Soil  or Hydrology  significantly disturbed? Are circumstances normal? Yes No Are Vegetation  Soil  or Hydrology  naturally problematic?  (If no, explain in Remarks)  Are circumstances normal? Yes No  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No  Hydrophytic Vegetation Present?  Yes No  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (38)  Surface Water (A1)  Water-Stained Leaves (89)  Surface Water (A1)  Water Table (A2)  Aqualic Fauna (B13)  Presence of Reduced Iron (C4)  Aqualit Reamarks (B1)  Hydrogen Sulfide Odor (C1)  Price Reduction in Tilled Soils (C6)  Geomorphic Position (X2)  Iron Deposits (B3)  Presence of Reduced Iron (C4)  Aqual Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Muck Surface (C7)  Wetland Hydrology  Present?  Yes No Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Landform (hillslope, terrace, etc.): N	ΆΑ	Local relief (concave, con-	vex, none): <u>none</u>	Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No (If no, explain in Remarks)  Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrology Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Valer (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B16)  V Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Field Observations:  Surface Water Present? Yes No Depth (inches): 0-24  Wetland Wetland	Are cimatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation or Hydrology naturally problematic?  Are Vegetation or Hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Sultant Hydrology Present?  Wetland Hydrology Present? Yes No Surface Water (A1) Surface Water (A1) Surface Water (A1) Surface Water (A1) Aquatic Fauna (B13) Drainage Patterns (B16)  Water Statington (A3) Mart Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Sediment Deposits (B2) Ordingted Phicospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Apal Mat or Crust (B4) Resent Iron Remarks)  Field Observations:  Surface Water Present? Yes No Depth (inches): 0 Water Stating Present? Yes No Depth (inches): 0 Water Marks (Present? Yes No Depth (inches): 0 Water Marks (Present? Yes No Depth (inches): 0 Present? Yes No Depth (inches): 0 Water Marks (Present? Yes No Depth (inches): 0 Water Marks (Present? Yes No Depth (inches): 0 Present? Yes No Depth (inches): 0 Water Marks (Present? Yes No Depth (inches): 0 Present	Subregion (LRR or MLRA): LRR U	Lat: _28.069714	4 Long: <u>-82.6</u>	26383	Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No No Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Surface Soil Present? Yes No Surface Soil Cracks (B6)  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)  Figh Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Field Observations:  Surface Water Present? Yes No Depth (inches): 0-24  Wetland Deposits (Reserved) Depth (inches): 0-24  Wetland Deposits (Reserved) Depth (inches): 0-24  Wetland Deposits (Reserved) Presente?	Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Suthy No Soil Soil Present? Yes No Soil Present	Soil Map Unit Name: Myakka fine sand			NWI classification:	NA
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No No Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Surface Soil Present? Yes No Surface Soil Cracks (B6)  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)  Figh Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Shallow Aquitard (D3)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Field Observations:  Surface Water Present? Yes No Depth (inches): 0-24  Wetland Deposits (Reserved) Depth (inches): 0-24  Wetland Deposits (Reserved) Depth (inches): 0-24  Wetland Deposits (Reserved) Presente?	Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Suthy No Soil Soil Present? Yes No Soil Present	Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes	No	(If no, explain in Remarks)
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) ✓ Surface Water (A1) Water Table (A2) — Aquatic Fauna (B13) — Water Marks (B1) — Water Marks (B1) — Drift Deposits (B3) — Presence of Reduced Iron (C4) — Algal Mat or Crust (B4) — Recent Iron Reduction in Tilled Soils (C6) — Recent Iron Reduction in Tilled Soils (C6) — Surface Water (B5) — Thin Muck Surface (C7) — Shallow Aquitar (D3) — Inon Deposits (B5) — Thin Muck Surface (C7) — Shallow Aquitar (D3) — Test (D5) — Shallow Aquitar (D3) — Presence of Reduced Iron (C4) — Saturation (N3) — Recent Iron Reduction in Tilled Soils (C6) — Geomorphic Position (D2) — Inon Deposits (B5) — Thin Muck Surface (C7) — Shallow Aquitard (D3) — FAC Neutral Test (D5)  Field Observations: Surface Water Present?  Yes ✓ No — Depth (inches): 0-24 Wettand Pyets on Living Roots (D3) — Depth (inches): 0-24 Wettand Pyets (P5) — Wettand	Summary OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.	Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances r	normal? YesNo
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present?  Wetland Hydrology Indicators: Remarks:  HYDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of two required) Yes	Hydrophytic Vegetation Present? Hydric Soil Present? Hydric Soil Present? Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required) Surface Soil Cracks (B6)  ✓ Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Jeriange Patterns (B10)  ✓ Saturation (A3) Mand Deposits (B15) (LRR U) Mater Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Titled Soils (C6) Iron Deposits (B5) I	Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed, explain a	any answers in Remarks)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15)  Water Marks (B1)  Water Marks (B1)  Drift Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Inundation Visible on Aerial Imagery (B7)  Presence Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland?  Yes No Depth (inches): Uetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland	Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Water (A1)  Water Stained Leaves (B9)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Water Marks (B1)  Hydrogen Suffide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Agualt For Reduction in Tilled Soils (C6)  Algal Mat or Crus (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  FIeld Observations:  Surface Water Present?  Yes No Depth (inches): 0				ansects, importa	ant features, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  Water Aduatic Fauna (B13)  Marl Deposits (B1)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Ves No Depth (inches): 0_  Wetland Hydrology Present?  Wes No Depth (inches): 0_  Wetland  Wetland Hydrology Present?  Wes No Depth (inches): 0_  Wetland  Wetland  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland	Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13)  Drainage Patterns (B10)  Asturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Agail Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Field Observations:  Surface Water Present?  Yes No Depth (inches): Outland Wetland Hydrology Present?  Yes No Depth (inches): Uestland Wetland Hydrology Present?  Yes No Depth (inches): Uestland Wetland Hydrology Present?  Yes No Depth (inches): Uestland Hydrology Present?  Yes No Depth (inches): Uestland Hydrology Present?  Yes No Depth (inches): Uestland Hydrology Present?  Yes No Depth (inches): Uestland Hydrology Present?  Yes No	Hydrophytic Vegetation Present?	Yes No			
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Stained Leaves (B9)  Saturation (A3)  Water Deposits (B1)  Water Marks (B1)  Drift Deposits (B2)  Drift Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland  Wetland	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation Vasible on Aerial Imagery (B7)  Algal Mat or Crust (B4)  Indicator (B8)  Algal Mat or Crust (B4)  Indicator (B8)  Algal Mat or Crust (B4)  Indicator (B8)  Algal Mat or Crust (B4)  Indicator (B8)  Algal Mat or Crust (B4)  Indicator (B8)  Algal Mat or Crust (B4)  Indicator (B8)  Algal Mat or Crust (B4)  Indicator (B8)  Indicator (B8)  Algal Mat or Crust (B4)  Indicator (B8)  Indicator (B1)	Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  High Water Table (A2)  ✓ Saturation (A3)  Marl Deposits (B15) (LRR U)  Sediment Deposits (B2)  Drift Deposits (B3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Ves ✓ No Depth (inches):  Oecondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Iron Deposits (B5)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Staturation (A3)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Water Marks (B1)  Drainage Patterns (B10)  Water Marks (B1)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0-24  Wetland  Hydrology  Present? Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydrology Present?	Yes No	]		
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)					
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches): 0-24  Wetland  Wetland	Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Mand Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Water Present?  Yes No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Moss Trim Lines (B10)  Sparsely Vegetated Concave Surface (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Moss Trim Lines (B10)  Moss Trim Lines (B10)  Sparsely Vegetated Concave Surface (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Moss Trim Lines (B10)  Moss Trim Lines (B10)  Sparsely Vegetated Concave Surface (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Sparlows (C8)  Sparlows (C8)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Cr					
✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Yes ✓ No Depth (inches): 0-24       Wetland         Water Table Present?       Yes ✓ No Depth (inches): 0       Wetland	✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Yes ✓ No Depth (inches):	l ' ''				<u> </u>
High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes  No Depth (inches): 0  Wetland  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B10)  Moss Trim Lines (B10)  Moss Trim Lines (B10)  Moss Trim Lines (B10)  Moss Trim Lines (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes  No Depth (inches): 0  Wetland	High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Presence Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)					• •
✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Yes ✓ No Depth (inches): 0-24       Wetland         Water Table Present?       Yes ✓ No Depth (inches): 0       Wetland	✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        V Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes✓ No Depth (inches):0	<del></del>	***************************************	(B9)		• •
Water Marks (B1)	Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)	<del></del>				
Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes No Depth (inches): 0  Wetland  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Wetland	Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches): 0-24  Water Table Present?  Yes  No  Depth (inches): 0  Wetland Hydrology (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	<del></del>		•		, ,
Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes No Depth (inches):	Drift Deposits (B3)	<del></del>	<u> </u>	` '		• •
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)	Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)	Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)		' '
Iron Deposits (B5)	Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes /_ NoDepth (inches):O  Water Table Present? Yes /_ NoDepth (inches):O  Saturation Present? Yes /_ NoDepth (inches):O  Wetland Hydrology (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Saturation Visi	ible on Aerial Imagery (C9)
/ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/NoDepth (inches):0  Water Table Present? Yes/NoDepth (inches):0  Seturation Present? Yes/NoDepth (inches):0  Wetland	✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Surface Water Present?       Yes ✓ No Depth (inches): 0-24         Water Table Present?       Yes ✓ No Depth (inches): 0 D	<del></del> -				
Field Observations:  Surface Water Present?  Yes	Field Observations:  Surface Water Present? Yes	<del></del>				• •
Surface Water Present? Yes	Surface Water Present? Yes _	<del></del>	Other (Explain in Rema	rks)	FAC Neutral T	est (D5)
Water Table Present? Yes / No Depth (inches): 0 Wetland	Water Table Present? Yes _ ✓ No Depth (inches): _ 0 _ Wetland					
Solution Property Yes V No. Doubly (inches): 0	Saturation Present? Yes No Depth (inches): 0				-	
Saturation Present? Yes Vo Depth (inches): 0 Hydrology	(includes capillary fringe) Present? Yes No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				Wetland	
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Yes/ No	_ Depth (inches):0		
		Li			Present?	Yes No
						•

VEGETATION - Use scientific na	mes of plants			Sampling Point:S
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:
Tree Stratum (Plot size:)	Cover	Species?	Status	
Quercus virginiana	85	yes	FACU	Number of Dominant Species
2.			17.00	That Are OBL, FACW, or FAC: 5 (A)
	<del></del>			Total Number of Dominant
3.				- 5 (B)
4.				Species Across All Strata:
5.				Percent of Dominant Species 100.00 (A/B)
6.				That Are OBL, FACW, or FAC:
7.				Prevalance Index worksheet:
	85	= Total Cove	r	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:	)			OBL species x1=
1. Salix spp.	10	yes	FACW	FACW species x2=
2.				FAC species x3=
3.		-		FACU species x4=
4.	- — —			UPL species x5=
				<del></del>
5.				Column Totals: (A) (B)
6.				4
7.				Prevalance Index = B/A =
	10	= Total Cove	:r	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:	_) .			✓ Dominance Test is 50%
Myrica cerifera	10	yes	FAC	Prevalence Index is ≤3.01
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
4.				Indicators of hydric soil and wetland hydrology must
5.	<u> </u>			be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
	- —			Definitions of vegetation strata.
7.				
	10	= Total Cove	ır	Tree- Woody plants, excluding woody vines,
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7.6
Ludwigia peruviana	25	yes	OBL	cm) or larger in diameter at breast height (DBH).
<ol><li>Sesbania spp.</li></ol>	10	yes	FAC	Sapling- Woody plants, excluding woody vines,
3. Osmunda cinnamomea	5	no	FACW	approximately 20 ft (6m) or more in height and less than 3
Urochloa mutica	5	no	NL	in. (7.6 cm) DBH.
5.	- —			Shrub- Woody plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7.	- ——			
8.	- ——			Herb- All herbaceous (non-woody)plants, including
				herbaceous vines, regardless of size. Includes woody
9.	- ———			plants, except woody vines, less than approximately 3 ft (1 m) in height.
10.				<u></u>
11.	_			Woody vine- All woody vines, regardless of height.
12.				
1	45	= Total Cove	er	
Woody Vine Stratum (Plot size:	)			
1				
2.				1
3.	<del></del>			
				<del>.</del>
4.	- ——			Hydrophytic
5.				Vegetation Present? Yes <u>√</u> No
		= Total Cove	er	
Remarks: (If observed, list morph	iological adapta	itions below).		
Percent cover estimates based o	n meandering s	survey of the b	roader co	mmunity.

County/soil: Hillsborough- Myakka

SOIL								Sampling Point: S
Profile De	scription: (Describe	to the dep	th needed to docu	ment th	e indicator or	confirm the abs	sence of indicators.	)
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	_%_	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	10 YR 3/1							year dady aray fine and
								very dark gray fine sand
5-20	10 YR 6/1							gray fine sand
20-25	N 2/0							black fine sand
25-30	5 YR 3/3	. —				<del></del>		dark reddish brown fine sand
								-
								-
Type: C=0	Concentration, D=Dep	letion. RM:	Reduced Matrix. C	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.
	il Indicators:		, ,					Indicators for Problematic Hydric Soils 3:
Histol				Poly	alue Below Sur	face (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)		-			9) (LRR S, T, L		2 cm Muck (A10) (LRR S)
	Histic (A3)		_			al (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		-		ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		-		eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR F	P, T, U)	-		x Dark Surface			(MLRA 153B)
	Mucky Mineral (A7) (L		_		eted Dark Surfa	` '		Red Parent Material (TF2)
_	Presence (A8) (LRR		-		x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	٠,	_		(F10) (LRR U)	(10)		Other (Explain in Remarks)
			-					Other (Explain in Remarks)
	ted Below Dark Surface	æ (A11)	_		-	11) (MLRA 151)		_
	Dark Surface (A12)		-		-	sses (F12) (LRF	•	<sup>3</sup> l
	Prairie Redox (A16) (		-		•	3) (LRR P, T, U)		
Sandy	Mucky Mineral (S1) (	LRR O, S)	_	Delta	Orchric (F17)	(MLRA 151)		
	Gleyed Matrix (S4)		_	Redu	iced Vertic (F18	B) (MLRA 150A,	150B)	
	Redox (S5)		=			Soils (F19) (ML		
Stripp	ed Matrix (S6)		-	Anon	nalous Bright Lo	oamy Soils (F20)	(MLRA 149A, 153C	, 153D)
Dark S	Surface (S7) (LRR P,	S, T, U)						
Restrictive	e Layer (If observed)	:						
	Type:							
	Depth (inches):						Hydric Soil Presen	t? Yes <u> </u>
Remarks:								
i								
İ								
				٠.				
						•		
l								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Date:_	9/22/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	T
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range		- , , , _	
Landform (hillslope, terrace, etc.): N//	1	Local relief (concave, conv		Slo	pe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.069994	•			tum: WGS84
Soil Map Unit Name: Myakka fine sand	200. 200.000		NWI classification:		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes _✓	_ No	(If no, explain in I	Pemarks)
· · ·	or Hydrology	· · · · · · · · · · · · · · · · · · ·	Are circumstances		s ✓ No
,,	or Hydrology	=	(If needed, explain		
SUMMARY OF FINDINGS - Attach sit			•	•	•
Hydrophytic Vegetation Present?	Yes/No	I point roodtions, tr	unocoto, impor	tunt routures,	010.
Hydric Soil Present?	Yes_ ✓ No	Is the Sampled Area w	ithin a Wetland?	Yes ✓ No	
Wetland Hydrology Present?	Yes_ ✓ No	•		<del></del>	
Remarks:	110	÷L			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate		vo required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Saturation V	isible on Aerial Ima	agery (C9)
Aigal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (85)	Thin Muck Surface (C7	)	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	ırks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	_ Depth (inches):			
Water Table Present?	Yes No	_ Depth (inches):			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	·
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:			
Remarks:					
Ì					

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
<u>.                                    </u>				Species Across All Strata:	(B)
5.				Percent of Dominant Species #DIV/0!	(A/B
6.				That Are OBL, FACW, or FAC:	
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL speciesx1≂	_
1.				FACW speciesx2=	_
2.				FAC species x3=	
3.				FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	(B)
6.					- (-,
<del>7</del> .				Prevalance Index = B/A =	
1.		= Total Cove		Hydrophytic Vegetation Indicators:	
Charle Chartery (Diet sing)	`	- rotal cove	,		
Shrub Stratum (Plot size:				Dominance Test is 50%	
1				Prevalence Index is ≤3.01	
2.				✓ Problematic Hydrophytic Vegetation¹ (Expl	lain)
3.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology m	ust
5				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
Herb Stratum (Plot size:)	0	= Total Cove	r	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in.	<i>(</i> 7.6
1. Chara spp.	10	ves	NL	cm) or larger in diameter at breast height (DBH).	(1.0
· - · · · · · · · · · · · · · · · · · ·		yes	INL		
2.				Sapling- Woody plants, excluding woody vines,	
3.				approximately 20 ft (6m) or more in height and less t in. (7.6 cm) DBH.	ınan 3
4.				` '	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wood	dy
9.				plants, except woody vines, less than approximately	3 ft
10.				(1 m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.				,	
	10	= Total Cove	 F		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
_				Vegetation Present? Yes <u>√</u> No	
5.				vegetation Fresentr 168NONONO	

IL.								S	Sampling Point:
	cription: (Describe to the	•	ument th	e indicator or	confirm the abs	ence of indicators.)			
pth	Matrix	Redox Features	-,	÷1	<del> </del>			_	
ches)	Color (moist) %	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc	Texture		Rema	rks
i	10 YR 3/1						very dark gray	fine sand	
.0	10 YR 6/1						gray fine sand	iiio ou.iu	
25	N 2/0	<del></del>					black fine sand		
30	5 YR 3/3						dark reddish br		
	<u> </u>						dan readon	OWN III C 22	
			—						
·						-			
pe: C=C	oncentration, D=Depletion,	RM=Reduced Matrix, 0	CS=Cove	red or Coated S	Sand Grains.	Location: PL=Pore	Lining, M=Matrix		
	Indicators:			-			ndicators for Pro		dric Soils 3:
Histol (			Poly	vatue Betow Su	face (S8) (LRR		1 cm Muck (a	•	
- `	pidon (A2)				S9) (LRR S, T, U		2 cm Muck (A		
_	Histic (A3)				al (F1) (LRR O)	, -			ide MLRA 150A, B)
	en Sulfide (A4)			ny Gleved Matri		-			F19) (LRR P, S, T)
						-			
	ed Layers (A5)	n		eted Matrix (F3		_	Anomalous B		oils (F20)
	c Bodies (A6) (LRR P, T, U			ox Dark Surface	, ,		(MLRA 153)	•	
_5 cm M	lucky Mineral (A7) (LRR P,	T,U)	Depl	eted Dark Surfa	ice (F7)	_	Red Parent M	laterial (TF2)	
Muck F	Presence (A8) (LRR U)		Redo	ox Depressions	(F8)		Very Shallow	Dark Surface (	(TF12) (LRR T, U)
_	tuck (A9) (LRR P,T)		Mart	(F10) (LRR U)		_	Other (Explain		, ,, , ,
_		4)	_		44) (84) (3.8.454)	_		,	
	ed Below Dark Surface (A1	1)		•	11) (MLRA 151)	- D.T.			
_	Dark Surface (A12)			•	sses (F12) (LRR	O, P,T) 3	l		
_Coast F	Prairie Redox (A16) (MLRA	\ 150A)	Umb	ric Surface (F1	3) (LRR P, T, U)				
Sandy	Mucky Mineral (S1) (LRR (	D, S)	Delta	a Orchric (F17)	(MLRA 151)				
	Gleyed Matrix (S4)	-, -,			B) (MLRA 150A,	150B)			
	Redox (S5)				Soils (F19) (ML				
_	· ·						450D)		
	d Matrix (S6)		Anor	nalous Bright L	oamy Soils (F20)	(MLRA 149A, 153C,	1530)		
	urface (S7) (LRR P, S, T, U	J)							
	Layer (If observed):								
1	Гуре:					Hydric Soil Present	? Yes	X No	
	Depth (inches):								
marks:									

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Hillsboro	ıgh	_Sampling Date:_	9/22/09	
Applicant/Owner: Progress Energy Florida, Inc.	·	State: FL Sampling Point: U				
Investigator(s): Justin Styer, Blake Meinec	ke	Section, Township, Range	: <u>5 28S 17E</u>			
Landform (hillstope, terrace, etc.): N	'A	Local relief (concave, con-	vex, none): none	Slo	ppe (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.07310	9 Long: <u>-82.6</u>	17422	Da	tum: WGS84	
Soil Map Unit Name: Malabar fine sand			NWI classification:	: <u>NA</u>		
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes✓	_ No	(If no, explain in l	Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Ye	s/No	
Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed, explain	any answers in R	emarks)	
SUMMARY OF FINDINGS - Attach si			ansects, impor	rtant features,	etc.	
Hydrophytic Vegetation Present?	Yes/ No					
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland?	YesNo		
Wetland Hydrology Present?	Yes No					
Remarks:						
			•			
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	wn required)	
Primary Indicators (minimum of one is required;	check all that anniv)		Surface Soil		<del>to required</del>	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	<del></del>	getated Concave S	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	(55)	Drainage Pa	_	Surface (BO)	
✓ Saturation (A3)	Mari Deposits (B15) (Li	DD III	Moss Trim L			
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bun			
Drift Deposits (B3)	Presence of Reduced I		—	isible on Aerial Ima	200v (CQ)	
<del></del>	Recent Iron Reduction	` ,		Position (D2)	igery (Ca)	
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C7		Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	· · · · · · · · · · · · · · · · · · ·				
Field Observations:	Other (Explain in Neme		TAC NEBILA	1 (50 (50)		
Surface Water Present?	Yes∕ No	Depth (inches): 0-24				
Water Table Present?	Yes No		1			
Saturation Present?	YesNo		Wetland			
(includes capillary fringe)		Dopan (#10/100)	Hydrology Present?	Yes ✓ No		
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previou	s inspections), if available:	1. 1000111	100		
Remarks:						
, tomano.						
		,				
		-				
		•				

Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Cover	Species?	Status			
			Number of Dominant Species	•	/A\
,			That Are OBL, FACW, or FAC:	2	(A)
			Total Number of Dominant		
			Species Across All Strata:	<u>3</u>	(B)
			Percent of Dominant Species		
			1 '	<u>100.00</u>	(A/B
· <del></del>					
	= Total Cove	er .		Multiply by:	
	101010010	· ·			
			· —		_
			- ·		_
	<del></del>		· · —		-
		•	4 · · · · · · · · · · · · · · · · · · ·		-
	<del></del>		· · · · · · · · · · · · · · · · · · ·		– (B)
·			Coldinii Totals.		_(0)
. ——			Brouglance Index = B/A =		
	= Total Cove			tore:	
,	- Total Cove	<b>21</b>		tors.	
-/		EAC			
15	yes	FAC	<del>                                     </del>	_	
			Problematic Hydrophytic	vegetation (Exp	olain)
	<del></del>		l <sub>1</sub> , , , , , , , , , , , ,		
					nust
. ——			Definitions of Vegetation Strati	a:	
			4		
15	= Total Cove	er	, , ,		<i>(</i> <b>7 0</b>
					(7.6
			4 ′ T	• , ,	
			1	n height and less	than :
			<b>4</b> ` ′		
			approximately 3 to 20 ft (1 to 6 m)	in height.	
5	no	FACW	<b>-1</b> ' ' ' '	, ,	
				an approximately	y 3 ft
			], , ,		
-			Woody vine- All woody vines, rega	ardless of height.	
	= Total Cove	er			
			1		
			]		
-					
-			Hydrophytic		
. ——				No	
			vegetation riesent: 160		<del></del>
	Cover  0  15  65  20  15  10  5  5  125	Cover Species?	Cover   Species?   Status	Number of Dominant Species	Number of Dominant Species   That Are OBL, FACW, or FAC: 3

County/soil: Hillsborough-	Malabar
SOIL	

SOIL		Sampling Point:U
Profile Description: (Describe to the depth needed to d	ocument the indicator or confirm the absence of ind	icators.)
Depth Matrix Redox Feature		
(inches) Color (moist) % Color (moist)	% Type¹ Loc² Textui	re Remarks
0-4 10 YR 4/1		dark gray fine sand
4-12 10 YR 6/2		light grayish brown fine sand
12-30 10 YR 6/6		brownish yellow fine sand
30-50 10 YR 6/3		pale brown fine sand
		· · · · · · · · · · · · · · · · · · ·
Type: C=Concentration, D=Depletion, RM=Reduced Matrix	c, CS=Covered or Coated Sand GrainsLocation:	PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	Debardus Delaus Curface (SQ) (LDD C. T. II)	Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)Thin Dark Surface (S9) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2) Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)	
Thick Dark Surface (A12)	fron-Manganese Masses (F12) (LRR O, P,T)	31
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)	
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149A)	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA 149)	A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (If observed):		
Type:		
Depth (inches):	Hydric Soil	Present? Yes No
Remarks:		
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Project/Site: Levy Nuclear Plant - Transmission Li	ines	City/County: Hillsborou	igh	_Sampling Date:	9/22/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	•	Sampling Point:	
Investigator(s): Justin Styer, Blake Meinecke	e	Section, Township, Range		· -	
Landform (hillslope, terrace, etc.): N/A	١	Local relief (concave, conv	vex, none): none	s	lope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.07265	1 Long: <u>-82.6</u>	18452	D	atum: WG\$84
Soil Map Unit Name: Malabar fine sand			NWI classification:	NA .	<u>,</u>
Are climatic / hydrologic conditions on the site typi	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain ir	Remarks)
Are Vegetation, Soil	or Hydrology	_ significantly disturbed?	Are circumstances	normal? Y	esNo
Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed, explain	any answers in I	Remarks)
SUMMARY OF FINDINGS - Attach site	e map showing sampli	ng point locations, tr	ansects, impor	tant features	s, etc.
Hydrophytic Vegetation Present?	Yes No	=			
Hydric Soil Present?	Yes No	Is the Sampled Area w	rithin a Wetland?	Yes✓ N	lo
Wetland Hydrology Present? Remarks:	Yes No				
HYDROLOGY	<u></u>				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)		getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	,	Drainage Pa	•	•
✓ Saturation (A3)	Marl Deposits (B15) (L	.RR U)	Moss Trim L	ines (B16)	+
Water Marks (B1)	Hydrogen Sulfide Odor			Water Table (C2	2)
Sediment Deposits (B2)	Oxidized Rhizospheres	. ,	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced I	iron (C4)	Saturation V	isible on Aerial In	nagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	<b>'</b> )	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutral	Test (D5)	
Field Observations:	· · · · · · · · · · · · · · · · · · ·				
Surface Water Present?	Yes No		1		
Water Table Present?	Yes No	Depth (inches): 0			
Saturation Present?	Yes No		Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> N	lo
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previou	is inspections), if available: .			
Remarks:					
•					

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species	1	(A)
2.				That Are OBL, FACW, or FAC:	<u> -</u>	٧,4
3.				Total Number of Dominant	1	(B)
4.				Species Across All Strata:	<del>_</del>	(0)
5.				Percent of Dominant Species	100.00	(A/B
6.				That Are OBL, FACW, or FAC:	100.00	(240
7.				Prevalance Index worksheet:		
		= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x	1=	
1.				FACW species x	2=	-
2.	<del></del>		·	FAC species x	3=	_
3.				'	4=	_
4.				· · · · · · · · · · · · · · · · · · ·	5=	_
5.	•			· · ——	A)	(B)
6.					<b>'</b>	_ (-,
7.				Prevalance Index = B/A =		
	0	= Total Cove	r	Hydrophytic Vegetation Indicat	ors:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.01		
2.				Problematic Hydrophytic V	egetation 1 (Evr	lain)
3.				- Toblemado Hydrophydd v	egotation (Exp	,
4.				Indicators of hydric soil and wetla	and hudralagu a	
5.				be present, unless disturbed or pr		iust
6.				Definitions of Vegetation Strata		
7		<del> </del>		i .	•	
		= Total Cove	<u> </u>	Tree- Woody plants, excluding woo	duuinaa	
Herb Stratum (Plot size:)	U	- Total Cove	1	approximately 20 ft (6m) or more in		/7 B
Panicum repens	80	yes	FACW	cm) or larger in diameter at breast l		٧٠.٠
Pontederia cordata	15	no	OBL	' -		
Sesbania spp.	2	no	FAC	Sapling- Woody plants, excluding value in approximately 20 ft (6m) or more in		than 1
Panicum hemitomon		no	OBL	in. (7.6 cm) DBH.	neight and less	uiaii
Cyperus spp.		no	FACW	Shrub- Woody plants, excluding wo	adu via a	
6.		110	FACVV	approximately 3 to 20 ft (1 to 6 m) i		
7.	- —				-	
<u>7.</u> 8.				Herb- All herbaceous (non-woody); herbaceous vines, regardless of siz		du
9.				plants, except woody vines, less that		
10.				(1 m) in height.	an approximately	JIL
11.				Woody vine- All woody vines, rega	rdlace of baiabt	
12.	-			woody ville- All woody villes, rega	ruless of fielgift.	
12.	100	= Total Cove				
Woody Vine Stratum (Plot size:		~ Total Cove				
1.						
2.	<del></del>					
3.						
4.				Hydrophytic		
5.					✓No	
<del></del>		= Total Cove				<del></del>
Remarks: (if observed, list morph		. 5 5010				

County/soil: Hillsborough- Malabar Sampling Point: SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Depth Matrix Type' Loc2 Remarks (inches) Color (moist) Color (moist) dark gray fine sand 10 YR 6/2 light grayish brown fine sand 10 YR 6/6 brownish yellow fine sand 12-30 30-50 10 YR 6/3 pale brown fine sand Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: Hydric Soil Indicators: \_1 cm Muck (a9) (LRR O) Potyvalue Below Surface (S8) (LRR S, T, U) Histol (A1) \_Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U)
Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B) \_Black Histic (A3) Loamy Gleyed Matrix (F2)
Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (LRR P, S, T) \_Hydrogen Sulfide (A4) Stratified Layers (A5)
Organic Bodies (A6) (LRR P, T, U) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Red Parent Material (TF2) Redox Depressions (F8) \_Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) Marl (F10) (LRR U) \_Other (Explain in Remarks) 1 cm Muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) \_Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T) \_Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B) \_Sandy Gleyed Matrix (S4) \_Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Hydric Soil Present? Yes No Depth (inches): Remarks:

Subregion (LRR or MLRA): LRR U Lat: 28.070975 Long: 82.623172 Datum: WGS84  Soil Map Unit Name: Basinger fine sand  Are climatic / Tydrologic conditions on the site typical for this time of year?  Yes No (If no, explain in Remarks)  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Soil or Hydrology naturally problematic?  Bytan	Project/Site: Levy Nuclear Plant - Transmission	on Lines	City/County: Hillsbord	ugh	Sampling Date:9/22/09
Landform (fillislope, terrace, etc.): N/A LR U Lat: 28.070975 Long: _82.623172 Datum: _WGS84 Soli Map Unit Name: Basinger fine sand	Applicant/Owner: Progress Energy Florida, II	nc.	State: F	•	Sampling Point: W
Subregion (LRR or MLRA): LRR U Lat: 28.070975 Long: -82.623172 Datum: WGS84 Soil Map Unit Name: Basinger fine sand Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation Soil or hydrology significantly disturbed? Are vegetation Soil or hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Wetland Hydrology Indicators  Wetland Hydrology Indicators Remarks:  HYDROLOGY  Wetland Hydrology Indicators (minimum of one is required; check all that apply) Sufface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Water Marks (B1) Hydrogen Sufface Odr (C1) Hydrogen Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydr	Investigator(s): Justin Styer, Blake Mein	ecke	_ Section, Township, Rang	e: <u>5 28S 17E</u>	
Soll Map Unit Name; Basinger fine sand  Are climatic / hydrologic conditions on the site typical for this time of year?  Yes _ No _ (If no, explain in Remarks)  Are Vegetation _ Soll _ or Hydrology _ significantly disturbed?  Are Vegetation _ Soll _ or Hydrology _ naturally problematic?  Wet _ No _ naturally problematic?  Wetgetation Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Sparsety Vegetated Concave Surface (B6)  Sparsety Vegetated Concave Surface (B8)  High Water Table (A2)	Landform (hillslope, terrace, etc.):	N/A	Local relief (concave, cor	vex, none): none	Slope (%):
Are Celimatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Sulfactors:  Hydrophytic Vegetation Present? Yes No Sulfactors:  Hydrology Present? Yes No Sulfactors:  Wetland Hydrology Indicators:  Femarks:  HYDROLOGY  Wetland Hydrology Indicators:  Femarks:  Secondary Indicators (minimum of two required)  Sparsety Vegetated Concave Surface (B8)  Sparsety Vegetated Concave Surface (B8)  Aquatic Fauna (B13)  Mard Deposits (B15) (LRR U)  Saturation (A3)  Mard Deposits (B15) (LRR U)  Saturation (A3)  Mard Deposits (B15) (LRR U)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Applat for Crust (B4)  Recent Iron Remarks:  No Depth (inches):  Oxidized Water Present?  Yes Y No Depth (inches):  Oxidization Remarks  No Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  No Wetland Hydrology  No Wetland Hydrology  No Wetland Hydrology  Wetland Hydrology  Recent Iron Remarks  No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pesent? Yes Y No Depth (inches):  Oxidized Rizospheres (Pes	Subregion (LRR or MLRA): LRR U	Lat: <u>28.0709</u>	75 Long: <u>-82.</u>	623172	Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No_ Are Vegetation Soil or Hydrologynaturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?	Soil Map Unit Name: Basinger fine sand			NWI classification	n: Shrub wetland
Are Vegetation	Are climatic / hydrotogic conditions on the site	typical for this time of year?	Yes	No	_ (If no, explain in Remarks)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Hydroc Soil Present? Wetland Hydrology Present? Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required) Surface Soil Cracks (86)  Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Trift Deposits (B3) Presence of Reduced Iron (C4) Agal Mat or Crust (B4) Iron Deposits (B5) I	Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstance	es normal? Yes/_No
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Agal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Agal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Field Observations:  Surface Water Present? Yes _ No _ Depth (inches): _0 - Saluration   Sa	Are Vegetation, Soil	or Hydrology	naturally problematic?	(if needed, explain	in any answers in Remarks)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Marl Deposits (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  FIEID Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0.36  Wetland Hydrology  Present? Yes ✓ No Depth (inches): 0.06  Wetland Hydrology  Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (inches): 0.07  Saturation Present? Yes ✓ No Depth (in	<b>SUMMARY OF FINDINGS - Attach</b>	site map showing samp	ling point locations, t	ransects, impo	rtant features, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Hydrology Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Saturation (A3)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Fresent?  Yes ✓ No Depth (inches): 0	Hydrophytic Vegetation Present?	Yes No			
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that appty)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Asturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Saturation Present?  Yes _ No _ Depth (inches):	Hydric Soil Present?	Yes No	Is the Sampled Area	vithin a Wetland?	Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes _ No _ Depth (inches):	Wetland Hydrology Present?	Yes No			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Ves       No       Depth (inches): 0       Wetland         Water Table Present?       Yes       No       Depth (inches): 0       Wetland         Water Table Present?       Yes       No       Depth (inches): 0       Present? <td< th=""><th>Remarks:</th><th></th><th></th><th></th><th></th></td<>	Remarks:				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Ves       No       Depth (inches): 0       Wetland         Water Table Present?       Yes       No       Depth (inches): 0       Wetland         Water Table Present?       Yes       No       Depth (inches): 0       Present? <td< th=""><th></th><th></th><th></th><th></th><th></th></td<>					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Ves       No       Depth (inches): 0       Wetland         Water Table Present?       Yes       No       Depth (inches): 0       Wetland         Water Table Present?       Yes       No       Depth (inches): 0       Present? <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Ves       No       Depth (inches): 0       Wetland         Water Table Present?       Yes       No       Depth (inches): 0       Wetland         Water Table Present?       Yes       No       Depth (inches): 0       Present? <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Agaid Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water (A1)  Water Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology (includes capillary fringe)	HYDROLOGY				
✓ Surface Water (A1)	Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two required)
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Semonthic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)	Primary Indicators (minimum of one is require	d; check all that apply)		Surface So	il Cracks (B6)
Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)	Surface Water (A1)	Water-Stained Leave	s (B9)	Sparsely Ve	egetated Concave Surface (B8)
Water Marks (B1)	High Water Table (A2)	Aquatic Fauna (B13)		Drainage P	atterns (B10)
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Crayfis	✓ Saturation (A3)	Marl Deposits (B15) (	LRR U)	Moss Trim	Lines (B16)
Drift Deposits (B3)	Water Marks (B1)	Hydrogen Sulfide Odd	or (C1)	Dry-Seasor	n Water Table (C2)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)	Sediment Deposits (B2)	Oxidized Rhizosphere	s on Living Roots (C3)	Crayfish Bu	rrows (C8)
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  virinundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes virinum NoDepth (inches):O-36  Water Table Present? Yes virinum NoDepth (inches):O  Saturation Present? Yes virinum NoDepth (inches):O  Metiand Hydrology (includes capillary fringe) Present? Yes virinum NoO	Drift Deposits (B3)	Presence of Reduced	Iron (C4)	Saturation \	visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes _ / NoDepth (inches):0-36  Water Table Present? Yes _ / NoDepth (inches):0  Saturation Present? Yes _ / NoDepth (inches):0  Wetland Hydrology (includes capillary fringe) Present? Yes _ / NoDepth (inches):0	Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6)	Geomorphi	c Position (D2)
Field Observations:  Surface Water Present?  Yes	Iron Deposits (B5)	Thin Muck Surface (C	77)	Shallow Aq	uitard (D3)
Surface Water Present?       Yes _ ✓ _ No Depth (inches):	✓ Inundation Visible on Aerial Imagery (B	7)Other (Explain in Rem	narks)	FAC Neutra	at Test (D5)
Water Table Present? Yes _	Field Observations:				
Saturation Present? Yes No Depth (inches): 0	Surface Water Present?			_	
Saturation Present? Yes V No Depth (inches): 0 Hydrology (includes capillary fringe) Present? Yes V No No No No No No No No No No No No No	Water Table Present?			- Wetland	
	Saturation Present?	Yes No	Depth (inches):0	I	
				Present?	Yes <u> </u>
	Remarks:				
Remarks:	·				
Remarks:					•
Remarks:		•			
Remarks:	·				
Remarks:					
Remarks:					
Remarks:					

VEGETATION - Use scientific na	mes or plants			Oui	npling Point:	W
Tree Stratum (Plot.size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>4</u>	(A)
3.				Total Number of Dominant Species Across All Strata:	<u>4</u>	(B)
5.				Percent of Dominant Species		
6.		<del></del>		That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.			-	Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:				OBL species	x1=	
Acer rubrum	10	yes	OBL	FACW species	x2=	_
2. Salix spp.	10	yes	FACW	FAC species	x3=	_
3.					x4=	_
4.				<del></del>	x5=	
5.				Column Totals:	(A)	_ (B)
6.						
7.				Prevalance Index = B/A =		
a a	. 20	= Total Cove	er	Hydrophytic Vegetation Indica	itors:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	1	
1.				Prevalence Index is ≤3.0		
<u>2.</u> 3.	·			Problematic Hydrophytic	Vegetation (Exp	plain)
<u>3.</u> 4.	<del></del>			1		
5.	· ——			Indicators of hydric soil and we		must
5. 6.				be present, unless disturbed or present of Vegetation Strategy		
7.	<del></del>			Deminions of Vegetation offat		
Herb Stratum (Plot size:)	0	= Total Cove	r	Tree- Woody plants, excluding wo		(7.6
Ludwigia peruviana	35	yes	OBL	cm) or larger in diameter at breast	•	. (1.0
Thalia spp.	20	yes	OBL	Sapling- Woody plants, excluding		
Polygonum punctatum	10	no	FACW	approximately 20 ft (6m) or more i		than 3
Andropogon glomeratus	10	no	FACW	in. (7.6 cm) DBH.	<b></b>	
5. Typha spp.	10	no	OBL	Shrub- Woody plants, excluding v	voody vines.	
Eupatorium capillifolium	5	no	FACU	approximately 3 to 20 ft (1 to 6 m)		
7.				Herb- All herbaceous (non-woody	)plants, including	
8.				herbaceous vines, regardless of s		
9.				plants, except woody vines, less the	nan approximatel	y 3 ft
10.				(1 m) in height.		
11.	_			Woody vine- All woody vines, reg	ardless of height.	
12.						
Woody Vine Stratum (Plot size:	90	= Total Cove	er			
1.				1		
2.						
3.				1		
4.				Hydrophytic		
5.				Vegetation Present? Yes	√ No	
J	0	= Total Cove		1 5		

Loarry Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loarry Soils (F20) (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P, T, U) Peeted Dark Surface (F7) Red or Perent Material (TF2)  Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR U)  1 cm Muck (A9) (LRR P,T) Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 150B)  Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A)  Stripped Matrix (S6) Anomalous Bright Loarry Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):	Depth (inches)	•				an indicator or c	onfirm the abo	once of indicators \	
Color (moist)	(inches)			-	ament u	ie indicator or c	ommin die abs	sence of maicators.	
10 YR 6/1	0-7 10	Color (moist)	%		%	Type <sup>1</sup>	Loc²	Texture	Remarks
10 YR 6/1	J-1 IU	VD 2/4							black fine good
10 YR 5/3; 10 YR 5/2 12.80 10 YR 6/2 brown and grayish brown fine sand light brownish gray fine									
Be 42   5/2									gray fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix.  Indicators for Problematic Hydric Soils *:									brown and gravish brown fine sand
Hydric Soil Indicators: Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Histic Epidon (A2) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR P, T, U) Depleted Matrix (F3) Mucky Mineral (A7) (LRR P,T,U)  I cm Muck (A9) (LRR P,T,U) Peleted Dark Surface (F6) Mucky Mineral (A7) (LRR P,T) Depleted Dark Surface (F7) Muck (A9) (LRR P,T) Depleted Dark Surface (F7)  Marl (F10) (LRR U) Depleted Dark Surface (F13) (LRR 151) Thick Dark Surface (A11) Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Piedmont Floodplain Soils (F19) (MLRA 150A) Sandy Redox (S5) Delta Orchric (F13) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):									
Hydric Soil Indicators: Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Histic Epidon (A2) Histic (A3)  Black Histic (A3) Loamy Mucky Mineral (F1) (LRR S, T, U)  Stratified Layers (A5) Depleted Matrix (F3) For Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6)  Coast Prairie Redox (A12)  Loamy Mucky Mineral (A7) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (LRR P, T, U) Depleted Dark Surface (F7) Redox Dark Surface (F6) Marl (F10) (LRR U) Depleted Dark Surface (F7) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Loamy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):									
Aydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Histic Epidon (A2)  Histic (A3)  Elack Histic (A3)  Elack Histic (A4)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F1)  Depleted Derlow Dark Surface (A11)  Thic Dark Surface (A12)  Loamy Mucky Mineral (S1) (LRR P, T, U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S6)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (F12) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):									
Aydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Histic Epidon (A2)  Histic (A3)  Elack Histic (A3)  Elack Histic (A4)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F1)  Depleted Derlow Dark Surface (A11)  Thic Dark Surface (A12)  Loamy Mucky Mineral (S1) (LRR P, T, U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S6)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (F12) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):	Type: C=Conc	entration. D=Deole	etion. RM	=Reduced Matrix. C	S=Cove	red or Coated Sa	and Grains.	*Location: PL=Pore	Lining, M=Matrix.
Histic Epidon (A2)  Black Histic (A3)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F13) (LRR P, T, U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Delta Orchric (F13) (LRR P, T, U)  Delta Orchric (F13) (LRR P, T, U)  Delta Orchric (F13) (LRR P, T, U)  Delta Orchric (F13) (LRR P, T, U)  Delta Orchric (F13) (LRR P, T, U)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Sandy Redox (S5)  Delta Orchric (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):			,						
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 15 Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, Stratified Layers (A5) Depleted Matrix (F2) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F19) (MLRA 151) Anomalous Bright Loamy Soils (F19) (MLRA 149A) (F19) (MLRA 149A) (F19) (MLRA 149A) (F19) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	Histol (A1)			_	Poly	value Below Surf	ace (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S6)  Dark Surface (S7) (LRR O, S, T, U)  Redox Depressions (F8)  Loamry Gleyed Matrix (F2)  Piedmont Floodplain Soils (F19) (LRR P, E7)  Anomalous Bright Loamry Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Red Parent Material (TF2)  (MLRA U)  Very Shallow Dark Surface (TF12) (LRR O, E7)  Other (Explain in Remarks)  Depleted Below Dark Surface (A11)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jumbric Surface (F13) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sendy Gleyed Matrix (S4)  Sendy Gleyed Matrix (S4)  Anomalous Bright Loamry Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):	Histic Epide	on (A2)			Thin	Dark Surface (S	9) (LRR S, T, U	) 	2 cm Muck (A10) (LRR S)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Event Mucky Mineral (A7) (LRR P, T, U) Depleted Matrix (F3) Stratified Layers (A5)  Depleted Matrix (F3) Redox Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2)  Red Parent Material (TF2)  Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A11) Depleted Matrix (F3) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR U) Other (Explain in Remarks)  Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Lron-Manganese Masses (F12) (LRR O, P,T) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	Black Histic	c (A3)			Loar	ny Mucky Minera	I (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox Dark Surface (A12)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	Hydrogen S	Sulfide (A4)		_	Loar	my Gleyed Matrix	(F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
				-				_	
Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Uvery Shallow Dark Surface (TF12) (LRR  It cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):				-					
				) .				_	
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):			<b>!</b> )	-			F8)	_	
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Umbric Surface (F13) (LRR P, T, U)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):				-				_	Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):			(A11)	-		•	, ,		
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)				-		•			l
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Park Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):		, , ,		-		•			
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):			RR O, S	) -			•	4500)	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):				-		•		•	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed):		, ,		-		•	` ',	•	152D)
Restrictive Layer (If observed):		. ,	- T III	-		maious bright Lu	arriy Suiis (F20)	(MLRA 149A, 1990,	1330)
								1	
Type:	-								
								Hydric Soil Present	? Yes ✓ No .
								1	
Depth (inches): Hydric Soil Present? Yes ✓ No  Remarks:		th (inches):						Hydric Soil Present	? Yes <u> </u>

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_ Sampling Date:	9/22/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	х
Investigator(s): Justin Styer, Blake Meineck	e	. Section, Township, Range	: 5 28\$ 17E		
Landform (hillslope, terrace, etc.):N//	4	Local relief (concave, con	vex, none): none	Slo	pe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.07034:	2 Long: <u>-82.6</u>	524701	Dat	um: WGS84
Soil Map Unit Name: Myakka fine sand			NWI classification	: NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓		(If no, explain in F	Remarks)
·	or Hydrology	significantly disturbed?	Are circumstances		, s_ ✓ No
		naturally problematic?		any answers in Re	emarks)
SUMMARY OF FINDINGS - Attach sit				•	•
Hydrophytic Vegetation Present?	Yes✓No				
Hydric Soil Present?	Yes✓No	is the Sampled Area v	vithin a Wetland?	Yes/ No	
Wetland Hydrology Present?	YesNo	1			
Remarks:		-	****		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of tw	o required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)		getated Concave S	iurface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	(50)	Drainage Pa	_	iandos (Bo)
✓ Saturation (A3)	Marl Deposits (B15) (LI	DD III	Moss Trim L	• •	
· · ·		·	<del></del>	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	, ,	
Drift Deposits (B3)	Presence of Reduced I	• ,		isible on Aerial Ima	igery (C9)
Aigal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	•	Shallow Aqu	iitard (D3)	
✓ Inundation Visible on Aerial Imagery (87)	Other (Explain in Rema	arks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		4		
Water Table Present?	Yes No	Depth (inches): 0	.		
Saturation Present?	Yes No	_ Depth (inches):0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes ✓ No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	•		
Remarks:					
The state of the s					

	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
Taxodium distichum	50	yes	OBL	Number of Dominant Species		
2. Acer rubrum	20	yes	OBL	That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.				Total Number of Dominant	_	
4.	. ——			Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species		
6.	·			That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.	-			Prevalance Index worksheet:		
	70	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:					1=	
1.				·	2=	-
2.				· · ———	 3=	_
3.	-			·	<b></b>	-
4.				· · —	· 5=	_
5.					N)	(B)
6.	- — —		· <del> · · · · · · · · · · · · · · · · ·</del>	(	,	(-/
7.				Prevalance Index = B/A =		
		= Total Cov	er	Hydrophytic Vegetation Indicate	ors:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Myrica cerifera	10	ves	FAC	Prevalence Index is ≤3.01		
2.				Problematic Hydrophytic V	egetation <sup>1</sup> (Exc	olain)
3.					-3	,
4.				1Indicators of hydric soil and wetla	nd hydrology n	nust
5.	·			be present, unless disturbed or pr		
6.				Definitions of Vegetation Strata		
7.				1		
	10	= Total Cov	er	Tree- Woody plants, excluding woo	dy vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in		(7.6
Urochloa mutica	. 50	yes	NL	cm) or larger in diameter at breast h	eight (DBH).	
Pontederia cordata	10	no	OBL	Sapling- Woody plants, excluding v	oody vines,	
Thalia spp.	10	no	OBL	approximately 20 ft (6m) or more in	height and less	than 3
4. Xyris spp.	5	no	OBL	in. (7.6 cm) DBH.		
5. Thalia spp.	5	no	OBL	Shrub- Woody plants, excluding wo	ody vines,	
6. Laportea sp.	5	no	FACW	approximately 3 to 20 ft (1 to 6 m) ir	n height.	
7.				Herb- All herbaceous (non-woody)p	lants, including	
8.				herbaceous vines, regardless of size		ody
9.				plants, except woody vines, less that	n approximately	y 3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines, regar	dless of height.	
12.	-					
	85	= Total Cov	er	]		
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes _	✓No	
		= Total Cov		1		

County/soil: Hillsborough- Myakka SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) Color (moist) Type<sup>1</sup> Remarks 10 YR 3/1 very dark gray fine sand 10 YR 6/1 5-20 gray fine sand 20-25 N 2/0 black fine sand dark reddish brown fine sand 5 YR 3/3 25-30 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) \_5 cm Mucky Mineral (A7) (LRR P,T,U) Depleted Dark Surface (F7) Red Parent Material (TF2) ✓ Muck Presence (A8) (LRR U) Redox Depressions (F8) \_Very Shallow Dark Surface (TF12) (LRR T, U) \_1 cm Muck (A9) (LRR P,T) Mart (F10) (LRR U) Other (Explain in Remarks) \_Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P,T) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) \_Sandy Redox (S5) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:

Applicant/Owner: Progress Energy Florida_Inc.	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date: 9/22/09
Local relief (concave, convex, none); none   Slope (%);	Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: Y
Subregion (LRR or MLRA):   LRR U	Investigator(s): Justin Styer, Blake Meineck	е	Section, Township, Range	: 4 28S 17E	
Soil Map Unit Name; Myakka fine sand	Landform (hillslope, terrace, etc.): N//	Α	Local relief (concave, con-	vex, none): none	Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year? Yes / No (If no, explain in Remarks)  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes / No Are Vegetation / Soil or Hydrology naturally problematic?  Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes / No   Is the Sampled Area within a Wetland? Yes / No   Is the Sampled Area within a Wetland? Yes / No   Is the Sampled Area within a Wetland? Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / No   Yes / Yes / Yes / No   Yes / Yes / Yes / No   Yes / Yes / Yes / No   Yes / Yes / No   Yes / Yes / Yes / No   Yes / Yes / Yes / Yes / No   Yes /	Subregion (LRR or MLRA): LRR U	Lat: 28.073903	Long:82.6	515131	Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No networks yes and interest the significantly disturbed? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrolyptic Vegetation Present? Yes No Service No Secondary Indicators (Indicators of No. No. No. No. No. No. No. No. No. No.	Soil Map Unit Name: Myakka fine sand			NWI classification:	: NA
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No networks yes and interest the significantly disturbed? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrolyptic Vegetation Present? Yes No Service No Secondary Indicators (Indicators of No. No. No. No. No. No. No. No. No. No.	Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes / No	Are Vegetation, Soil,	or Hydrology			
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.				(If needed, explain	any answers in Remarks)
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16) Wetland Mydrogensits (B2) Originate Solic Cracks (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Iron Deposits					•
Wetland Hydrology Present?         Yes ✓ No           HYDROLOGY           Wetland Hydrology Indicators:           Secondary Indicators (minimum of two required)           Primary Indicators (minimum of one is required; check all that apply)         Surface Soil Cracks (B6)           ✓ Surface Water (A1)				•	•
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Soil Cracks (B6)  ✓ Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water (A1)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Wetland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology	Hydric Soil Present?	Yes✓No	Is the Sampled Area w	vithin a Wetland?	Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  Surface Water Present?  — Yes ✓ No — Depth (inches): — 0  Wetland Hydrology Present?  — Wetland Hydrology Present?  — Wetland Hydrology Present?  — Wetland Hydrology Present?  — Wetland Hydrology Present?  — Wetland Hydrology Present?  — No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Yes ✓ No — Depth (inches): — 0  — Wetland Hydrology Present?  — Yes ✓ No — Depth (inches): — 0  — Yes ✓ No — Depth (inches): — 0  — Yes ✓ No — Depth (inches	*	Yes✓_No			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)			<del></del>		
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)				,	
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)				,	
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)					
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Water Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Fresent?  Yes ✓ No Depth (inches): 0  Wetland	HYDROLOGY				
✓ Surface Water (A1)	Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  / Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)
✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Surface Water Present?       Yes ✓ No Depth (inches): 0       Wetland Hydrology Present?         Saturation Present?       Yes ✓ No Depth (inches): 0       Wetland Hydrology Present?       Yes ✓ No Depth (inches): 0	✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concave Surface (B8)
Water Marks (B1)	High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)
Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes _ / No _ Depth (inches): _ 0  Saturation Visible on Aerial Imagery (B7)  Saturation Present?  Yes _ / No _ Depth (inches): _ 0  Wetland Hydrology (Inches): _ 0  Wetland Hydrology (Inches): _ Yes _ / No _ Depth (inches): _ 0  Wetland Hydrology (Inches): _ Yes _ / No _ Depth (Inches): _ 0  Wesent? Yes _ / No _ Depth (Inches): _ 0  Wetland Hydrology (Inches): _ Yes _ / No _ Depth (Inches): _ 0  Wesent? Yes _ / No _ Depth (Inches): _ 0  Wetland Hydrology (Inches): _ 0  Wetland Hydrology (Inches): _ 0  Wetland Hydrology (Inches): _ 0  Wesent? Yes _ / No _ Depth (Inches): _ 0  Wesent? Yes _ / No _ Depth (Inches): _ 0  Wetland Hydrology (Inches	✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)
Drift Deposits (B3)	Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)
Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Shallow Aquitard (D3) Collection (D2) Shallow Aquitard (D3) FAC Neutral Test (D5) Shallow Aquitard (D3) FAC Neutral Test (D5) Shallow Aquitard (D3) FAC Neutral Test (D5) Shallow Aquitard (D3) FAC Neutral Test (D5) Shallow Aquitard (D3) FAC Neutral Test (D5) Shallow Aquitard (D3) FAC Neutral Test (D5) Shallow Aquitard (D3) FAC Neutral Test (D5) Shallow Aquitard (D3)	Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bun	rows (C8)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)Shallow Aquitard	Drift Deposits (B3)	<del></del>		Saturation V	isible on Aerial Imagery (C9)
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)	<del></del>		• •	<del></del>	=
/ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes / NoDepth (inches):0  Water Table Present? Yes / NoDepth (inches):0	<del></del>				, ,
Field Observations:           Surface Water Present?         Yes/No	<del></del>				
Surface Water Present?         Yes/No		- Carol (Especial III Conta		T	7.001 (2.0)
Water Table Present? Yes No Depth (inches): _ 0		Yes ✓ No	Denth (inches): 0-10		
Saturation Present? Yes No Depth (inches): Wetland Hydrology (includes capillary fringe) Present? Yes No				1 .	
(includes capillary fringe) Present? Yes <a href="#">Yes <a href="#">Yes</a> <a href="#">No</a></a>					
		140	Deput (inches)		Voe 🗸 No
		ing well aerial photos previous	inspections) if available:	Present	res <u>v</u> No
	Remarks:				
Remarks:					

VEGETATION - Use scientific na	mes of plants				ampling Point:		
Tree Stretum (Diet eine:	Absolute %	Dominant		Dominance Test Worksheet:			
Tree Stratum (Plot size:)	Cover	Species?	Status	lu ulu uk Busha da Busha			
Quercus laurifolia	2	yes	FACW	Number of Dominant Species	<u>4</u>	(A)	
2.				That Are OBL, FACW, or FAC:	_	` '	
3.				Total Number of Dominant	<u>4</u>	(B)	
4.				Species Across All Strata:		(5)	
5.				Percent of Dominant Species	400.00	(A (D)	
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)	
7.				Prevalance Index worksheet:	•		
		= Total Cove	r	Total % Cover of:	Multiply by:		
Sapling Stratum (Plot size:		10101 0010	•	OBL species	x1=		
1. Salix spp.	20	yes	FACW	FACW species	x2=		
2.				FAC species	x3=	_	
3.				FACU species	x4=	-	
4.	-			UPL species	x5=	_	
5.				Column Totals:		(B)	
				Column Totals:	(A)	- <sup>(B)</sup>	
6. 7.				Prevalance Index = B/A =			
	20	= Total Cove		Hydrophytic Vegetation Indic	atore:		
Shrub Stratum (Plot size:	\	- 10tal 00VC	•	✓ Dominance Test is 50%	41013.		
			-10		.1		
Myrica cerifera	15	yes	FAC	Prevalence Index is ≤3,0			
2.				Problematic Hydrophytic	: Vegetation ' (Exp	olain)	
3.							
4.				<sup>1</sup> Indicators of hydric soil and we	tland hydrology n	nust	
5.				be present, unless disturbed or	problematic.		
6.	·			Definitions of Vegetation Stra	ta:		
7.				}			
	15	= Total Cove	r	Tree- Woody plants, excluding w	oody vines,		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6	
Ludwigia peruviana	50	yes	OBL	cm) or larger in diameter at breas	st height (DBH).	•	
Polygonum punctatum	15	no	FACW	Sapling- Woody plants, excluding	a woody vinos		
Eupatorium capillifolium	10	no	FACU	approximately 20 ft (6m) or more		than 3	
	- — —			in. (7.6 cm) DBH.	in neight and less	ulali	
Panicum hemitomon	5	no	OBL	<b>4</b> ` '			
5.				Shrub- Woody plants, excluding			
6.				approximately 3 to 20 ft (1 to 6 m	) in neight.		
7.				Herb- All herbaceous (non-wood)			
8.				herbaceous vines, regardless of size. Includes wo			
9.				plants, except woody vines, less	than approximately	y 3 ft	
10.				(1 m) in height.			
11.			-, ,	Woody vine- All woody vines, re-	gardless of height.		
12.	-			1	J		
<u>-</u>	80	= Total Cove		1			
Woody Vine Stratum (Plot size:_			•				
1.				1			
2.				1			
3.				1			
4.				- Hydrophytic			
				1 * * *			
				Nonetation December Voc	./ Nc		
5.		= Total Cove		Vegetation Present? Yes	No	<del></del>	

Profile Description: (Descril Depth Matrix Color (moist)  0-5 10 YR 3/1  0-5-20 10 YR 6/1  20-25 N 2/0  25-30 5 YR 3/3  Type: C=Concentration, D=D Hydric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7)  Muck Presence (A8) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16 Sandy Mucky Mineral (S1	%  repletion, RM=	Redox Features Color (moist)	%  CS=Covered  Polyve Thin D Loamy Loamy Deplet	Type'	Loc²  Ind Grains.  Ind Grains.  Ind Grains.	Texture  Texture  Location: PL=Pore  In the state of the	ndicators for Problematic Hydric Soils <sup>3</sup> :1 cm Muck (a9) (LRR O)
nches)  Color (moist)  10 YR 3/1  10 YR 6/1  10 YR 6/1  N 2/0  5-30  Type: C=Concentration, D=D  Indric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRI  5 cm Mucky Mineral (A7)  Muck Presence (A8) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16	epletion, RM=	Color (moist)	Polyva Polyva Thin D Loamy Loamy Deplet	d or Coated Sai lue Below Surfa ark Surface (S9	nd Grains. ce (S8) (LRR S	<sup>2</sup> Location: PL=Pore	very dark gray fine sand gray fine sand black fine sand dark reddish brown fine sand  Lining, M=Matrix. ndicators for Problematic Hydric Soils 3:1 cm Muck (a9) (LRR O)
20 10 YR 6/1 0-25 N 2/0 5-30 5 YR 3/3  Type: C=Concentration, D=D ydric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LR 5 cm Mucky Mineral (A7)  Muck Presence (A8) (LR 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16	R P, T, U) (LRR P,T,U)	Reduced Matrix, (	Polyva Thin D Loamy Loamy	alue Below Surfa Park Surface (S9 Mucky Mineral	ce (S8) (LRR S ) (LRR S, T, U)	lı i, T, U) _	gray fine sand black fine sand dark reddish brown fine sand  Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)
ype: C=Concentration, D=D ype: C=Concentration, D=D ype: C=Concentration, D=D yraric Soil Indicators:     Histo (A1)     Histic Epidon (A2)     Black Histic (A3)     Hydrogen Sulfide (A4)     Stratified Layers (A5)     Organic Bodies (A6) (LRI     5 cm Mucky Mineral (A7)     Muck Presence (A8) (LR     1 cm Muck (A9) (LRR P,     Depleted Below Dark Sur     Thick Dark Surface (A12)     Coast Prairie Redox (A16)	R P, T, U) (LRR P,T,U)	Reduced Matrix, (	Polyva Thin D Loamy Loamy	alue Below Surfa Park Surface (S9 Mucky Mineral	ce (S8) (LRR S ) (LRR S, T, U)	lı i, T, U) _	gray fine sand black fine sand dark reddish brown fine sand  Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)
ype: C=Concentration, D=D rdric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7) Muck Presence (A8) (LR 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16)	R P, T, U) (LRR P,T,U)	Reduced Matrix, (	Polyva Thin D Loamy Loamy	alue Below Surfa Park Surface (S9 Mucky Mineral	ce (S8) (LRR S ) (LRR S, T, U)	lı i, T, U) _	dark reddish brown fine sand  Lining, M=Matrix.  Indicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O)
ype: C=Concentration, D=D rdric Soil Indicators: _Histol (A1) _Histic Epidon (A2) _Black Histic (A3) _Hydrogen Sulfide (A4) _Stratified Layers (A5) _Organic Bodies (A6) (LRI _5 cm Mucky Mineral (A7) _Muck Presence (A8) (LR _1 cm Muck (A9) (LRR P, _Depleted Below Dark Sur _Thick Dark Surface (A12) _Coast Prairie Redox (A16)	R P, T, U) (LRR P,T,U)	Reduced Matrix, (	Polyva Thin D Loamy Loamy	alue Below Surfa Park Surface (S9 Mucky Mineral	ce (S8) (LRR S ) (LRR S, T, U)	lı i, T, U) _	Lining, M=Matrix. ndicators for Problematic Hydric Soils <sup>3</sup> :1 cm Muck (a9) (LRR O)
rdric Soil Indicators:  Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7) Muck Presence (A8) (LRR 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16)	R P, T, U) (LRR P,T,U)	Reduced Matrix, (	Polyva Thin D Loamy Loamy	alue Below Surfa Park Surface (S9 Mucky Mineral	ce (S8) (LRR S ) (LRR S, T, U)	lı i, T, U) _	ndicators for Problematic Hydric Soils <sup>3</sup> :1 cm Muck (a9) (LRR O)
rdric Soil Indicators:  Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7) Muck Presence (A8) (LRR 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16)	R P, T, U) (LRR P,T,U)	Reduced Matrix, (	Polyva Thin D Loamy Loamy	alue Below Surfa Park Surface (S9 Mucky Mineral	ce (S8) (LRR S ) (LRR S, T, U)	lı i, T, U) _	ndicators for Problematic Hydric Soils <sup>3</sup> :1 cm Muck (a9) (LRR O)
_Histol (A1) _Histic Epidon (A2) _Black Histic (A3) _Hydrogen Sulfide (A4) _Stratified Layers (A5) _Organic Bodies (A6) (LRI _5 cm Mucky Mineral (A7) _Muck Presence (A8) (LRI _1 cm Muck (A9) (LRR P, _Depleted Below Dark Sur _Thick Dark Surface (A12) _Coast Prairie Redox (A16)	(LRR P,T,U)		Thin D Loamy Loamy Deplet	ark Surface (S9 Mucky Mineral	) (LRR S, T, U)	i, T, U) _	1 cm Muck (a9) (LRR O)
Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7) Muck Presence (A8) (LR 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16)	(LRR P,T,U)		Thin D Loamy Loamy Deplet	ark Surface (S9 Mucky Mineral	) (LRR S, T, U)		
Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7) Muck Presence (A8) (LRR P, 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16)	(LRR P,T,U)		Loamy Loamy Deplet	Mucky Mineral			
Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7) Muck Presence (A8) (LR 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16)	(LRR P,T,U)		Loamy			_	2 cm Muck (A10) (LRR S)
Stratified Layers (A5) Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7) Muck Presence (A8) (LR 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16)	(LRR P,T,U)		Deplet	( Gleved Matrix )		_	Reduced Vertic (F18) (outside MLRA 150A, B
Organic Bodies (A6) (LRI 5 cm Mucky Mineral (A7) Muck Presence (A8) (LR 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16	(LRR P,T,U)				(F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
_5 cm Mucky Mineral (A7)  _Muck Presence (A8) (LR _1 cm Muck (A9) (LRR P, _Depleted Below Dark Sur _Thick Dark Surface (A12) _Coast Prairie Redox (A16	(LRR P,T,U)		Dadov	ed Matrix (F3) : Dark Surface (I	E6)	_	Anomalous Bright Loamy Soils (F20)
Muck Presence (A8) (LR P, 1 cm Muck (A9) (LRR P, Depleted Below Dark Sur Thick Dark Surface (A12) Coast Prairie Redox (A16				•	•		(MLRA 153B)
_1 cm Muck (A9) (LRR P, _Depleted Below Dark Sur _Thick Dark Surface (A12) _Coast Prairie Redox (A16	9R III			ed Dark Surface	. ,	-	Red Parent Material (TF2)
Depleted Below Dark Sur _Thick Dark Surface (A12) _Coast Prairie Redox (A16	•			Depressions (F	8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
Thick Dark Surface (A12) _Coast Prairie Redox (A16	•			10) (LRR U)		-	Other (Explain in Remarks)
Coast Prairie Redox (A16	. ,			ed Orchric (F11	, , ,		
_ '				langanese Mass		O, P,T) 3 <sub>1</sub>	I
_Sandy Mucky Mineral (S1		A)	_	c Surface (F13)			
	) (LRR O, S)		Delta	Orchric (F17) (N	ILRA 151)		
_Sandy Gleyed Matrix (S4)	)		Reduc	ed Vertic (F18)	(MLRA 150A, 1	50B)	
_Sandy Redox (S5)				ont Floodplain S		•	
_Stripped Matrix (S6)			Anoma	alous Bright Loa	my Soils (F20) (	(MLRA 149A, 153C,	153D)
Dark Surface (S7) (LRR I							
estrictive Layer (If observe	ed):						
Type: Depth (inches):						Hydric Soil Present	? Yes ✓ No .
emarks:		<del></del>				······	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıah	_ Sampling Date:	9/23/09
Applicant/Owner: Progress Energy Florida, Inc.	NO.	State: FL		Sampling Point:	Z
Investigator(s): Justin Styer, Blake Meineck	e	Section, Township, Range			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-		Slo	ne (%).
Subregion (LRR or MLRA): LRR U	Lat: _28.07434				um: <u>WGS84</u>
Soil Map Unit Name: Myakka fine sand		Long	NWI classification		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes ✓		(If no, explain in F	Remarks)
, , , , , , , , , , , , , , , , , , , ,	or Hydrology	significantly disturbed?	Are circumstances		, s ✓ No
	or Hydrology			n any answers in Re	emarks)
SUMMARY OF FINDINGS - Attach sit				•	•
Hydrophytic Vegetation Present?	Yes✓No			<u> </u>	
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes/ No	
Wetland Hydrology Present?	Yes ✓ No				
HYDROLOGY					
Wetland Hydrology Indicators:				tors (minimum of tw	o required)
Primary Indicators (minimum of one is required; of		100)		Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)		egetated Concave S	surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)			atterns (B10)	
Saturation (A3)	Marl Deposits (B15) (L	•	Moss Trim L	• •	
Water Marks (B1)	Hydrogen Sulfide Odor	• •		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur		
Drift Deposits (B3)	Presence of Reduced			isible on Aerial Ima	gery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	` '		Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7		Shallow Aqu	, ,	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutra	l Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	_ , , ,	-		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	Depth (inches):0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ring well periol shotes proving	us inspections) if qualishin:	Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aeriai priotos, previot	is inspections), it available:			
Remarks:					
	·				

VEGETATION - Use scientific na	mes of plants			Sampling Point:
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:
Tree Stratum (Plot size:)	Cover	Species?	Status	
Quercus laurifolia	10	yes	FACW	Number of Dominant Species
2.				That Are OBL, FACW, or FAC:
3.				Total Number of Dominant
4.				Species Across All Strata: 7 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC:
7.				Prevalance Index worksheet:
	10	= Total Cove		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:		- 10tai 00V	-1	OBL species x1=
Salix spp.	5	yes	FACW	FACW species x2=
Sapium sebiferum	5	yes	FAC	FAC species x3=
3.	· ——	yes	170	FACU species x4=
4.	<del></del>			· — — — — — — — — — — — — — — — — — — —
5.				
6.	·			Column Totals: (A) (B)
	·			B
7.		= Total Cove		Prevalance Index = B/A =
Short Start or (District	, 10	= Total Cove	er .	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:				Dominance Test is 50%
Myrica cerifera	10	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				<b>l</b> .
4.				Indicators of hydric soil and wetland hydrology must
5.	<del> </del>			be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7.				
	10	= Total Cove	er	Tree- Woody plants, excluding woody vines,
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7.6
Ludwigia peruviana	60	yes	OBL	cm) or larger in diameter at breast height (DBH).
2. Panicum repens	60	yes	FACW	Sapling- Woody plants, excluding woody vines,
<ol><li>Sesbania spp.</li></ol>	20	yes	FAC	approximately 20 ft (6m) or more in height and less than
4. Eupatorium capillifolium	10	no	FACU	in. (7.6 cm) DBH.
5. Pluchea spp.	5	no	FACW	Shrub- Woody plants, excluding woody vines,
6. Panicum hemitomon	5	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.
7. Rhynchospora colorata	5	no	OBL	Herb- All herbaceous (non-woody)plants, including
8.				herbaceous vines, regardless of size. Includes woody
9.				plants, except woody vines, less than approximately 3 ft
10.				(1 m) in height.
11.				Woody vine- All woody vines, regardless of height.
12.	•			1
	165	= Total Cove	er	1
Woody Vine Stratum (Plot size:				
1.				
2.	· ———			1
3.				
4.	. ———			l Hydrophytic
5.				Vegetation Present? YesNo
<u> </u>		= Total Cove		regetation riesenti 105
Remarks: (If observed, list morph				l
Percent cover estimates hased of		•	roader cor	mmunity

SOIL	l: Hillsborough- Myakk							Sampling Point:
		to the der	•	ument th	ne indicator or	confirm the abs	sence of indicators.)	)
epth	Matrix		Redox Features					
iches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
5	10 YR 3/1							very dark gray fine sand
20	10 YR 6/1	- —						gray fine sand
)-25	N 2/0	- —				· <del></del>		black fine sand
5-30	5 YR 3/3							dark reddish brown fine sand
					<del></del>			
		- —						
ype: C≃C	Concentration, D=Dep	oletion, RM	=Reduced Matrix, C	S=Cove	red or Coated 5	Sand Grains.	<sup>2</sup> Location: PL=Pore	
ydric Soi	il Indicators:	4						Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Poly	value Below Su	rface (S8) (LRR	. S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (	S9) (LRR S, T, L	J)	2 cm Muck (A10) (LRR S)
	Histic (A3)		_			ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sutfide (A4)		-		my Gleyed Matri		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		-		illeted Matrix (F3		-	<del></del>
	ied Layers (A5) iic Bodies (A6) (LRR F	D T 10	_		lox Dark Surface		-	Anomalous Bright Loamy Soils (F20)
			-					(MLRA 153B)
	Mucky Mineral (A7) (L		,		leted Dark Surfa		-	Red Parent Material (TF2)
✓ Muck	Presence (A8) (LRR	U)		Red	ox Depressions	(F8)	•.	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm N	Muck (A9) (LRR P,T)			Mart	(F10) (LRR U)			Other (Explain in Remarks)
	ted Below Dark Surfac	ce (A11)		Dep	leted Orchric (F	11) (MLRA 151)	,	
Thick !	Dark Surface (A12)			Iron-	-Manganese Ma	asses (F12) (LRF	R O, P,T) 2	<sup>3</sup> l
Coast	Prairie Redox (A16) (	(MLRA 150	0A) .	Umt	oric Surface (F1	3) (LRR P, T, U)	J	
Sandy	Mucky Mineral (S1) (	(LRR O, S)	) .	Delt	a Orchric (F17)	(MLRA 151)		
Sandy	Gleyed Matrix (S4)			Red	uced Vertic (F1	8) (MLRA 150A,	, 150B)	
	Redox (S5)		-		•	n Soils (F19) (ML		
	ed Matrix (S6)					· , ,	) (MLRA 149A, 153C,	. 153D)
	Surface (S7) (LRR P,	S, T, U)	-		•	•		
	e Layer (If observed)							
	Type:	<i>/-</i>						
	Depth (inches):						Hydric Soil Present	nt? Yes ✓ No .
Remarks:	Deput (alcinos).						Invalie dell'i recon.	1100
Cilians.								
								•

Project/Site: Levy Nuclear Plant - Transmission Li	nes	City/County: Hillsboro	Sampling Date: 9/23/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	·	Sampling Point: AA	
Investigator(s): Justin Styer, Blake Meinecke	9	Section, Township, Range	e: <u>4 28S 17E</u>		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con			%):
Subregion (LRR or MLRA): LRR U	Lat: 28.074204	04 Long: -82.613597 Date			WGS84
Soil Map Unit Name: Myakka fine sand			NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typi	ical for this time of year?	Yes✓	_ No	(If no, explain in Rema	arks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	s normal? Yes <u>√</u>	No
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remar	rks)
SUMMARY OF FINDINGS - Attach site	map showing sampling	g point locations, tra	nsects, import	ant features, etc.	
Hydrophytic Vegetation Present?	Yes ✓ No		• •		
Hydric Soil Present?	Hydric Soil Present? Yes No			Yes✓No	
Wetland Hydrology Present?					
Remarks:					
	•				
HYDROLOGY					
HYDROLOGY					
Wetland Hydrology Indicators:				ors (minimum of two red	quired)
Primary Indicators (minimum of one is required; cl			Surface Soil		
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concave Surfac	ce (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa		
Saturation (A3)	Mart Deposits (B15) (LF	RR U)	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	•
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	rows (C8)		
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	ı	Shallow Aqu	itard (D3)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks) FAC Neutral Test (D5)			
Field Observations:			ŀ		
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No				
Saturation Present?	Yes✓ No	· · · · · · · · · · · · · · · · · · ·	Wetland		
	140	Deptit (inches)	Hydrology Present?	Vac ( Na	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring)	a well periol photos provious	nenoctions) if available:	Present?	Yes <u>✓ No</u>	
Describe Recorded Data (stream gadge, monitorii	ig weil, aeliai priotos, previous i	rispections), ii available.			
Remarks:					

VEGETATION - Use scientific na	mes of plants			Sampling Point:AA
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:
1.				Number of Dominant Species
2.				That Are OBL, FACW, or FAC: $\frac{1}{}$ (A)
3.				Total Number of Dominant
4.				Species Across All Strata: $\frac{1}{}$ (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC:
7.				Prevalance Index worksheet:
				4
Sapling Stratum (Plot size:	)	= Total Cove	r ·	Total % Cover of: Multiply by:  OBL species x1=
1.				FACW species x2=
2.				FAC speciesx3=
3.				FACU species x4=
4.				UPL species x5=
5.				Column Totals: (A) (B)
6.				(-)
7				Prevalance Index = B/A =
		= Total Cove	<del></del>	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:	,	1010, 0010	•	✓ Dominance Test is 50%
do otratum (Fiot size:				Prevalence Index is ≤3.0 <sup>1</sup>
1.				·
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7.				
Herb Stratum (Plot size:)	0	= Total Cove		Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6
Panicum repens	90	yes	FACW	cm) or larger in diameter at breast height (DBH).
Ludwigia peruviana	<u> </u>	no	OBL	Sapling- Woody plants, excluding woody vines,
Sesbania spp.	5	no	FAC	approximately 20 ft (6m) or more in height and less than 3
4.				in. (7.6 cm) DBH.
5. 6.				Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.
7				Herb- All herbaceous (non-woody)plants, including
8.				herbaceous vines, regardless of size. Includes woody
9.				plants, except woody vines, less than approximately 3 ft (1
		<u> </u>		m) in height.
10.				1 '
11.	_			Woody vine- All woody vines, regardless of height.
12.				1
Woody Vine Stratum (Plot size:_	105	= Total Cove	r	
1.				]
2.				
3.				
4.				Hydrophytic
5.				Vegetation Present? Yes <u>✓ No</u> .
		= Total Cove	r	1 •
Remarks: (If observed, list morph				
Percent cover estimates based o			roader cor	mmunity.

County/soil:	Hillsboroug	h- Mvakka

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators  Depth Matrix Redox Features  (inches) Color (moist) % Color (moist) % Type¹ Loc² Texture	Sampling Point:AA
	s.)
	D t.
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture	Remarks
0-5 10 YR 3/1	very dark gray fine sand
5-20 10 YR 6/1	gray fine sand
20-25 N 2/0	black fine sand
25-30 5 YR 3/3	dark reddish brown fine sand
	ore Lining, M=Matrix.
Hydric Soil Indicators:	Indicators for Problematic Hydric Soils 3:
Histol (A1)Polyvalue Below Surface (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)Depleted Dark Surface (F7)	Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)Redox Depressions (F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)Depleted Orchric (F11) (MLRA 151)	
Thick Dark Surface (A12)Iron-Manganese Masses (F12) (LRR O, P,T)	<sup>3</sup> l
Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F13) (LRR P, T, U)	
Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17) (MLRA 151)	I
Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B)	I
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)	I
Stripped Matrix (S6)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153)	C, 153D)
Dark Surface (S7) (LRR P, S, T, U)	•
Restrictive Layer (If observed):	-
Type:	
Depth (inches): Hydric Soil Prese	ent? Yes ✓ No .
Remarks:	
	I
	·
•	

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Hillsboro	ugh	_Sampling Date:_	9/23/09
Applicant/Owner: Progress Energy Florida, Inc.					
Investigator(s): Justin Styer, Blake Meinec					
Landform (hillslope, terrace, etc.):N/	Α	Local relief (concave, con	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.07524				Datum: WGS84
Soil Map Unit Name: Myakka fine sand			NWI classification		
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes✓	_ No		
Are Vegetation, Soil,	•		Are circumstances		Yes/_No
Are Vegetation, Soil,			(If needed, explain	any answers in F	Remarks)
SUMMARY OF FINDINGS - Attach sit				•	· ·
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	is the Sampled Area v	vithin a Wetland?	Yes/	No	
Wetland Hydrology Present?					
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of t	wo required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)	
✓ Saturation (A3)	Mart Deposits (B15) (LI	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	Tows (C8)	
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Saturation V	isible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	)	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutra	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	_ Depth (inches):0-12	_		
Water Table Present?	Yes No	_ Depth (inches):0	_		
Saturation Present?	Yes No		Wetland - Hydrology		
(includes capillary fringe)			Present?	Yes ✓	No
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previo	us inspections), if available	:		
Remarks:					
Acidaks.					
		•			
	•				
1					

VEGETATION - Use scientific nar	nes of plants			Sam	pling Point:	BB
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
Sabal palmetto  2.	5	yes	FAC	Number of Dominant Species That Are OBL, FACW, or	<u>4</u>	(A)
3.		-		Total Number of Dominant	•	(5)
4.				Species Across All Strata:	<u>4</u>	(B)
5.				That Are OBL, FACW, or	100.00	( <b>6</b> /D)
<del></del> 6.		***************************************		FAC:	<u>100.00</u>	(A/B)
<del></del> 7.				Prevalance Index worksheet:		
	5	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	_
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	(B)
6.				1		<b>-</b> '
7.				Prevalance Index = B/A =		
	0	= Total Cove	r	Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Myrica cerifera	10	yes	FAC	Prevalence Index is ≤3.0		
2.				Problematic Hydrophytic		olain)
3.					, , , , , , , , , , , , , , , , , , , ,	μ,
<u>4</u> .				Indicators of hydric soil and we	etland bydrology i	must
5.				be present, unless disturbed or		IIIuət
<u>5.</u> 6.	· -			Definitions of Vegetation Stra		
<del>5.</del> 7.						
Herb Stratum (Plot size:)	10	= Total Cove	r	Tree- Woody plants, excluding w approximately 20 ft (6m) or more		(76
Panicum repens	80	VAC	FACW	cm) or larger in diameter at breas		. (1
Ludwigia peruviana	20	yes	OBL	4 · _		
2. Ludwigia peruviana 3.		yes	OBL	Sapling- Woody plants, excludin approximately 20 ft (6m) or more		than
3. 4.				3 in. (7.6 cm) DBH.	III neignt and icaa	) lilaii
<del>4.</del> 5.				<b>_</b>	····andu vinan	
				Shrub- Woody plants, excluding approximately 3 to 20 ft (1 to 6 m		
<u>6.</u> 7.				1	· -	
		-		Herb- All herbaceous (non-wood	• • •	•
8. o	· -			herbaceous vines, regardless of		
<del>.</del>	· <del></del>			plants, except woody vines, less to (1 m) in height.	man approximate	you
10.				<u> </u>		L
11.				Woody vine- All woody vines, re	gardiess of neight	
12.	100	<del></del>	•			
Mandy Vina Ctratum (Blot nive)		= Total Cove	r			
Woody Vine Stratum (Plot size:	/					
1.	· <del></del>					
2.						
3.				1		
				Hydrophytic		
4.						
4. 5.		= Total Cove		Vegetation Present? Yes	No	<del></del>

County/soil: Hillsborough- Myakka Sampling Point: SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type Loc2 Texture Remarks very dark gray fine sand 5-20 10 YR 6/1 gray fine sand 20-25 N 2/0 black fine sand dark reddish brown fine sand 5 YR 3/3 25-30 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix Indicators for Problematic Hydric Soils 3: Hydric Soil Indicators: Histol (A1) \_1 cm Muck (a9) (LRR O) Polyvalue Below Surface (S8) (LRR S, T, U) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) \_Loamy Gleyed Matrix (F2) \_Depleted Matrix (F3) \_Piedmont Floodplain Soils (F19) (LRR P, S, T) \_Hydrogen Sulfide (A4) \_Stratified Layers (A5) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) Organic Bodies (A6) (LRR P, T, U) (MLRA 153B) \_5 cm Mucky Mineral (A7) (LRR P,T,U) \_Depleted Dark Surface (F7) Red Parent Material (TF2) / Muck Presence (A8) (LRR U) \_Very Shallow Dark Surface (TF12) (LRR T, U) Redox Depressions (F8) \_1 cm Muck (A9) (LRR P,T) \_Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Orchric (F11) (MLRA 151) Depleted Below Dark Surface (A11) \_\_\_Thick Dark Surface (A12) \_Iron-Manganese Masses (F12) (LRR O, P,T) \_Umbric Surface (F13) (LRR P, T, U) \_Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) \_Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 149A) Sandy Redox (S5) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Depth (inches): Hydric Soil Present? Yes \_\_∕\_\_ No Remarks:

Applicant/Owner: Progress Energy Florida, Inc. Investigator(s): Justin Styer, Blake Meinecke Landform (hillslope, terrace, etc.): N/A Subregion (LRR or MLRA): LRR U Soil Map Unit Name: Myakka fine sand Are climatic / hydrologic conditions on the site typical for the same of the sam	Lat: 28.075468  his time of year?  blogy  showing sampling  NoNo	Section, Township, Range Local relief (concave, conv Long:82.6  Yessignificantly disturbed?naturally problematic?	vex, none): none 610780  NWI classification No Are circumstances (If needed, explair ransects, impo	: Shrub Wetland (If no, explain in s normal? n any answers in R	_Slope (%):
Landform (hillslope, terrace, etc.):N/A  Subregion (LRR or MLRA): LRR U  Soil Map Unit Name:	Lat: 28.075468  his time of year?  blogy  showing sampling  NoNo	Section, Township, Range Local relief (concave, conv Long:82.6  Yes ✓ _significantly disturbed? _naturally problematic? ng point locations, tr	e: 4 28S 17E  vex, none): none  610780  NWI classification  No  Are circumstances  (If needed, explair  ransects, impo	: Shrub Wetland (If no, explain in s normal? n any answers in R	_Slope (%):
Subregion (LRR or MLRA): LRR U  Soil Map Unit Name: Myakka fine sand  Are climatic / hydrologic conditions on the site typical for the same of the sam	Lat: 28.075468  his time of year?  blogy  blogy  showing sampling  No  No	Yes<_ significantly disturbed? _naturally problematic? ng point locations, tr	NWI classification No Are circumstances (If needed, explair	: Shrub Wetland (If no, explain in s normal? n any answers in F	Datum: WGS84  Remarks)  Yes _ V _ No  Jemarks)
Soil Map Unit Name: Myakka fine sand  Are climatic / hydrologic conditions on the site typical for the same of the	nis time of year?  plogy plogy showing samplin  V No No	Yessignificantly disturbed? _naturally problematic? ng point locations, tr	NWI classification  No  Are circumstances (If needed, explair ransects, impo	: Shrub Wetland (If no, explain in s normal?	Remarks) Yes <u>√</u> No temarks)
Soil Map Unit Name: Myakka fine sand  Are climatic / hydrologic conditions on the site typical for the same of the	nis time of year?  plogy plogy showing samplin  V No No	Yessignificantly disturbed? _naturally problematic? ng point locations, tr	NWI classification  No  Are circumstances (If needed, explair ransects, impo	: Shrub Wetland (If no, explain in s normal?	Remarks) Yes <u></u> ✓ No emarks)
Are Vegetation, Soil, or Hydro           Are Vegetation, Soil, or Hydro           SUMMARY OF FINDINGS - Attach site map           Hydrophytic Vegetation Present?         Yes           Hydric Soil Present?         Yes           Wetland Hydrology Present?         Yes	ology ology <b>showing samplii</b> ✓ No	significantly disturbed? _naturally problematic? ng point locations, tr	Are circumstances (If needed, explair ransects, impo	s normal? n any answers in R	Yes <u>   √    </u> No <u> </u> lemarks)
Are Vegetation, Soil or Hydro  SUMMARY OF FINDINGS - Attach site map  Hydrophytic Vegetation Present? Yes  Hydric Soil Present? Yes  Wetland Hydrology Present? Yes	ologyshowing samplii V No No	_naturally problematic? ng point locations, tr	(If needed, explair ransects, impo	n any answers in R	emarks)
SUMMARY OF FINDINGS - Attach site map Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes	showing samplii  No No No	ng point locations, tr	ransects, impo	-	•
Hydrophytic Vegetation Present?         Yes	✓ No			rtant features	, etc.
Hydric Soil Present?  Wetland Hydrology Present?  Yes	✓ No	Is the Sampled Area w	ithin a Wetland?	1	
Wetland Hydrology Present? Yes		Is the Sampled Area w	ithin a Wetland?		
, , , , , , , , , , , , , , , , , , , ,	✓ No			Yes	No
Remarks:					
HYDROLOGY					
			Socondan Indicat	ore /minimum of th	uo roquirod)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all	that apply)		Secondary Indicat  Surface Soil		vo required)
		(DO)		getated Concave S	Surface (BR)
<del></del>	ater-Stained Leaves (	D3)		-	Surface (Bo)
<del></del> -	quatic Fauna (B13)	20.10	Drainage Patterns (B10)Moss Trim Lines (B16)		
<del></del>	arl Deposits (B15) (LR	•			
<del></del>	ydrogen Sulfide Odor (	•	Dry-Season Water Table (C2)Crayfish Burrows (C8)		
<del></del>	xidized Rhizospheres			(00)	
<del></del>	esence of Reduced In	, ,		isible on Aerial Im	agery (C9)
<del></del>	ecent Iron Reduction in	• •	Geomorphic		
<del></del>	nin Muck Surface (C7)		Shallow Aqu		
- · · · · · · · · · · · · · · · · · · ·	ther (Explain in Remai	rks)	FAC Neutral	Test (D5)	
Field Observations:	C No.	Death (inches) 0.40			
		Depth (inches): 0-10	1		
	No		Wetland		
	No	Depth (inches): 0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well,			Present?	Yes <u>√</u>	No

<b>VEGETATION</b> - Use scientific nar	nes of plants			Sampling Point:	CC
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Quercus laurifolia	5	yes	FACW	Number of Dominant Species	
2.				That Are OBL, FACW, or	(A)
3.				Total Number of Dominant	·-·,
4.				Species Across All Strata:	(B)
5.	,			That Are OBL FACW or	
6.				FAC: 100.00	(A/B)
7.				Prevalance Index worksheet:	
<u>i </u>	5	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	- 10101 00.0.		OBL species x1=	
Acer rubrum	10	yes	OBL	FACW species x2=	_
2.				FAC species x3=	-
3.				FACU species x4=	-
4.				UPL species x5=	-
5.			-	Column Totals: (A)	- (В)
6.					-\"'
7.				Prevalance Index = B/A =	
, · · · · · · · · · · · · · · · · · · ·	10	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	γ		•	✓ Dominance Test is 50%	
Myrica cerifera	5	VAS	FAC	Prevalence Index is ≤3.0¹	
Baccharis glomeruliflora	<u>.                                      </u>	yes yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	nlain)
3.		<u>yes</u>	FACTA	1 Tobiematic Hydrophytic Vegetation (Ex	Piairi)
4.				11-di-tors of budgie soil and watland budgalague	
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology r be present, unless disturbed or problematic.	nusi
6.				Definitions of Vegetation Strata:	
7.				Delimitions of vegetation Strata.	
<del>/ .</del>	10	= Total Cove			
Herb Stratum (Plot size:)	10	= Total Cove	r	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in.	/7 G
	15		ODL	cm) or larger in diameter at breast height (DBH).	. (7.0
Pontederia cordata     Sechania ann	15	yes	OBL		
2. Sesbania spp.	15	yes	FAC	Sapling- Woody plants, excluding woody vines,	than
3. Juncus spp.	15	yes	OBL	approximately 20 ft (6m) or more in height and less 3 in. (7.6 cm) DBH.	tnan
4. Polygonum punctatum	15	yes	FACW	4 ` ′	
5. Ludwigia peruviana	15	yes	OBL	Shrub- Woody plants, excluding woody vines,	
6. Eupatorium capillifolium	5	no	FACU	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Andropogon virginicus	5	no	FAC	Herb- All herbaceous (non-woody)plants, including	
8. Rhyncospora spp.	4	no	FACW	herbaceous vines, regardless of size. Includes wo	
Commelina spp.	3	no	FACW	plants, except woody vines, less than approximatel	у 3 п
10. Diodia virginiana	3	no	FACW	(1 m) in height.	
11. Thelypteris spp.	3	no	FACW	Woody vine- All woody vines, regardless of height	
12. Juncus marginatus	3	no	FACW		
	101	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
Vitus rotundifolia	5	yes	FAC	]	
Ampelopsis arborea	5	yes	FAC		
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>✓ No</u>	<u>.</u>
	10	= Total Cove	r	1	
Remarks: (If observed, list morph-	ological adapta	tions below).			
Percent cover estimates based or	n meandering s	urvey of the b	roader cor	mmunity.	

pth	ption: (Describe t Matrix							Sampling Point:
ches)	matnx	o the dep		ment the indicator	or confirm the abs	sence of indicate	ors.)	
	Color (moist)	%	Redox Features Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
10	Color (moist)	- 70	Color (moist)	<del></del>	Туре		rexture	Remarks
	YR 3/1							very dark gray fine sand
	) YR 6/1		·					gray fine sand
5 N 2	2/0							black fine sand
5 Y	YR 3/3							dark reddish brown fine sand
				_				
0: C=C000	contration D=Dani	otion DM	- Raducad Matrix (	S=Covered or Coate	d Sand Grains	ZI ocation: DI	=Pore Lining, M≃Mat	hiv .
ric Soil Ind		euon, Rivi-	-Reduced Matrix, C	3-Covered of Coale	d Sand Grains.	Location, FL-	-Fore Lilling, M-Mai	Indicators for Problematic Hydric Soils 3:
Histol (A1)				Polyvalue Below	Surface (S8) (LRR	S. T. U)		1 cm Muck (a9) (LRR O)
Histic Epide			•		(S9) (LRR S, T, L			2 cm Muck (A10) (LRR S)
Black Histic			•		neral (F1) (LRR O)	•		Reduced Vertic (F18) (outside MLRA 150A, B
	Sulfide (A4)		•	Loamy Gleyed Ma				Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ayers (A5)			Depleted Matrix (				Anomalous Bright Loamy Soils (F20)
	odies (A6) (LRR P,	, T, U)	-	Redox Dark Surfa				(MLRA 153B)
5 cm Muck	ky Mineral (A7) (LR	R P.T.U)		Depleted Dark Su	rface (F7)			Red Parent Material (TF2)
	sence (A8) (LRR U		•	Redox Depressio				Very Shallow Dark Surface (TF12) (LRR T, U)
	k (A9) (LRR P,T)	,	•	Marl (F10) (LRR I				Other (Explain in Remarks)
			-		•			one (explain in remails)
•	Below Dark Surface	e (A11)			(F11) (MLRA 151)			
	Surface (A12)		-		Masses (F12) (LRF			31
Coast Prair	irie Redox (A16) (1	/ILRA 150	A) .	Umbric Surface (I	F13) (LRR P, T, U)			
Sandy Muc	cky Mineral (S1) (L	.RR O, S)		Delta Orchric (F1	7) (MLRA 151)			
Sandy Gley	eyed Matrix (S4)			Reduced Vertic (F	18) (MLRA 150A,	150B)		
Sandy Red	dox (S5)			Piedmont Floodpl	ain Soils (F19) (ML	RA 149A)		
Stripped Ma	flatrix (S6)			Anomalous Bright	Loamy Soils (F20	) (MLRA 149A, 1	53C, 153D)	
Dark Surfa	ace (S7) (LRR P, S	i, T, U)						
	yer (If observed):							
Туре								
	oth (inches):						Hydric Soil Preser	nt? Yes ✓ No .
narks:	zar (monda).						1117 4110 00111 10001	

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Hillsboro	ugh	_Sampling Date:_	9/23/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	•	Sampling Point:_	DD
Investigator(s): Justin Styer, Blake Meinec	ke	. Section, Township, Rang	e: <u>4 28S 17E</u>		
Landform (hillslope, terrace, etc.): N/	Α	Local relief (concave, cor	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.076938	B Long: <u>-82.</u>	606637		Datum: WGS84
Soil Map Unit Name: Myakka fine sand			NWI classification	n: <u>NA</u>	
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u>✓</u>	_ No	_ (If no, explain in F	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstance	_	Yes <u> ✓</u> No
Are Vegetation, Soil,			(If needed, explai	n any answers in R	emarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, ti	ransects, impor	rtant features,	etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Is the Sampled Area v	vithin a Wetland?	Yes/	No	
Wetland Hydrology Present?					
Remarks:					
HYDROLOGY					
HYDROLOGY			Cdl-di	A (1-1 4.	
Wetland Hydrology Indicators:	-1			tors (minimum of ty	vo requirea)
Primary Indicators (minimum of one is required;		(7.0)	Surface Soi		
Surface Water (A1)	Water-Stained Leaves	(B9)		egetated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)			atterns (B10)	
Saturation (A3)	Marl Deposits (B15) (LI	•	Moss Trim I		
Water Marks (B1)	Hydrogen Sulfide Odor				
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bu		
Drift Deposits (B3)	Presence of Reduced I	<del></del>			agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	, ,		c Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	,	Shallow Aq		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutra	al Test (D5)	
Field Observations:	No. 2				
Surface Water Present?	YesNo				
Water Table Present?	Yes No	· · · · · · · · · · · · · · · · · · ·	Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	- Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previol	us inspections), it available	:		
Remarks:					

<b>VEGETATION</b> - Use scientific nar	nes of plants			;	Sampling Point:	DD
	Absolute %	Dominant	Indicator	Dominance Test Worksh	eet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	<u> </u>		. <u>-</u>	Number of Dominant Spec	ies <u>4</u>	(A)
2. 3.				That Are OBL, FACW, or	<b>=</b>	(~)
	<del></del>			Total Number of Dominant	: <u>4</u>	(B)
4.				Species Across All Strata:	크	(6)
5.				That Are OBL, FACW, or	100.00	(A/B)
6.				FAC:		(700)
7.				Prevalance Index worksh	eet:	
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Schinus terebinthifolius	50	yes	FAC	FACW species	x2=	
2. Salix spp.	20	yes	FACW	FAC species	x3=	_
Acer rubrum	10	no	OBL	FACU species	x4=	_
4. Sapium sebiferum	10	no	FAC	UPL species	x5=	_
5. Melia azedarach	10	no	NL	Column Totals:	(A)	_ (B)
6.				1 -	• •	_ ' '
7.				Prevalance Index = B/	A =	
	100	= Total Cove	er	Hydrophytic Vegetation I		
Shrub Stratum (Plot size:	)			✓ Dominance Test is		
11				Prevalence Index is		
2.					hytic Vegetation <sup>1</sup> (Ex	olain)
3.					, \	<b>P.</b> ,
4.				Indicators of hydric soil an	ed wetland hydrology i	muet
5.				be present, unless disturbe		lliust
6.			-	Definitions of Vegetation		
7.						
		= Total Cove		Tree- Woody plants, excludi	na woody vines	
Herb Stratum (Plot size:)	· ·	- 10(4) 00.0	21	approximately 20 ft (6m) or r		(7.6
Ludwigia peruviana	20	yes	OBL	cm) or larger in diameter at t	-	. (,
Thelypteris spp.	5	ves	FACW	Sapling- Woody plants, exc	• , ,	]
3.		<u>yes</u>	IACTT	approximately 20 ft (6m) or r		than
4.	<del></del>			3 in. (7.6 cm) DBH.	note in neight and	,
5.				Shrub- Woody plants, exclu	dina woody vinge	
6.	· <del></del>			approximately 3 to 20 ft (1 to		
7.		<del></del>		1	-	
8.				Herb- All herbaceous (non-v		
9.				herbaceous vines, regardles plants, except woody vines,		
				(1 m) in height.	icos man approximato.	y 5
10. 11.	-			Woody vine- All woody vine	a rogardlass of boight	
<del></del>				WOOdy Ville- All Woody Ville	S, regardless or neight	
12.	25	= Total Cove				
144 du Vina Stratum (Blot oize:	25	= Total Cove	3F			
Woody Vine Stratum (Plot size:	)		ļ			
1.	· <del></del>			ļ		
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present?	Yes <u>   √       </u> No <u> </u>	
	0	= Total Cove	<b>∍r</b>	<u>                                     </u>		
Remarks: (If observed, list morpho		-	oroader cor	mmunity		

epth Matrix	e to the dep	th needed to docu	ment the indicator	or confirm the abs	ence of indicate	ors.)	
	.,	Redox Features				•	
ches) Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>	Texture	Remarks
5 10 YR 3/1							very dark gray fine sand
20 10 YR 6/1							gray fine sand
1-25 N 2/0							black fine sand
5-30 5 YR 3/3							dark reddish brown fine sand
ype: C=Concentration, D=D	epletion, RM=	Reduced Matrix, C	S=Covered or Coat	ed Sand Grains.	Location: PL=	Pore Lining, M=Mat	
dric Soil Indicators:							Indicators for Problematic Hydric Soils 3:
Histol (A1)		_		Surface (S8) (LRR			1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	•	_	Thin Dark Surface	ce (\$9) (LRR S, T, U	)		2 cm Muck (A10) (LRR S)
Black Histic (A3)		_	Loamy Mucky M	ineral (F1) (LRR O)			Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)			Loamy Gleyed N	fatrix (F2)			Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)		-	Depleted Matrix				Anomalous Bright Loamy Soils (F20)
_Organic Bodies (A6) (LRR	( P, T, U)	-	Redox Dark Sur				(MLRA 153B)
5 cm Mucky Mineral (A7) (		-	Depleted Dark S				Red Parent Material (TF2)
		-					
Muck Presence (A8) (LRI	-	-	Redox Depressi				Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T	)	-	Marl (F10) (LRR	U)			Other (Explain in Remarks)
Depleted Below Dark Surf	ace (A11)		Depleted Orchri	(F11) (MLRA 151)			
Thick Dark Surface (A12)	, ,	-	Iron-Manganese	Masses (F12) (LRF	(O. P.T)		31
Coast Prairie Redox (A16)	/MI DA 150	۸۱ -		(F13) (LRR P, T, U)			1
		٠, -	<del></del>				
Sandy Mucky Mineral (S1)		-	Delta Orchric (F				
Sandy Gleyed Matrix (S4)		-	_	(F18) (MLRA 150A,	•		
Sandy Redox (S5)		-		olain Soils (F19) (ML			
Stripped Matrix (S6)		-	Anomalous Brig	ht Loamy Soils (F20)	(MLRA 149A, 1	53C, 153D)	
Dark Surface (S7) (LRR P	, S, T, U)						
estrictive Layer (If observe	d):						
Type:							
Depth (inches):						Hydric Soil Preser	nt? Yes ✓ No .
emarks:							
•							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Date:_	9/23/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	EE	
Investigator(s): Justin Styer, Blake Meineck						
Landform (hillslope, terrace, etc.): N/A	<b>\</b>	Local relief (concave, con	vex, none): none		_ Slope (%):	
Subregion (LRR or MLRA): LRR U		3 Long: <u>-82.</u> 6	06251	· · · ·	Datum: WGS84	
Soil Map Unit Name: Basinger fine sand			NWI classification:	Shrub wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_ No	(If no, explain in I	Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normal?	Yes <u></u> ✓ No	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in R	emarks)	
SUMMARY OF FINDINGS - Attach site	e map showing sampli	ng point locations, tı	ansects, impor	tant features,	etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present? .	ls the Sampled Area within a Wetland? Yes✓ No					
Wetland Hydrology Present?	Yes No					
Remarks:	* "					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	•	vo required)	
Primary Indicators (minimum of one is required; of			Surface Soil	· · · · · · · · · · · · · · · · · · ·		
Surface Water (A1)	Water-Stained Leaves	(B9)		getated Concave S	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa			
Saturation (A3)	Marl Deposits (B15) (LI	•	Moss Trim L			
Water Marks (B1)	Hydrogen Sulfide Odor	• •		Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	. ,	Crayfish Burn	• •		
Drift Deposits (B3)	Presence of Reduced I	· ,				
Algal Mat or Crust (B4)	Recent Iron Reduction					
Iron Deposits (B5)	Thin Muck Surface (C7	,	Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)		
Field Observations:	V (					
Surface Water Present?	Yes✓ No		=			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yes No	_ Depth (inches):U	Hydrology			
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ing well periol photos provious	a inapactiona) if available:	Present?	Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial priotos, previous	s inspections), if available.				
Domesto						
Remarks:						

VEGETATION - Use scientific nan	nes of plants			Samp	ling Point:	<u>EE</u>
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species That Are OBL, FACW, or	<u>5</u>	(A)
3.				Total Number of Dominant	_	
4.				Species Across All Strata:	<u>5</u>	(B)
5.				That Are OBL, FACW, or	****	
4. 5. 6.				FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			<u> </u>	:1=	
Acer rubrum	20	yes	OBL	FACW species x	2=	_
2. 3.				FAC speciesx	:3=	_
3.				FACU speciesx	4=	_
4.				UPL speciesx	:5= <u></u>	_
5.				Column Totals: (	A)	_ (B)
6.				1 ——		_
7.				Prevalance Index = B/A =		
	20	= Total Cove	÷r	Hydrophytic Vegetation Indica	tors:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
Cephalanthus occidentalis	5	yes	OBL	Prevalence Index is ≤3.0 <sup>1</sup>		
2. 3.				Problematic Hydrophytic \	Vegetation <sup>1</sup> (Ex	plain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and wet		must
5.				be present, unless disturbed or p	oroblematic.	
6.				Definitions of Vegetation Strat	a:	
7.				]		
Herb Stratum (Plot size:)	5	= Total Cove	er	Tree- Woody plants, excluding wo approximately 20 ft (6m) or more in	n height and 3 in.	. (7.6
Polygonum punctatum	80	yes	FACW	cm) or larger in diameter at breast	height (DBH).	
2. Ludwigia peruviana	20	yes	OBL	Sapling- Woody plants, excluding		
Saururus cernuus	20	yes	OBL	approximately 20 ft (6m) or more in	n height and less	than
Eupatorium capillifolium	10	no	FACU	3 in. (7.6 cm) DBH.		
5. Laportea sp.	10	no	FACW	Shrub- Woody plants, excluding w		
6. Blechnum serrulatum	5	no	FACW	approximately 3 to 20 ft (1 to 6 m)	in height.	
7. Thelypteris spp.	5	no	FACW	Herb- All herbaceous (non-woody)		
8. 9.				herbaceous vines, regardless of si		
				plants, except woody vines, less th	an approximatel	y 3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines, rega	ardless of height.	•
12.						
Woody Vine Stratum (Plot size:	)	= Total Cove	<del>;</del> r			
1.				-		
2. 3. 4. 5.						
3. 1				l le -dua mby dia		
<u>4.</u>				Hydrophytic Vegetation Present? Yes	✓ No	
J.		= Total Cove	\r	Vegetation Present? Yes _		<del></del>
Remarks: (If observed, list morpho			я			
Percent cover estimates based on	-	-	roader cor	mmunity.		

County/soil: Hillsborough- Basinger SOIL				Sampling Point:
ofile Description: (Describe to the dep	•	ator or confirm the absence of i	ndicators.)	
ches) Matrix Color (moist) %	Redox Features	Type¹ Loc		Damed:
ches) Color (moist) %	Color (moist) %		Texture	Remarks
7 10 YR 2/1				black fine sand
28 10 YR 6/1				gray fine sand
10 YR 5/3; 10 YR				- 400
142 5/2		<del></del>	<del></del>	brown and grayish brown fine sand
-80 10 YR 6/2	<del></del>			light brownish gray fine sand
			<del></del>	
	<del></del>			
ype: C=Concentration, D=Depletion, RM	N=Reduced Matrix, CS=Covered or C	Coated Sand Grains. Location	on: PL=Pore Lining, M=Matri	ix.
dric Soil Indicators:			ı	ndicators for Problematic Hydric Soils 3:
_Histol (A1)		elow Surface (S8) (LRR S, T, U)		1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)		urface (S9) (LRR S, T, U)	-	2 cm Muck (A10) (LRR S)
_Black Histic (A3) Hydrogen Sulfide (A4)		y Mineral (F1) (LRR O) ed Matrix (F2)	-	Reduced Vertic (F18) (outside MLRA 150A, B) Piedmont Floodplain Soils (F19) (LRR P, S, T)
Hydrogen Suinde (A4) _Stratified Layers (A5)	Loamy Gleye Depleted Ma		-	_
_Organic Bodies (A6) (LRR P, T, U)	Bepleted Wa		-	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)	<del></del>	rk Surface (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depre	• •	-	Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (LRR P,T)	Marl (F10) (L		-	Other (Explain in Remarks)
_ , ,, .,		•	•	outer (Explain at Normalia)
_Depleted Below Dark Surface (A11) _Thick Dark Surface (A12)		chric (F11) (MLRA 151) lese Masses (F12) (LRR O, P,T)	,	<b>1</b> .
_Coast Prairie Redox (A16) (MLRA 150		ace (F13) (LRR P, T, U)	•	<sup>3</sup> 1
	· —			
_Sandy Mucky Mineral (S1) (LRR O, S)	· —	(F17) (MLRA 151)		
Sandy Gleyed Matrix (S4)		rtic (F18) (MLRA 150A, 150B)		
Sandy Redox (S5) Stripped Matrix (S6)		oodplain Soils (F19) (MLRA 149A) Bright Loamy Soils (F20) (MLRA 1		
Dark Surface (S7) (LRR P, S, T, U)		5/1g/10 200/1/1/ 00/10 (1/20) (1/2/01 1	1001, 1000, 1000,	
estrictive Layer (If observed):				
Type:				
Depth (inches):			Hydric Soil Present	t? Yes✓ No
emarks:				
			•	
		·		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 9/24/09			9/24/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:_	FF
Investigator(s): Justin Styer, Blake Meineck	:e	Section, Township, Range	: 4 28S 17E		
Landform (hillslope, terrace, etc.): N//	<del>\</del>	Local relief (concave, con-	vex, none): <u>none</u>	•	_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.079626</u>	6 Long: <u>-82.5</u>	98987		Datum: WGS84
Soil Map Unit Name: Basinger fine sand			NWI classification	: Freshwater eme	rgent wetland
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes	_ No	(If no, explain in F	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		Yes <u> ✓ No</u>
Are Vegetation, Soil			(If needed, explain	any answers in R	emarks)
SUMMARY OF FINDINGS - Attach site	e map showing samplir	ng point locations, tra	ansects, impor	tant features,	etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	Yes/	No	
Wetland Hydrology Present?	]				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of tv	vo required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	getated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced In	ron (C4)	Saturation V	isible on Aerial Ima	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic	Position (D2)	
fron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-24			
Water Table Present?	Yes No	Depth (inches): 0			
Saturation Present?	Yes No		Wetland Hydrology		
(includes capillary fringe)			Present?	Yes 🗸	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	us inspections), if available:			
Remarks:					
		•			
,					
		•			
ļ					

<b>VEGETATION</b> - Use scientific na	mes of plants			Sa	ampling Point:	FF
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet		
1.				Number of Dominant Species	; 1	<b>(</b> A)
2.				That Are OBL, FACW, or	<u>4</u>	(A)
3.				Total Number of Dominant	<u>5</u>	(B)
4.				Species Across All Strata:	<u> </u>	( <del>B</del> )
5.				That Are OBL, FACW, or	80.00	(A/B)
6.				FAC:	·	(***)
7.				Prevalance Index workshee	rt:	
Sapling Stratum (Plot size:	)	= Total Cove	er	Total % Cover of: OBL species	Multiply by: _x1=	_
Acer rubrum	10	yes	OBL	FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	_ (B)
6.				1 —		<b>-</b> ` '
7.	-			Prevalance Index = B/A =	=	
	10	= Total Cove	er	Hydrophytic Vegetation Ind	icators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50		
Myrica cerifera	10	yes	FAC	Prevalence Index is ≤		
2.				Problematic Hydrophy		plain)
3.		-		<u> </u>		" ´
4.			-	Indicators of hydric soil and v	wetland hydrology	must
5.				be present, unless disturbed		
6.				Definitions of Vegetation St		
7.				1		
Herb Stratum (Plot size:)	10	= Total Cove	e <b>r</b>	Tree- Woody plants, excluding approximately 20 ft (6m) or mo		. (7.6
Polygonum punctatum	50	yes	FACW	cm) or larger in diameter at bre	ast height (DBH).	
Ludwigia peruviana	30	yes	OBL	Sapling- Woody plants, exclud	ling woody vines,	
3. Juncus effusus	15	no	FACW	approximately 20 ft (6m) or mor		s than
4. Panicum hemitomon	2	no	OBL	3 in. (7.6 cm) DBH.		
5. Eupatorium capillifolium	1	no	FACU	Shrub- Woody plants, excludin	ig woody vines,	
6. Thelypteris spp.	1	no	FACW	approximately 3 to 20 ft (1 to 6		
7.				Herb- All herbaceous (non-woo	ody)plants, including	1
8.				herbaceous vines, regardless of		
9.				plants, except woody vines, les	s than approximatel	ly 3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines,	regardless of height	<b>(.</b>
12.				1		
	99	= Total Cove	er	1		
Woody Vine Stratum (Plot size:	)					
1. Rubus spp.	1	yes	FACU			
2.				1		
3.						
4.				Hydrophytic		
5.				Vegetation Present? Ye	esNo	
	1	= Total Cove	er	1		
Remarks: (If observed, list morph	nological adapta	ations below).			· · · · · · · · · · · · · · · · · · ·	
Percent cover estimates based or	-		oroader cor	mmunity		

Depth (nches)         Matrix (nches)           -7         10 YR 2/1		par necessa to acc	ument the indic	ator or confirm the abs	ence of indicat	tors.)	
		Redox Features					
7 40.70.04	%	Color (moist)	<u> </u>	Type'	Loc <sup>2</sup>	Texture	Remarks
							black fine sand
-28 10 YR 6/1							gray fine sand
10 YR 5/3; 10 YR							
8-42 5/2							brown and grayish brown fine sand
2-80 10 YR 6/2			<u> </u>				light brownish gray fine sand
			_				
Type: C=Concentration, D=D	Depletion, RN	/=Reduced Matrix,	CS=Covered or 0	Coated Sand Grains.	<sup>2</sup> Location: PL	.=Pore Lining, M=Mat	rix.
lydric Soil Indicators:							Indicators for Problematic Hydric Soils 3:
Histol (A1)				elow Surface (S8) (LRR			1 cm Muck (a9) (LRR O)
Histic Epidon (A2)				urface (S9) (LRR S, T, U	)		2 cm Muck (A10) (LRR S)
Black Histic (A3)				ky Mineral (F1) (LRR O)			Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4) Stratified Layers (A5)			Depleted Ma	ed Matrix (F2)			Piedmont Floodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRI	R P. T. III			Surface (F6)			Anomalous Bright Loamy Soils (F20) (MLRA 153B)
5 cm Mucky Mineral (A7)		١		ark Surface (F7)			Red Parent Material (TF2)
✓ Muck Presence (A8) (LR		,		ressions (F8)			Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,			Marl (F10) (I				Other (Explain in Remarks)
Depleted Below Dark Sur	face (A11)		Depleted Or	chric (F11) (MLRA 151)			
Thick Dark Surface (A12)	1		Iron-Mangar	nese Masses (F12) (LRF	O, P,T)		3 <sub>1</sub>
Coast Prairie Redox (A16	6) (MLRA 15	0A)	Umbric Surf	ace (F13) (LRR P, T, U)			
Sandy Mucky Mineral (S1	) (LRR O, S	)	Delta Orchri	c (F17) (MLRA 151)			
Sandy Gleyed Matrix (S4)	)		Reduced Ve	ertic (F18) (MLRA 150A,	150B)		
Sandy Redox (S5)				oodplain Soils (F19) (ML			
Stripped Matrix (S6)			Anomalous	Bright Loamy Soils (F20)	(MLRA 149A,	153C, 153D)	
Dark Surface (S7) (LRR I						· p	
Restrictive Layer (If observe	ed):						
Type:						Unidaia Cail Danas	nt? Yes ✓ No .
Depth (inches): Remarks:			<del></del>			Hydric Soil Preser	nt? Yes ✓ No

Project/Site: Levy Nuclear Plant - Transmission I	_ines	City/County: Hillsborou	igh	Sampling Date:_	9/24/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	GG
Investigator(s): Justin Styer, Blake Meinecl	re	Section, Township, Range	: 3 28S 17E		
Landform (hillslope, terrace, etc.): N/.	Α	Local relief (concave, conv	vex, none): none		_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.081502	2 Long: <u>-82.5</u>	93501		Datum: WGS84
Soil Map Unit Name: Myakka fine sand			NWI classification:	Freshwater eme	rgent wetland
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	. No	(If no, explain in F	Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	YesNo
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in R	emarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing samplir	ng point locations, tra	ansects, impor	tant features,	etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	Yes	No	
Wetland Hydrology Present?	Yes No				
Remarks:					
HADBOI OCA					
HYDROLOGY			Connedential	(	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required:	obook all that apply		Secondary Indicate		70 requirea)
		(DO)	Surface Soil		\deea (DO)
✓ Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (	<sub>[09]</sub>		jetated Concave S	Juriace (Bo)
· '	Aquatic Fauna (B13)	DD 110	Drainage Pa		
Saturation (A3)	Marl Deposits (B15) (LF	-	Moss Trim Li		
Water Marks (B1)	Hydrogen Sulfide Odor	• •		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	-	Crayfish Burn		(00)
Drift Deposits (B3)	Presence of Reduced In			sible on Aerial Ima	igery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i			Position (D2)	
lron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7)Other (Explain in Remai		Shallow Aqui	* *	
Field Observations:	Other (Explain in Nemal	11.07	I AC Nedular	Test (D3)	
Surface Water Present?	Yes No	Denth (inches): 0-24			
Water Table Present?	Yes No		1		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)	140	Deptil (iliciles)	Hydrology Present?	Yes ✓	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	is inspections), if available:	Fresence	163	NO
		· <del>-</del>			
Daniel de la constant					
Remarks:					
	•				

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	GG
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	-			Number of Dominant Species	(A)
2.				That Are OBL, FACW, or 3	(^)
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	(B)
5.				That Are OBL, FACW, or	(A (D)
6.	. ——		-	FAC: 75.00	(A/B)
7.				Prevalance Index worksheet:	1
	0	= Total Cove	er	Total % Cover of: Multiply by	:
Sapling Stratum (Plot size:	)			OBL species x1=	·
1.				FACW species x2=	_
				FAC species x3=	_
2. 3.				FACU species x4=	
4.			<del></del>	UPL species x5=	
5.				Column Totals: (A)	— (B)
5. 6.				,	—`
7.	•			Prevalance Index = B/A =	
		= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
Baccharis glomeruliflora	15	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
Myrica cerifera	5	yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (B	-xolain)
3. 4.				Indicators of hydric soil and wetland hydrolog	v must
5.				be present, unless disturbed or problematic.	ymust
6.				Definitions of Vegetation Strata:	
7.				20	
	20	= Total Cove	۰r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)		- 1000 - 00.	.1	approximately 20 ft (6m) or more in height and 3	in. (7,6
Ludwigia peruviana	80	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Panicum hemitomon	5	no	OBL	Sapling- Woody plants, excluding woody vines,	
Woodwardia virginica	5	no	OBL	approximately 20 ft (6m) or more in height and le	ss than
4.	·			3 in. (7.6 cm) DBH.	
5.	- —			Shrub- Woody plants, excluding woody vines,	:
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.	-			Herb- All herbaceous (non-woody)plants, includi	na
8.				herbaceous vines, regardless of size. Includes v	
9.				plants, except woody vines, less than approxima	
10.				(1 m) in height.	,
11.				Woody vine- All woody vines, regardless of heig	iht.
12.					,,,,
12.	90	= Total Cove			
Woody Vine Stratum (Plot size:	)	- 10101 55.5	"		
Rubus spp.	10	ves	FACU		
2.		<u>yes</u>	1700		
3.	- ——				
	-			l. Lhdahsia	
<b>4</b> . <b>5</b> .				Hydrophytic Vegetation Present? Yes ✓ No	
J <sup>5.</sup>	10	= Total Cove	\ <u>-</u>	Vegetation Present? YesNo_ 	
Remarks: (If observed, list morph			<del>//</del>	<u>L</u>	
	-		ador oo	na ma com like y	
Percent cover estimates based or	n meandening s	survey of the b	noader cor	nmunity.	ŀ

отне иє		4 - 411-					\	Sampling Point:
	escription: (Describe	to the de		ument the indicat	or or confirm the abs	sence of indicati	ors.)	
oth	Matrix	%	Redox Features	0/	Type	Locz	Toutura	Romarka
hes)	Color (moist)	- 70	Color (moist)	<u>_%_</u>	rype		Texture	Remarks
	10 YR 3/1							very dark gray fine sand
)	10 YR 6/1							gray fine sand
5	N 2/0				-			black fine sand
30	5 YR 3/3							dark reddish brown fine sand
								,
e: C=	Concentration, D=Dep	letion, RM	=Reduced Matrix,	CS=Covered or Co	ated Sand Grains.	Location: PL:	Pore Lining, M=Ma	trix.
ric Sc	oil Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Polyvalue Beld	ow Surface (S8) (LRR	S, T, U)		1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin Dark Surf	face (S9) (LRR S, T, L	I)		2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loamy Mucky	Mineral (F1) (LRR O)			Reduced Vertic (F18) (outside MLRA 150A, E
	gen Sulfide (A4)			Loamy Gleyed				Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratif	ied Layers (A5)			Depleted Matr	ix (F3)			Anomalous Bright Loamy Soils (F20)
Orgar	nic Bodies (A6) (LRR F	P, T, U)		Redox Dark S	urface (F6)			(MLRA 153B)
5 cm l	Mucky Mineral (A7) (L1	RR P,T,U)		Depleted Dark	Surface (F7)			Red Parent Material (TF2)
	Presence (A8) (LRR I			Redox Depres				Very Shallow Dark Surface (TF12) (LRR T, U)
	. , ,	-,			, ,			Other (Explain in Remarks)
	Muck (A9) (LRR P,T)			Marl (F10) (LF	•			Outer (explain in Remarks)
	ted Below Dark Surfac	e (A11)			ric (F11) (MLRA 151)			
Thick	Dark Surface (A12)			iron-Mangane	se Masses (F12) (LRF	R O, P,T)		3 <sub>1</sub>
Coast	Prairie Redox (A16) (	MLRA 150	DA)	Umbric Surfac	e (F13) (LRR P, T, U)			
Sand	Mucky Mineral (S1) (I	RR O SI		Delta Orchric (	F17) (MLRA 151)			
			'			450D)		
	Gleyed Matrix (\$4)				c (F18) (MLRA 150A,			
	Redox (S5)				dplain Soils (F19) (ML		E2C 1E2D)	
	ed Matrix (S6)			Anomalous bi	ight Loamy Soils (F20	) (WILKA 149A, 1	330, 1330)	
	Surface (S7) (LRR P, S							
trictiv	e Layer (If observed)	:					ł	
	Туре:							
	Depth (inches):						Hydric Soil Prese	nt? Yes <u>√</u> No
arks:								
						•		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	_Sampling Date:_	9/24/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling I			HH
Investigator(s): Justin Styer, Blake Meineck	ie	Section, Township, Range	: 3 28S 17E		
Landform (hillslope, terrace, etc.): N/A	<b>\</b>	Local relief (concave, conv	/ex, none): none		_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.082531	Long: <u>-82,5</u>	90857	<del></del>	Datum: WGS84
Soil Map Unit Name: Water			NWI classification	:_Lake	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes	_ No	(If no, explain in I	Remarks)
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances	s normal?	Yes✓_No
Are Vegetation, Soil,			(If needed, explain	any answers in R	emarks)
SUMMARY OF FINDINGS - Attach site			ansects, impor	tant features,	etc.
Hydrophytic Vegetation Present?	Yes No		•	•	
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes/	No
Wetland Hydrology Present?	YesNo				į
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of tw	vo required)
Primary Indicators (minimum of one is required; of	check all that apply)			Cracks (B6)	ro rodanou,
✓ Surface Water (A1)	Water-Stained Leaves (	'RO)		getated Concave S	Curface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	,55)	Oparsery ve	-	diface (DO)
` ′		2010		* *	
Saturation (A3)	Marl Deposits (B15) (LF	•	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor	•	·	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur		
Drift Deposits (B3)	Presence of Reduced Ir	, ,		isible on Aerial Ima	agery (C9)
Algai Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		4		
Water Table Present?	Yes No	Depth (inches): 0	18/04/0		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes ✓	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:	•		
Remarks:			· · · · · · · · · · · · · · · · · · ·		
incinario,					•
					*.

VEGETATION - Use scientific na	mes of plants			Sampli	ng Point:	HH
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	0	<b>(A)</b>
2.				That Are OBL, FACW, or	<u>8</u>	(A)
3.	• ———			Total Number of Dominant	•	(5)
4.	-			Species Across All Strata:	<u>9</u>	(B)
5.	-			That Are OBL, FACW, or		
6.				IFAC:	<u>88.89</u>	(A/B)
7.	-			Prevalance Index worksheet:		
		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)		-	OBL species x		
Taxodium distichum	10	yes	OBL		2=	-
Acer rubrum	5	yes	OBL	FAC species x3	3=	-
3. 4.	•			<del></del>	1=	-
4.				· · · · · · · · · · · · · · · · · · ·	5=	-
5.				Column Totals: (A	۸)	– (B)
6.	• ———				′	_ (- /
7.	-			Prevalance Index = B/A =		
	15	= Total Cove		Hydrophytic Vegetation Indicat	ors:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1. Ilex cassine	5	yes	FACW	Prevalence Index is ≤3.0¹		
Sambucus canadensis	5	yes	FACW	Problematic Hydrophytic V	/egetation <sup>1</sup> (Ex	nlain)
			17.011	1 robicinado riyaropriyas v	egotation (Ex	piaii,
3. 4. 5. 6.	-			Indicators of hydric soil and wetla	and hydrology r	muet
5				be present, unless disturbed or pr		iiust
6.	- —			Definitions of Vegetation Strata		
7.	•					
	10	= Total Cove	-r	Tree- Woody plants, excluding woo	dy vines	
Herb Stratum (Plot size:)	.0	. 0.0.	<b>,</b>	approximately 20 ft (6m) or more in		(7.6
Ludwigia peruviana	20	yes	OBL	cm) or larger in diameter at breast h		(7.0
Panicum hemitomon	20	yes	OBL	  Sapling- Woody plants, excluding v		
Osmunda cinnamomea	20	yes	FACW	approximately 20 ft (6m) or more in		than
Nymphaea spp.	20	yes	OBL	3 in. (7.6 cm) DBH.	noight and look	tirai.
5.			<u> </u>	Shrub- Woody plants, excluding wo	nody vines	
6				approximately 3 to 20 ft (1 to 6 m) in		
6. 7.	•	<del></del>		1	_	
8.	- ——			Herb- All herbaceous (non-woody)pherbaceous vines, regardless of siz		
9.				plants, except woody vines, less that		
10.				(1 m) in height.	an approximator	,
11.				Woody vine- All woody vines, rega	rdless of height	
12.				woody vine- All woody vines, rega	raiess of fleight.	
12.	80	= Total Cove		1		
Woody Vine Stratum (Plot size:	, 00	- Total Cove	<b>21</b>			
	20	1/00	EACH			
1. Rubus spp.		yes	FACU			
2.						
3.				l <i></i>		
4.				Hydrophytic		
5.	. —			Vegetation Present? Yes	<u>√No</u>	
D	20	= Total Cove	er	<u> </u>		
Remarks: (If observed, list morph		•				
Percent cover estimates based or	n meandering s	urvey of the b	roader cor	nmunity.		

SOIL					Sampling Point:
Profile Description: (Describe to the depth needed to	document the indic	ator or confirm the ab	sence of indicat	ors.)	
Depth Matrix Redox Feat	ures				
inches) Color (moist) % Color (moi	st) %	Type <sup>1</sup>	Loc²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Ma	atrix, CS=Covered or	Coated Sand Grains.	Location: PL	=Pore Lining, M=Matr	
lydric Soil Indicators:	,				Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue B	elow Surface (S8) (LRR	S, T, U)		1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark S	urface (S9) (LRR S, T, I	J)		2 cm Muck (A10) (LRR S)
Black Histic (A3)		y Mineral (F1) (LRR O)		•	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)		ed Matrix (F2)		•	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma			•	
Organic Bodies (A6) (LRR P, T, U)		Surface (F6)			Anomalous Bright Loamy Soils (F20)
					(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)		ark Surface (F7)		,	Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depr	essions (F8)			Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (	LRR U)			Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Or	chric (F11) (MLRA 151)	)		
Thick Dark Surface (A12)		nese Masses (F12) (LR		:	3 <sub>1</sub>
Coast Prairie Redox (A16) (MLRA 150A)		ace (F13) (LRR P, T, U			
	<del></del>		,		
Sandy Mucky Mineral (S1) (LRR O, S)		c (F17) (MLRA 151)			
Sandy Gleyed Matrix (S4)		ertic (F18) (MLRA 150A			
Sandy Redox (S5)		oodplain Soils (F19) (M			
Stripped Matrix (S6)	Anomalous	Bright Loamy Soils (F20	) (MLRA 149A, 1	153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)					
Restrictive Layer (If observed):				T	
Type:					
Depth (inches):				Hydric Soil Presen	nt? Yes ✓ No .
Remarks:				1.174.10 00	······································
remarks.					
		•			

Applicant/Owner: Progress Energy Florida, Inc.  Investigator(s):Justin Styer, Blake Memecke	Project/Site: Levy Nuclear Plant - Transmission t	ines	City/County: Hillsboro	ugh	Sampling Date:_	9/24/09
Landform (hillislope, terrace, etc.):   N/A	Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	11
Subregion (LRR or MLRA):LRR U	Investigator(s): Justin Styer, Blake Meineck	(e	Section, Township, Range	e: 35 27S 17E		
Subregion (LRR or MLRA):LRR U	Landform (hillslope, terrace, etc.): N//	Δ	Local relief (concave, con	vex, none): none		_Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes / No Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Present? Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes / No   Is the Sampled Area within a Wetland? Yes / No   Wetland Hydrology Present? Yes / No   Is the Sampled Area within a Wetland? Yes / No   Surface Soil Cracks (B6)   Sparsely Vegetated Concave Surface (B8)   Sparsely Vegetated Concave Surface (B8)   Sparsely Vegetated Concave Surface (B8)   Sparsely Vegetated Concave Surface (B8)   Primary Indicators (minimum of no is required)   High Water Table (A2)   Aquatic Fauna (B13)   Drainage Patterns (B10)   Advantage Patterns (B10)   Advantage Patterns (B10)   Averemarks (B1)   Moss Trim Lines (B16)   Dry-Season Water Table (C2)   Sediment Deposits (B2)   Oxidized Rhizospheres on Living Roots (C3)   Crayfish Burrows (C8)   Saturation Visible on Aerial Imagery (C9)   Algal Mat or Crus (B4)   Recent Iron Reduction in Tilled Soils (C6)   Saturation Visible on Aerial Imagery (C9)   Other (Explain in Remarks)   PAC Neutral Test (D5)   FAC Neutral Test (D5)   Facility   Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)   Ower of the Hydrology   Present? Yes / No   Depth (inches)			5 Long: <u>-82.5</u>	82943		Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes ✓ No Are Vegetation Soil or Hydrology naturally problematic? ((If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrology Present? Yes ✓ No Hydric Soil Present? Yes ✓ No Secondary Indicators (minimum of two required)  Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6)  ✓ Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  ✓ Saturation (A3) Mari Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation (Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent fron Reduction in Tilm Muck Surface (C7) Shallow Aquitard (D3)  FIELD Observations:  Surface Water Present? Yes ✓ No Depth (inches): O  Water Table Present? Yes ✓ No Depth (inches): O  Saturation Present? Yes ✓ No Depth (inches): O  Water Table Present? Yes ✓ No Depth (inches): O  Water Table Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Water Table Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Saturation Present? Yes ✓ No Depth (inches): O  Wetland Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O	Soil Map Unit Name: Water			NWI classification:	Freshwater Pon-	d
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes ✓ No Are Vegetation Soil or Hydrology naturally problematic? ((If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrology Present? Yes ✓ No Hydric Soil Present? Yes ✓ No Secondary Indicators (minimum of two required)  Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6)  ✓ Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  ✓ Saturation (A3) Mari Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation (Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent fron Reduction in Tilm Muck Surface (C7) Shallow Aquitard (D3)  FIELD Observations:  Surface Water Present? Yes ✓ No Depth (inches): O  Water Table Present? Yes ✓ No Depth (inches): O  Saturation Present? Yes ✓ No Depth (inches): O  Water Table Present? Yes ✓ No Depth (inches): O  Water Table Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Water Table Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Saturation Present? Yes ✓ No Depth (inches): O  Wetland Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O  Hydrology Present? Yes ✓ No Depth (inches): O	Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes	_ No	(If no, explain in F	Remarks)
### Summary OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  ###################################	Are Vegetation, Soil,	or Hydrology				
### Summary OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  ###################################	Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Water Table (A2)  Aquatic Fauna (B13)  Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Drinage Patterns (B16)  Water Marks (B1)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Inon Deposits (B5)				ansects, import	tant features,	etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland Hydrology  Wetland Hydrology  Present?  Yes  No  Depth (inches): 0  Wetland Hydrology  Present?  Yes  No  Depth (inches): 0  Wetland Hydrology  Present?  Yes  No  Depth (inches): 0  Wetland Hydrology  Present?  Yes  No  Depth (inches): 0  Present?	Hydrophytic Vegetation Present?	Yes No				
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Moss Trim Lines (B16)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Crayfish Burrows (C8)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  FAC Neutral Test (D5)  Fletd Observations:  Surface Soil Cracks (B6)  — Sparsely Vegetated Concave Surface (B8)  — Drainage Patterns (B10)  — Moss Trim Lines (B16)  — Dry-Season Water Table (C2)  — Crayfish Burrows (C8)  — Saturation Visible on Aerial Imagery (C9)  — Shallow Aquitard (D3)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  — FAC Neutral Test (D5)  Fletd Observations:  Surface Water Present?  — Yes — No — Depth (inches): _0  — Wetland  Hydrology  Present? Yes — No  (includes capillary fringe)	Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes/	No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9) — Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) — Aquatic Fauna (B13) — Drainage Patterns (B10)  ✓ Saturation (A3) — Marl Deposits (B15) {LRR U} — Moss Trim Lines (B16) — Water Marks (B1) — Hydrogen Sulfide Odor (C1) — Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Drift Deposits (B3) — Presence of Reduced Iron (C4) — Saturation Visible on Aerial Imagery (C9) — Iron Deposits (B5) — Thin Muck Surface (C7) — Shallow Aquitard (D3) — Freld Observations:  Surface Water Present?  Yes ✓ No Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland Hydrology Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland	Wetland Hydrology Present?	Yes No	]			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Remarks:					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches): 0  Wettand  Hydrology  Present?  Yes  No  Depth (inches): 0  Wettand  Hydrology  Present?  Yes  No  Depth (inches): 0  Wettand  Hydrology  Present?  Yes  No  Depth (inches): 0  Wettand  Hydrology  Present?  Yes  No  Depth (inches): 0  Wettand  Hydrology  Present?  Yes  No  Depth (inches): 0  Wettand  Hydrology  Present?  Yes  No  Depth (inches): 0  Present?  Yes  No  Depth (inches): 0  Present?  No  Present?  Yes  No  Present?  No  Present?  No  Present?  Yes  No  Present?  No  Present?  Yes  No  Present?  No  Present?  Yes  No  Present?  Present?  Present Present?  Present?  Present?  Present?  Present?  Present Present Present?  Present Present Present?  Present Present Present?	HYDROLOGY					
✓ Surface Water (A1)	Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	vo required)
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)	
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)	✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Veg	jetated Concave S	Surface (B8)
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes✓ NoDepth (inches):96  Water Table Present? Yes✓ NoDepth (inches):0  Saturation Present? Yes✓ NoDepth (inches):0  Wetland Hydrology  Present? Yes✓ NoDepth (inches):0  Present? Yes✓ NoDepth (inches):0  No	High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	ttems (B10)	
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D5)Shallow Agritard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)	✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	nes (B16)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Proposits (B5) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations: Surface Water Present?  Water Table Present?  Yes  No  Depth (inches): 0  Wetland Hydrology (includes capillary fringe)  Wes  No  Depth (inches): 0  Wetland Hydrology Present?  Yes  No  No  Depth (inches): 0  Wetland Hydrology Present?  Yes  No  No  Depth (inches): 0  Present?  No  No  Depth (inches): 0  Present?  No  No  Depth (inches): 0  Present?  No  No  Depth (inches): 0  No  Depth (inches): 0  Present?  No  No  Depth (inches): 0  No  Depth (inches): 0  Present?  No  Depth (inches): 0  No  Depth (inc	Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season \	Water Table (C2)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Proposits (B5) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations: Surface Water Present?  Water Table Present?  Yes  No  Depth (inches): 0  Wetland Hydrology (includes capillary fringe)  Wes  No  Depth (inches): 0  Wetland Hydrology Present?  Yes  No  No  Depth (inches): 0  Wetland Hydrology Present?  Yes  No  No  Depth (inches): 0  Present?  No  No  Depth (inches): 0  Present?  No  No  Depth (inches): 0  Present?  No  No  Depth (inches): 0  No  Depth (inches): 0  Present?  No  No  Depth (inches): 0  No  Depth (inches): 0  Present?  No  Depth (inches): 0  No  Depth (inc		Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	ows (C8)	
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)Shallow Aquita	<del></del>			Saturation Vi	sible on Aerial Ima	agery (C9)
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/ NoDepth (inches):96  Water Table Present? Yes/ NoDepth (inches):0  Saturation Present? Yes/ NoDepth (inches):0  Wettand Hydrology (includes capillary fringe)	<del></del>	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Field Observations:           Surface Water Present?         Yes _ ✓ _ No Depth (inches): 96           Water Table Present?         Yes _ ✓ _ No Depth (inches): 0           Saturation Present?         Yes _ ✓ _ No Depth (inches): 0           (includes capillary fringe)         Wettand Hydrology Present?           Yes _ ✓ _ No	Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)	
Surface Water Present?         Yes ✓ No Depth (inches):	✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Water Table Present?  Yes _	Field Observations:					
Saturation Present?  Yes No Depth (inches): 0 Hydrology  (includes capillary fringe) Present? Yes No	Surface Water Present?	Yes No	Depth (inches): >96			
Saturation Present?  Yes No Depth (inches): 0 Hydrology  (includes capillary fringe) Present? Yes No	Water Table Present?	Yes ✓ No	Depth (inches): 0			
(includes capillary fringe) Present? Yes 🗸 No	  Saturation Present?					
					Yes ✓	No
	Linux	ing well, aerial photos, previou	s inspections), if available:	<del></del>		
	Remarks:					
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						

VEGETATION - Use scientific nar	mes of plants	•		Sampling Po	int:	- 11
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.		•		Number of Dominant Species	_	
2.				That Are OBL, FACW, or	<u>6</u>	(A)
3.			-	Total Number of Dominant		
4.				Species Across All Strata:	<u>6</u>	(B)
5.				•		
6.				That Are OBL, FACW, or 10	00.00	(A/B)
7.				Prevalance Index worksheet:		
1.				1		
Capling Chatum (Dlat size	, 0	= Total Cove	er	Total % Cover of: Multip	oly by:	
Sapling Stratum (Plot size:	/ <sub>_</sub>		E40144	OBL species x1=		-
Quercus laurifolia	5	yes	FACW	FACW speciesx2=		-
<ol> <li>3.</li> <li>4.</li> <li>5.</li> </ol>				FAC speciesx3=		_
3.	. <del></del>			FACU speciesx4=		_
4.				UPL speciesx5=		_
5.				Column Totals:(A)		_(B)
6.						
7.				Prevalance Index = B/A =		•
	5	= Total Cove	er	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
Ilex cassine	5	yes	FACW	Prevalence Index is ≤3.01		
2.				Problematic Hydrophytic Vegetation	on¹ (Exc	olain)
3.						,
4.				Indicators of hydric soil and wetland hyd	rology n	nuet
5.				be present, unless disturbed or problema		lust
6.				Definitions of Vegetation Strata:	10.	
7.				l		
1.	5	= Total Cove		Trans Mandy plants, evaluding was de vines		
Herb Stratum (Plot size:)	5	- Total Cove	<b>5</b> 1	Tree- Woody plants, excluding woody vines approximately 20 ft (6m) or more in height a		/7 G
1	20		OBL	cm) or larger in diameter at breast height (D		(7.0
Ludwigia repens     Typha spp.	20	yes	OBL	d	•	
	20	yes	OBL	Sapling- Woody plants, excluding woody vi		46
	20	yes	FACW	approximately 20 ft (6m) or more in height a 3 in. (7.6 cm) DBH.	and less	ınan
Blechnum serrulatum	20	yes	FACW	· ·		
5.				Shrub- Woody plants, excluding woody vine		
6.				approximately 3 to 20 ft (1 to 6 m) in height.	-	
7.				Herb- All herbaceous (non-woody)plants, in		
8.				herbaceous vines, regardless of size. Inclu		•
9.				plants, except woody vines, less than appro	oximately	/ 3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines, regardless of	f height.	
12.						
	80	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.				- Hydrophytic		
5.			******	Vegetation Present? Yes✓	No	
<u> </u>		= Total Cove		regeration resents res		<del></del>
Remarks: (If observed, list morph	· · · · · · · · · · · · · · · · · · ·		<u></u>	L		
1				na manusa iku		
Percent cover estimates based or	i meandering s	urvey of the t	proader cor	ninunity.		

						Sampling Point;
file Description: (Describe to the de	•	nent the indicator or c	onfirm the abs	ence of indicat	ors.)	
th Matrix	Redox Features					
hes) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
e: C=Concentration, D=Depletion, R	vl=Reduced Matrix, CS	=Covered or Coated S	and Grains.	Location: PL	=Pore Lining, M≕Matr	
ric Soil Indicators:						Indicators for Problematic Hydric Soils 3:
Histol (A1)	_	_Polyvalue Below Surf				1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	_	_Thin Dark Surface (S		)		2 cm Muck (A10) (LRR S)
Black Histic (A3)	_	_Loamy Mucky Minera				Reduced Vertic (F18) (outside MLRA 150A, E
Hydrogen Sulfide (A4)	_	_Loamy Gleyed Matrix	(F2)			Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	_	Depleted Matrix (F3)				Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	_	_Redox Dark Surface	(F6)			(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U	J)	Depleted Dark Surface	e (F7)			Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	_	 Redox Depressions (				Very Shallow Dark Surface (TF12) (LRR T, U)
	_		,			Other (Explain in Remarks)
1 cm Muck (A9) (LRR P,T)	_	Mari (F10) (LRR U)				Outer (Explain in Remarks)
Depleted Below Dark Surface (A11)		Depleted Orchric (F1	1) (MLRA 151)			
Thick Dark Surface (A12)	_	_Iron-Manganese Mas	ses (F12) (LRR	O, P,T)		<sup>3</sup> l
Coast Prairie Redox (A16) (MLRA 15	50A)	_Umbric Surface (F13)	(LRR P. T. U)			
Sandy Mucky Mineral (S1) (LRR O, S	<i>"</i>	Delta Orchric (F17) (I				
Sandy Gleyed Matrix (S4)	_	_Reduced Vertic (F18)				
_Sandy Redox (S5)	_	_Piedmont Floodplain				
_Stripped Matrix (S6)	_	_Anomalous Bright Lo	amy Soils (F20)	(MLRA 149A, 1	53C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)						
trictive Layer (If observed):					1	
Type:					!	
Depth (inches):					Hydric Soil Presen	t? Yes ✓ No .
narks:					L	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh Sampti	ing Date: 9/24/09
Applicant/Owner: Progress Energy Florida, Inc.	· · · · · · · · · · · · · · · · · · ·	State: FL	Sampli	ing Point:
Investigator(s): Justin Styer, Blake Meineck	:e	. Section, Township, Range	e: <u>35 27\$ 17E</u>	
Landform (hillslope, terrace, etc.):N/	4	Local relief (concave, con	ivex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.086874	1Long:82.5	578770	Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification: NA	
Are climatic / hydrologic conditions on the site type	oical for this time of year?	Yes <u></u> ✓	No (If no, e	explain in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances normal	? Yes <u></u> No
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain any ans	swers in Remarks)
SUMMARY OF FINDINGS - Attach site	e map showing samplir	ng point locations, tr	ransects, important fe	eatures, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland? Yes	No
Wetland Hydrology Present?	Yes No	]		
	M. F			
HYDROLOGY				
Wetland Hydrology Indicators:	-t		Secondary Indicators (min	
Primary Indicators (minimum of one is required;		·==:	Surface Soil Cracks	
✓ Surface Water (A1)	Water-Stained Leaves (	(89)		Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (E	,
Saturation (A3)	Marl Deposits (B15) (LF	•	Moss Trim Lines (B1	•
Water Marks (B1)	Hydrogen Sulfide Odor	<del></del> •		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burrows (C8	•
Drift Deposits (B3)	Presence of Reduced Ir			
Algal Mat or Crust (B4)	Recent Iron Reduction i	· / · · · · · · · · · · · · · · · · · ·		
Iron Deposits (B5)	Thin Muck Surface (C7)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral Test (D	5)
Field Observations:	V / N-	* · # // · · · · · · · · · · · · · · · ·		
Surface Water Present?	Yes No			
Water Table Present?	Yes_ ✓ No		- Wetland	
Saturation Present?	Yes No	_ Depth (inches):0	- Hydrology	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ring wall pariet photos proving	:= :=anactions) if available	Present? Yes <u>✓</u>	<u>No</u>
Describe Recorded Data (Stream gauge, monitor	ing well, aeriai pilotos, previou	із іпѕресцопѕ), я ачанаме	:	
Remarks:				
Nonidino.				

VEGETATION - Use scientific na	mes of plants				ing Point:	JJ
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species	<u>5</u>	(A)
2.				That Are OBL, FACW, or	<u> </u>	(/-)
3.				Total Number of Dominant	<u>5</u>	(B)
4.				Species Across All Strata:	<u>~</u>	(5)
5.				That Are OBL, FACW, or	100.00	(A/B)
6.				FAC:		( /
7.				Prevalance Index worksheet:		
	. 0	= Total Cov	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL speciesx1		_
Salix spp.	10	yes	FACW	FACW speciesx2		_
Acer rubrum	5	yes	OBL	FAC speciesx3		
3.		·		FACU speciesx4		_
4.				UPL speciesx5		<b>-</b>
5.	<u> </u>			Column Totals:(A	)	_ <sup>(B)</sup>
6.						
7.	· —————			Prevalance Index = B/A =		
0 0	15	= Total Cov	er	Hydrophytic Vegetation Indicate	ors:	
Shrub Stratum (Plot size:	<del></del>			✓ Dominance Test is 50%		
Baccharis glomeruliflora	5	yes	FACW	Prevalence Index is ≤3.0¹	1	
Sambucus canadensis	5	yes	FACW	Problematic Hydrophytic V	egetation (Ex	plain)
3.	·			1,		
4.				Indicators of hydric soil and wetla		must
5. 6.		•		be present, unless disturbed or pr Definitions of Vegetation Strata		
<del>0.</del> 7.		<del></del>		Delimitions of Vegetation Strata	•	
1.	10	= Total Cov		M	4	
Herb Stratum (Plot size:)	10	- Total Cov	eı	Tree- Woody plants, excluding wood approximately 20 ft (6m) or more in		(7.6
• —	75		OBL	cm) or larger in diameter at breast h		. (7.0
Ludwigia peruviana     Thelyptoria and	<u>75</u> 5	yes	OBL FACW	<b>.</b>		
Thelypteris spp.     Panicum hemitomon		no	OBL	Sapling- Woody plants, excluding water approximately 20 ft (6m) or more in		than
	- <u>5</u> 5	no	FACW	3 in. (7.6 cm) DBH.	neight and less	ulan
Blechnum serrulatum     5.		no	FACVV	Shrub- Woody plants, excluding wo	adu vinos	
5. 6.				approximately 3 to 20 ft (1 to 6 m) in	•	
7.				1	-	
8.	<del></del>		·	Herb- All herbaceous (non-woody)p herbaceous vines, regardless of size		
9.				plants, except woody vines, less tha		-
10.			· ——	(1 m) in height.		,
11.				Woody vine- All woody vines, regar	dless of height	
12.	-			······, ······	a	
12.	90	= Total Cov	 er	1		
Woody Vine Stratum (Plot size:	١	10.01	<b>-</b> .			
Dioscorea bulbifera	30	yes	NL			
Rubus spp.	5	no	FACU	1		
3.			17.00			
4.	-			Hydrophytic		
<del>5</del> .				Vegetation Present? Yes	√ No	
<del></del>	35	= Total Cov	er			

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

		•	ument the indicat	tor or confirm the abs	ence of indicate	ors.)	
Depth Ma		Redox Features		Y	1.00	<b></b>	P I
inches) Color	(moist) %	Color (moist)	<u> </u>	Type¹	Loc²	Texture	Remarks
-7 10 YR 2/1							black fine sand
'-28 10 YR 6/1							gray fine sand
10 YR 5/3	; 10 YR						
28-42 5/2 12-80 10 YR 6/2							brown and grayish brown fine sand
10 YR 6/2			—				light brownish gray fine sand
				*****	<del></del>		
Type: C=Concentration	on, D=Depletion, RM	M=Reduced Matrix,	CS=Covered or Co	pated Sand Grains.	Location: PL=	Pore Lining, M=Ma	atrix.
lydric Soil Indicator	s:					,	Indicators for Problematic Hydric Soils 3:
Histol (A1)				ow Surface (S8) (LRR			1 cm Muck (a9) (LRR O)
Histic Epidon (A2) Black Histic (A3)				face (S9) (LRR S, T, U Mineral (F1) (LRR O)	)		2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide	(44)		Loamy Gleyer				Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (			Depleted Mat				Anomalous Bright Loamy Soils (F20)
Organic Bodies (A			Redox Dark S				(MLRA 153B)
5 cm Mucky Miner	al (A7) (LRR P,T,U	)	Depleted Dark	k Surface (F7)			Red Parent Material (TF2)
✓ Muck Presence (/	48) (LRR U)		Redox Depre	ssions (F8)			Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (L	.RR P,T)		Marl (F10) (LF	RR U)			Other (Explain in Remarks)
Depleted Below D	ark Surface (A11)		Depleted Orci	hric (F11) (MLRA 151)			
Thick Dark Surfac	, ,			se Masses (F12) (LRR	O, P,T)		31
Coast Prairie Red	ox (A16) (MLRA 15	(OA)	Umbric Surfac	ce (F13) (LRR P, T, U)			,
Sandy Mucky Mine	eral (S1) (LRR O, S	3	Delta Orchric	(F17) (MLRA 151)			
Sandy Gleyed Ma		•		ic (F18) (MLRA 150A,	150B)		
Sandy Redox (S5				odplain Soils (F19) (ML			
Stripped Matrix (S	6)		Anomalous B	right Loamy Soils (F20)	(MLRA 149A, 1	53C, 153D)	
Dark Surface (S7)	(LRR P, S, T, U)						
Restrictive Layer (If	observed):						
Type:						l	
Depth (inch	es):					Hydric Soil Prese	ent? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ugh Sampling Date:	9/24/09
Applicant/Owner: Progress Energy Florida, Inc.			Sampling Point:	
Investigator(s): Justin Styer, Blake Meineck				
Landform (hillslope, terrace, etc.):N/A			vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U		•	•	Datum: WGS84
Soil Map Unit Name: Basinger fine sand			NWI classification: Freshwater Po	nd
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No (If no, explain in	Remarks)
Are Vegetation, Soil,	•		Are circumstances normal?	YesNo
Are Vegetation Soil			(If needed, explain any answers in I	Remarks)
SUMMARY OF FINDINGS - Attach site	map showing samplir	ng point locations, tr	ansects, important features,	etc.
Hydrophytic Vegetation Present?	YesNo			
Hydric Soil Present?	Yes No	Is the Sampled Area w	rithin a Wetland? Yes	No
Wetland Hydrology Present?	Yes No			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (minimum of	wo required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Vegetated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Lines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burrows (C8)	
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Visible on Aerial In	nagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral Test (D5)	
Field Observations:				
Surface Water Present?	Yes No	Depth (inches): 8-10		
Water Table Present?	Yes No	Depth (inches): 0	Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	
(includes capillary fringe)			Present? Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previou	s inspections), if available:		

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	: <u>KK</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	<u>1</u> (A)
2.				That Are Obl., FACVV, Of	. ( )
<ul><li>3.</li><li>4.</li><li>5.</li><li>6.</li><li>7.</li></ul>				Total Number of Dominant	<u>5</u> · (B)
4.				Species Across All Strata:	<u>,</u> (6)
5.				That Are OBL, FACW, or	00 (4/8)
6.				FAC: 80.	<u>.00</u> (A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove		Total % Cover of: Multiply	y by:
Sapling Stratum (Plot size:	)			OBL species x1=	
1. Salix spp.	10	yes	FACW	FACW species x2=	
Acer rubrum	10	yes	OBL	FAC species x3=	
Quercus laurifolia	5	yes	FACW	FACU species x4=	<del></del>
4.	,			UPL species x5=	
5.				Column Totals: (A)	(B)
6.					
7.				Prevalance Index = B/A =	
	25	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	· <del></del>			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation	ո¹ (Explain)
3.					(=: (=: (=: (=: (=: (=: (=: (=: (=: (=:
4.			-	Indicators of hydric soil and wetland hydro	ology must
5.	. ——			be present, unless disturbed or problemati	
6.			•	Definitions of Vegetation Strata:	
7.				1	
		= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) or more in height ar	
1. Ludwigia repens	50	yes	OBL	cm) or larger in diameter at breast height (DE	
2. Typha spp.	5	no	OBL	  Sapling- Woody plants, excluding woody vin	100
Blechnum serrulatum	5	no	FACW	approximately 20 ft (6m) or more in height ar	
4.	• — —			3 in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vine	•
6.	. ——			approximately 3 to 20 ft (1 to 6 m) in height.	<i>J</i> ,
7.				Herb- All herbaceous (non-woody)plants, inc	dudina
8.	- —			herbaceous vines, regardless of size. Includ	
9.	- —			plants, except woody vines, less than approx	
10.	. ——			(1 m) in height.	
11.				Woody vine- All woody vines, regardless of	height
12.				voody vines All woody vines, regardless or	neight.
12.	60	= Total Cove		1	
   Woody Vine Stratum (Plot size:	,	- rotal oove	,1		
Rubus spp.	10	yes	FACU		
2.			.,,,,,,	1	
3.	. ———	<del></del>			
4. 5.				Hydrophytic	No
J.	- 10	= Total Carr		Vegetation Present? Yes✓I	No
Domorko: (If observed list roomb	10	= Total Cove	21		
Remarks: (If observed, list morph	-	-	randar as:	mmunitu	
Percent cover estimates based or	i meandering s	urvey of the b	noauer cor	mmunity.	

County/soil: Hillsborough- Basinger SOIL				Sampling Point: KK
Profile Description: (Describe to the depth needed to do	cument the indicator or confirm the abs	ence of indicat	ors.)	· · · -
Depth Matrix Redox Features			,	
(inches) Color (moist) % Color (moist)	% Type	Loc²	Texture	Remarks
0-7 10 YR 2/1				black fine sand
7-28 10 YR 6/1	· <del></del>			gray fine sand
10 YR 5/3; 10 YR				· · · · · · · · · · · · · · · · · · ·
28-42 5/2				brown and grayish brown fine sand
42-80 10 YR 6/2				light brownish gray fine sand
		<del>7: - :</del>		
'Type: C=Concentration, D=Depletion, RM=Reduced Matrix,	CS=Covered or Coated Sand Grains.	*Location: PL	=Pore Lining, M=Matrix	
Hydric Soil Indicators:	Polycolus Polovy Curfoso (CP) (I PD)	C T III	ır	ndicators for Problematic Hydric Soils 3:
Histol (A1) Histic Epidon (A2)	Polyvalue Below Surface (S8) (LRR : Thin Dark Surface (S9) (LRR S, T, U		-	1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	,	-	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		-	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		-	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)			Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		_	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)			Other (Explain in Remarks)
Thick Dark Surface (A11)	Iron-Manganese Masses (F12) (LRR	O. P.TI	3	
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	-,.,.,	'	
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)			
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A,	150R)		
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (ML	•		
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20)		153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)	, , , , ,	,	. ,	
Restrictive Layer (If observed):				
Туре:				
Depth (inches):			Hydric Soil Present	? Yes _ ✓ No
Remarks:				

Project/Site: Levy Nuclear Plant - Transmission L	.ines	City/County: Hillsborough Sampling D			9/24/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:_	LL	
Investigator(s): Justin Styer, Blake Meineck	:e	Section, Township, Range: <u>35_27S_17E</u>				
Landform (hillslope, terrace, etc.): N/A	4	Local relief (concave, convex, none): <u>none</u> Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: _28.088069	D Long:82.5	75656		Datum: WGS84	
Soil Map Unit Name: Basinger fine sand	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_NWI classification:	Freshwater Pon	nd	
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes	No	(If no, explain in I	Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	YesNo	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in R	Remarks)	
<b>SUMMARY OF FINDINGS - Attach site</b>	e map showing samplir	ng point locations, tr	ansects, impor	tant features,	etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes	No	
Wetland Hydrology Present?	Yes No					
Remarks:						
L						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of to	wo required)	
Primary Indicators (minimum of one is required; of	check all that apply)					
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave S	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)		
Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)		
Drift Deposits (B3)	Presence of Reduced In	ron (C4)	Saturation V	isible on Aerial Im	agery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Ad		itard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	ırks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No					
Water Table Present?	Yes No	Depth (inches): 0				
Saturation Present?	Yes No	Depth (inches): 0	Wetland - Hydrology			
(includes capillary fringe)			Present?	Yes <	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	us inspections), if available	:		<del></del>	
Remarks:					· · · · · · · · · · · · · · · · · · ·	
İ						
1						

VEGETATION - Use scientific nar	mes of plants			Sa	mpling Point:	<u>LL</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet	:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1				Number of Dominant Species	<u>3</u>	(A)
2. 3. 4. 5.				That Are OBL, FACW, or	≚	( )
3.				Total Number of Dominant	<u>3</u>	(B)
4.				Species Across All Strata:	<u>=</u>	(5)
5.				That Are OBL, FACW, or	100.00	(A/B)
6.				FAC:		(,,,,,
7.				Prevalance Index workshee	t:	
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	_
1. Salix spp.	35	yes	FACW	FACW species	_x2=	_
Acer rubrum	5	no	OBL	FAC species	_x3=	_
3. 4.				FACU species	x4=	_
4.				UPL species	x5=	_
5. 6.				Column Totals:	_(A)	_(B)
6.				]		
7.				Prevalance Index = B/A =		
	40	= Total Cove	er	Hydrophytic Vegetation Ind		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50°		
Sambucus canadensis	5	yes	FACW	Prevalence Index is ≤3		
2.				Problematic Hydrophy	tic Vegetation¹ (Ex	plain)
3.				]		
4.				Indicators of hydric soil and v		must
5. 6.				be present, unless disturbed		
				Definitions of Vegetation St	rata:	
7.						
	5	= Total Cove	er	Tree- Woody plants, excluding		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or mor		. (7.6
Ludwigia peruviana	70	yes	OBL	cm) or larger in diameter at bre		
Juncus effusus	15	no	FACW	Sapling- Woody plants, exclud		
Thelypteris spp.	5	no	FACW	approximately 20 ft (6m) or moi	e in height and less	than
Colocasia esculenta	5	no	FACW	3 in. (7.6 cm) DBH.		
5. Juncus marginatus	2	no	FACW	Shrub- Woody plants, excludin		
6.				approximately 3 to 20 ft (1 to 6	, -	
7.	·			Herb- All herbaceous (non-woo		
8.				herbaceous vines, regardless o		-
9. 10.				plants, except woody vines, les (1 m) in height.	s than approximater	ysπ
10.	•			<u>'</u>		
11.				Woody vine- All woody vines, r	egardiess of neight.	-
12.		<del></del>				
	97	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.				4		
2. 3. 4.						
3.				ļ.,		
				Hydrophytic	a / Na	
5.		= Total Carre		Vegetation Present? Ye	sNo	<del></del>
Remarks: (If observed, list morph	0 pleatest adapte	= Total Cove	:1	L		
Percent cover estimates based or	-		roader cor	mmunity.		

SOIL Profile De	escription: (Describe	to the de	oth needed to doc	ument the indica	tor or confirm the ab	sence of indicat	tors.)	Sampling Point:
Depth	Matrix	the de	Redox Features	amont the mulea	to, o, committee ab	Jones of malea	,	
inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks
1101100)			Color (molec)				10/(410	T. College
-7	10 YR 2/1							black fine sand
-28	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							3,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
8-42	5/2							brown and grayish brown fine sand
2-80	10 YR 6/2							light brownish gray fine sand
						· ——		-gg
					-	. ——		
Type: C=	Concentration, D≃Dec	oletion RA	1=Reduced Matrix	CS=Covered or C	nated Sand Grains	Z) ocation: PI	=Pore Lining, M=Matri	iv
71	oil Indicators:	Jiodon, Ttie	i-reduced Matrix,	00-0010100010	outed out a crains.	ECOCOCOTI: 1 E		Indicators for Problematic Hydric Soils 3:
Histol				Polyvalue Re	low Surface (S8) (LRR	STID	•	1 cm Muck (a9) (LRR O)
	Epidon (A2)				rface (S9) (LRR S, T, I		-	2 cm Muck (A10) (LRR S)
	Histic (A3)				/ Mineral (F1) (LRR 0)		-	Reduced Vertic (F18) (outside MLRA 150A, B)
	nisiic (A3) ogen Sulfide (A4)			Loamy Gleve			-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	igen Sulfide (A4) fied Layers (A5)			Loamy Gleye Depleted Mat			-	
	ned Layers (A5) nic Bodies (A6) (LRR F	ртіп		Depleted Mai			-	Anomalous Bright Loamy Soils (F20)
					• ,			(MLRA 153B)
_	Mucky Mineral (A7) (LI		1		k Surface (F7)		-	Red Parent Material (TF2)
<u>√</u> Muck	Presence (A8) (LRR	U)		Redox Depre	ssions (F8)		-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm l	Muck (A9) (LRR P,T)			Marl (F10) (L	RR U)		-	Other (Explain in Remarks)
Deple	eted Below Dark Surface	ce (A11)		Depleted Orc	hric (F11) (MLRA 151)	1		
	Dark Surface (A12)				ese Masses (F12) (LR		3	31
	t Prairie Redox (A16) (	MIRA 15	0Δ)		ce (F13) (LRR P, T, U			,
	y Mucky Mineral (S1) (		•		(F17) (MLRA 151)	•		
		LKK U, S	)					
	y Gleyed Matrix (S4)				tic (F18) (MLRA 150A			
	y Redox (S5)				odplain Soils (F19) (M			
Stripp	ed Matrix (S6)			Anomalous B	right Loamy Soils (F20	) (MLRA 149A,	153C, 153D)	
Dark	Surface (S7) (LRR P,	S, T, U)						
Restrictiv	e Layer (if observed)	):		,			I	
	Type:	•					1	
	Depth (inches):						Hydric Soil Present	t? Yes ✓ No .
Remarks:							1,	
tornario.								
								•
								•

Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 9/24/			9/24/09
Investigator(s)	Applicant/Owner: Progress Energy Florida, Inc.		State:FL		MM	
Subregion (LRR or MLRA): LRR U Lat: 28 088637 Long: 32 57058 Datum: WGS84 Soll Map Unit Name: Myskka fine sand Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No naturally problematic? (If no, explain in Remarks) Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No naturally problematic? (If needed, explain any answers in Remarks) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrology Present? Yes No Sumplied Area within a Wetland? Yes No Suffice Soil Present? Yes No Suffice Soil Present? Yes No Suffice Soil Present? Yes No Suffice Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8) Drift Deposits (B3) Presence of Reduced fron (C4) Saturation (Visible on Aerial Imagery (C9) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquation Visible on Aerial Imagery (C9) Water Table Present? Yes No Depth (inches): Surface (D2) Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Investigator(s): Justin Styer, Blake Meineck			e: <u>35 27\$ 17E</u>		
Soil Map Unit Name: Myakka fine sand Are climatic / hydrologic conditions on the site typical for this time of year? Are Negetation Soil or Hydrology naturally problematic? (if needed, explain in Remarks) Are Vegetation Soil or Hydrology naturally problematic? (if needed, explain in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrocyphic Vegetation Present? Yes No Hydrocyphic Vegetation Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Vater (A1) High Water Table (A2) Aquatic Fauna (B13) Again Deposits (B15) Adard Deposits (B16) Drill Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Find Muck Surface (C7) Algal Mat or Crust (B4) Find Muck Surface (C7) Find Deposits (B3) Inundation Visible on Aerial Imagery (B7) Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches): Wetland Hydrology Present?  Yes No Depth (inches):	Landform (hillslope, terrace, etc.): N/A	4	Local relief (concave, con	vex, none): none		_Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No	Subregion (LRR or MLRA): LRR U	Lat: 28.088637	7Long:82.5	57058		Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Secondary Indicators (Innimum of two required) Primary Indicators (Innimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Drainage Patterns (B10)  Saturation (A3) Marl Deposits (B15) (LRR U) Mose Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquatard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches	Soil Map Unit Name: Myakka fine sand			_NWI classification:	NA	
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Secondary Indicators (Innimum of two required) Primary Indicators (Innimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Drainage Patterns (B10)  Saturation (A3) Marl Deposits (B15) (LRR U) Mose Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquatard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches	Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in F	Remarks)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydroic Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Man Deposits (B15) (LRR U)  Sediment Deposits (B2)  Soil/Greath (B2)  Soil/Greath (B3)  Drainage Patterns (B10)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Are Vegetation, Soil,	or Hydrology				
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydroic Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Surface Water (A1)  Water-Stained Leaves (B9)  High Water Table (A2)  Aquatic Fauna (B13)  Man Deposits (B15) (LRR U)  Sediment Deposits (B2)  Soil/Greath (B2)  Soil/Greath (B3)  Drainage Patterns (B10)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Water (A1)  Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Drainage Patterns (B10)  Water Marks (B1)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  I				ansects, import	tant features,	etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Sectiment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Depth (inches):  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  Yes  No  Saturation Present?  No  Saturation Present?  No  Saturation Present?  No  Saturation Present?  No	Hydrophytic Vegetation Present?	Yes ✓ No				
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Mater Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Teach No  Depth (inches):  Wetland Hydrology Present?  Yes  No  Depth (inches):  Wetland Hydrology Present?  Yes  No  Depth (inches):  Wetland Hydrology Present?  Yes  No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Hydric Soil Present?	Yes ✓ No	Is the Sampled Area v	vithin a Wetland?	Yes	No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Adardic Fauna (B15) (LRR U)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Orift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Settland  Wetland  Hydrology  Fresent?  Yes  No  Depth (inches):  Wetland  Hydrology  Fresent?  Yes  No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydrology Present?	Yes✓ No				
Wetland Hydrology Indicators:    Primary Indicators (minimum of one is required; check all that apply)	Remarks:					
Wetland Hydrology Indicators:    Primary Indicators (minimum of one is required; check all that apply)						ļ
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Priment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inim Muck Surface (C7)  Inim Muck Surface (C7)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Prasely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Hydrology  Present? Yes No Depth (inches):  Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (B7)  FAC Neutral Test (D5)						
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Priment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inim Muck Surface (C7)  Inim Muck Surface (C7)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology Present?  Yes No Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Prasely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Wetland  Hydrology  Present? Yes No Depth (inches):  Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (B7)  FAC Neutral Test (D5)						
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Priment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inim Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Water Table Present?  Water Table Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Surface Water Indicators (minimum of two required)  Surfaces (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  User In No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	LIVEROLOGY					
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Drainage Patterns (B10)  Water Marks (B1)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Water Marks (B1)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes No Depth (inches):  Wetland  Hydrology  Present?  Yes No No Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Surface Water (A1)	, •.					vo required)
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Shallow Aquitard (D3)  ✓ Inon Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?						
Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Water Marks (B1)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No → Depth (inches):  Water Table Present?  Yes ✓ No Depth (inches):  Saturation Present?  Yes ✓ No Depth (inches):  Wetland Hydrology  Present? Yes ✓ No Depth (inches):  Wetland Hydrology  Present? Yes ✓ No No Metland Hydrology  Present? Yes ✓ No No Metland Hydrology  Present? Yes ✓ No Mo Metland Hydrology  Present? Yes ✓ No Mo Metland Hydrology  Present? Yes ✓ No Mo Metland Hydrology  Present? Yes ✓ No Mo Metland Hydrology  Present? Yes ✓ No Mo Metland Hydrology  Present? Yes ✓ No Mo Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology  Present? Yes ✓ No Metland Hydrology	· ·		(B9)			Surface (B8)
Water Marks (B1)Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8)	<del></del> • • • • • • • • • • • • • • • • •					
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Crayfish Burrows (C8)Crayfish Describe Recorded Iron (C4)Saturation Visible on Aerial Imagery (C9)Shallow Aquitard (D3)Cemorphic Position (D2)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D5)Shallow Aquitard (D5)	Saturation (A3)		•			
Drift Deposits (B3)	Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season \	Water Table (C2)	
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)		Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	rows (C8)	
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  V Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNo/ Depth (inches): Water Table Present? YesNo Depth (inches): Saturation Present? Yes/No Depth (inches): (includes capillary fringe) Wetland Hydrology Present? Yes/ No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Drift Deposits (B3)	Presence of Reduced Ir	on (C4)			agery (C9)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNo/ Depth (inches): Water Table Present? YesNo/ Depth (inches): Saturation Present? Yes/No Depth (inches): (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Algal Mat or Crust (B4)	Recent Iron Reduction i				
Field Observations:  Surface Water Present?  Yes No Depth (inches): Water Table Present?  Yes No Depth (inches): Saturation Present?  Yes / No Depth (inches): Hydrology (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Iron Deposits (B5)				• •	
Surface Water Present? YesNo/Depth (inches): Water Table Present? YesNoDepth (inches): Saturation Present? Yes/_NoDepth (inches): (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Water Table Present? Yes No Depth (inches): Wetland Saturation Present? Yes No Depth (inches): U Hydrology (includes capillary fringe) Present? Yes No Secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Saturation Present?  Yes No Depth (inches):	Surface Water Present?			-{		
Saturation Present?  Yes No Depth (inches):0 Hydrology (includes capillary fringe)  Present?  Yes No Depth (inches):0 Hydrology Present?  Yes No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Water Table Present?					_
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present?	Yes No	Depth (inches): 0	P .		
	(includes capillary fringe)				Yes	No
Remarks:	Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	is inspections), if available			
Remarks:						•
	Remarks:					
	·					

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	MM
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species	l
2.				That Are OBL, FACW, or	(A)
3.				Total Number of Dominant	,
4.			-	Species Across All Strata:	(B)
5.				That Are ORL EACIN or	
6.				FAC: 66.67	(A/B)
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	,	= Total Cove	:r	Total % Cover of: Multiply by: OBL species x1=	
1. Salix spp.	<i>)</i> 5	yes	FACW	FACW species x2=	-
2.		yes	PACVV	FAC species x3=	-
3.				FACU species x4=	-
4.				UPL species x5=	-
5.				Column Totals: (A)	- <sub>(B)</sub>
6.				Column rotals. (A)	- <sup>(B)</sup>
7.				Prevalance Index = B/A =	
1.	5	= Total Cove	·r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	\	- Tulai Cuve		✓ Dominance Test is 50%	
	.— <i>)</i>			Prevalence Index is ≤3.0 <sup>1</sup>	
1.	,	<del></del>		<del></del>	(منما-
2.       3.	,			Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	piairi)
	,			1	. 1
4.				Indicators of hydric soil and wetland hydrology r	must
5. 6.	·			be present, unless disturbed or problematic.	
7.				Definitions of Vegetation Strata:	
7.		Tetal Cava		<u> </u>	
Herb Stratum (Plot size:)	0	= Total Cove		Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. cm) or larger in diameter at breast height (DBH).	. (7.6
1. Panicum repens	25	yes	FACW	4 ′	
Sporobolus indicus	20	yes	FACU	Sapling- Woody plants, excluding woody vines,	,,
3. Cajanus cajan	20	yes	NL	approximately 20 ft (6m) or more in height and less 3 in. (7.6 cm) DBH.	than
4. Bidens alba	20	yes	NL		
5. Paspalum notatum	10	no	FACU	Shrub- Woody plants, excluding woody vines,	
Ludwigia repens 7.	5	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
8.				Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woo	
9.	,			plants, except woody vines, less than approximately	
10.		<del></del>		(1 m) in height.	,
11.		<del></del>		Woody vine- All woody vines, regardless of height.	
12.				Trooty this this transfer to the source of t	
12.	100	= Total Cove	•r	1	
Woody Vine Stratum (Plot size:	)	- 10141 0010	'		
1.				1	
2.					
3.				<u> </u>	
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	<del></del>
	0	= Total Cove	r .	<u> </u>	
Remarks: (If observed, list morpho Percent cover estimates based or			roader cor	mmunity.	

rofile De								Sampling Point:
	escription: (Describe	to the dep		ument the indicator	or confirm the abs	sence of indicat	tors.)	
epth	Matrix		Redox Features	n/	Type	Loc²	Texture	Remarks
ches)	Color (moist)	%	Color (moist)	<u></u>	туре		rexture	Remarks
5	10 YR 3/1							very dark gray fine sand
20	10 YR 6/1							gray fine sand
-25	N 2/0							black fine sand
-30	5 YR 3/3							dark reddish brown fine sand
				<u> </u>				
				_				
	Concentration, D=Dep	letion, RM	=Reduced Matrix,	CS=Covered or Coate	ed Sand Grains.	*Location: PL	=Pore Lining, M=Mat	
	oil Indicators:							Indicators for Problematic Hydric Soils 3:
_Histol					Surface (S8) (LRR			1 cm Muck (a9) (LRR O)
	Epidon (A2)				e (S9) (LRR S, T, U	')		2 cm Muck (A10) (LRR S)
	Histic (A3)				neral (F1) (LRR O)			Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)			Loamy Gleyed Ma				Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5) nic Bodies (A6) <b>(LRR P</b>	T 11)		Depleted Matrix ( Redox Dark Surfa				Anomalous Bright Loamy Soils (F20)
				_				(MLRA 153B)
	Mucky Mineral (A7) (LF			Depleted Dark Su				Red Parent Material (TF2)
Muck	Presence (A8) (LRR I	J)		Redox Depressio	ns (F8)			Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm	Muck (A9) (LRR P,T)			Marl (F10) (LRR	U)			Other (Explain in Remarks)
_Deple	ted Below Dark Surfac	e (A11)		Depleted Orchric	(F11) (MLRA 151)			
_Thick	Dark Surface (A12)			lron-Manganese	Masses (F12) (LRF	R O, P,T)		3,
Coas	t Prairie Redox (A16) (I	MLRA 150	OA)	Umbric Surface (	F13) (LRR P, T, U)			·
	y Mucky Mineral (S1) (I		•	Delta Orchric (F1				
		-KK O, 3)			7) (MLRA 151) F18) (MLRA 150A,	450D)		
	y Gleyed Matrix (S4) y Redox (S5)				lain Soils (F19) (ML			
	ed Matrix (S6)				t Loamy Soils (F20)		153C 153D)	
				Anomalous bright	LUAINY SUIS (F20	(MERA 145A,	1336, 1330)	
	Surface (S7) (LRR P, S						1	
estrictiv	e Layer (If observed)	:						
	Type:						Under Call Decay	nt? Yes √ No
	Depth (inches):		<del></del>				Hydric Soil Preser	nt? Yes _ ✓ No
emarks:								
			*					
	•							
	•							
	•							
	·							
	·							
	·							

Project/Site: Levy Nuclear Plant - Transmission	n Lines	City/County: Hillsboro	ugh	_Sampling Date:	9/24/09		
Applicant/Owner: Progress Energy Florida, In	C.	State:FL	Sampling Point: NN				
Investigator(s): Justin Styer, Blake Meine	ecke	Section, Township, Range: 35 27S 17E					
Landform (hillslope, terrace, etc.):	N/A	Local relief (concave, cor	vex, none): none		_Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28,08955	9 Long:82.	571346		Datum: WGS84		
Soil Map Unit Name: Myakka fine sand			_NWI classification	: <u>NA</u>			
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in F	Remarks)		
Are Vegetation, Soil	or Hydrology	_ significantly disturbed?	Are circumstances	s normal?	YesNo		
Are Vegetation, Soil			(If needed, explain	any answers in R	emarks)		
SUMMARY OF FINDINGS - Attach s	ite map showing sampli	ng point locations, ti	ansects, impor	tant features,	etc.		
Hydrophytic Vegetation Present?	Yes <u> √</u> No						
Hydric Soil Present?	Yes✓ No	Is the Sampled Area v	vithin a Wetland?	Yes	No		
Wetland Hydrology Present?	Yes No	] .					
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				ors (minimum of tv	vo required)		
Primary Indicators (minimum of one is required			Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves	(B9)		getated Concave S	Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	, ,			
Saturation (A3)	Marl Deposits (B15) (L	•	Moss Trim L				
Water Marks (B1)	Hydrogen Sulfide Odor	• •		Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	rows (C8)			
Drift Deposits (B3)	Presence of Reduced		· · · · · · · · · · · · · · · · · · ·	isible on Aerial Ima	agery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction						
Iron Deposits (B5)	Thin Muck Surface (C7	· · · · · · · · · · · · · · · · · · ·					
✓ Inundation Visible on Aerial Imagery (B	7)Other (Explain in Rem	arks)	FAC Neutral	Test (D5)			
Field Observations:	No. 7						
Surface Water Present?	Yes No		-				
Water Table Present?	Yes No		Wetland				
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology				
(includes capillary fringe)  Describe Recorded Data (stream gauge, moni	toring well agrial photos previo	us inenactions) if available	Present?	Yes _/	No		
Describe Necorded Data (Stream gadge, Inom	toring well, aerial priotos, previo	us inspections), il available	•				
Remarks:							
-							

<b>VEGETATION</b> - Use scientific na	mes of plants			Samp	oling Point:	<u>NN</u>
T Circline (Diet size:	Absolute %	Dominant Species?		Dominance Test Worksheet:		<del></del>
Tree Stratum (Plot size:)	Cover	Species?	Status	Number of Deminant Species		
1.				Number of Dominant Species That Are OBL, FACW, or	<u>3</u>	(A)
2.	- ——					
3.				Total Number of Dominant	<u>3</u>	(B)
4.				Species Across All Strata:	_	
5.				That Are OBL, FACW, or	100.00	(A/B)
6.				FAC:		` .
7.				Prevalance Index worksheet:		
Sapling Stratum (Plot size:	)	= Total Cove	e <b>r</b>	Total % Cover of: OBL species	Multiply by: x1=	
Acer rubrum	15	yes	OBL	FACW species	x2=	_
2. Persea borbonia	10	yes	FACW	FAC species	x3=	_
3.	•			· · · · · · · · · · · · · · · · · · ·	×4=	_
4.	•		-	<del></del>	x5=	_
5.					(A)	- (B)
6.	- —					-\-'
7.	- —			Prevalance Index = B/A =		
1.	25	= Total Cove		Hydrophytic Vegetation Indica	tore:	
Shrub Stratum (Plot size:	١	- 10(4) 0010	1	✓ Dominance Test is 50%	itors.	
<u> </u>	<del>_</del>				1	
1.	- ———			Prevalence Index is ≤3.0	4	
2.				Problematic Hydrophytic	Vegetation (Ex	plain)
3.				1		
4.				Indicators of hydric soil and well		must
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ta:	
7.				] .		
Herb Stratum (Plot size:)	0	= Total Cove	r.	Tree- Woody plants, excluding wo approximately 20 ft (6m) or more i		. (7.6
Woodwardia virginica	80	yes	OBL	cm) or larger in diameter at breast	: height (DBH).	
Eriocaulon spp.	10	no	OBL	Sapling- Woody plants, excluding	woody vines,	
3.	•			approximately 20 ft (6m) or more i		than
4.	• ——			3 in. (7.6 cm) DBH.	J	
<del>5</del> .	- ——			Shrub- Woody plants, excluding v	woody vines	
<u>6.</u>				approximately 3 to 20 ft (1 to 6 m)	•	
7.				1	_	
<del>7.</del> 8.				Herb- All herbaceous (non-woody		
<u>o.</u> 9.				herbaceous vines, regardless of s plants, except woody vines, less the		
				(1 m) in height.	ian approximates	yon
10.				<b>1</b> ` '	عاما كم معالد	
11.				Woody vine- All woody vines, reg	ardiess of neight.	
12.				1		
	90	= Total Cove	:r			
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	<u>.</u>
	0	= Total Cove	r	1		
Remarks: (If observed, list morph	nological adapta			<u> </u>		
Percent cover estimates hased or	•		roader cor	mmunity		

County/soil:	Hillsborough- Myakk	a						
SOIL								
Profile Des	cription: (Describe	to the de	epth needed to docu	ment the inc	dicator or confirm the ab	sence of indicate	ors.)	
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc	Texture	

Depth	Matrix		Redox Features								
inches)	Color (moist)	<u> </u>	Color (moist)	%	Туре	Loc²	Texture	Remarks			
-5	10 YR 3/1							very dark gray fine sand			
-20	10 YR 6/1							gray fine sand			
)-25	N 2/0							black fine sand			
5-30	5 YR 3/3							dark reddish brown fine sand			
				=							
	O	1- <del>1 D</del>	-D-d 11	S <del>-0-</del>	0-1-10-1	7 DI	Billion Manage				
	Concentration, D=Dep	letion, KM	=Reduced Matrix, (	S=Covered or	Coated Sand Grains,	-Location: PL	=Pore Lining, M=Matr	ndicators for Problematic Hydric Soils 3:			
_Histol				Polyvalue F	Below Surface (S8) (LRR S	ET HI		1 cm Muck (a9) (LRR O)			
	Epidon (A2)		•		Surface (S9) (LRR S, T, U)		•	2 cm Muck (A10) (LRR S)			
	Histic (A3)				ky Mineral (F1) (LRR O)		•	Reduced Vertic (F18) (outside MLRA 150A, B)			
	gen Sulfide (A4)				yed Matrix (F2)		•	Piedmont Floodplain Soils (F19) (LRR P, S, T)			
	ied Layers (A5)			Depleted M			•	Anomalous Bright Loamy Soils (F20)			
Organ	ic Bodies (A6) (LRR P	P, T, U)		Redox Darl	k Surface (F6)		•	(MLRA 153B)			
5 cm l	Mucky Mineral (A7) (LF	RR P,T,U)		Depleted D	ark Surface (F7)			Red Parent Material (TF2)			
Muck	Presence (A8) (LRR U	U)		Redox Dep	ressions (F8)		Very Shallow Dark Surface (TF12) (LRF				
1 cm l	Muck (A9) (LRR P,T)			Marl (F10)	(LRR U)			Other (Explain in Remarks)			
Deple	ted Below Dark Surfac	e (A11)		Depleted O	rchric (F11) (MLRA 151)						
Thick Dark Surface (A12)Iron-Manganese Masses (F12						O, P,T)	:	31			
Coast	Prairie Redox (A16) (I	MLRA 150	)A)	Umbric Sur	face (F13) (LRR P, T, U)						
Sandy	/ Mucky Mineral (S1) (L	LRR O, S)		Delta Orchi	ric (F17) (MLRA 151)						
Sandy	Gleyed Matrix (S4)				ertic (F18) (MLRA 150A, 1						
	Redox (S5)				Toodplain Soils (F19) (MLI						
Stripp	ed Matrix (S6)			Anomalous	Bright Loamy Soils (F20)	(MLRA 149A, 1	153C, 153D)				
	Surface (S7) (LRR P, S										
	e Layer (If observed)	<b>:</b>					Ì				
	Type: Depth (inches):	-	<del></del>				Hydric Soil Presen	t? Yes ✓ No .			
Remarks:	Depar (inches).		<del></del>				Inyana Son riesen	163			
								•			
								•			

Sampling Point: NN

Project/Site: Levy Nuclear Plant - Transmission I	ines	City/County: Hillsborou	ough Sampling Date: 9/28/09					
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	Sampling Point:_	00				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: 35 27S 17E						
Landform (hillslope, terrace, etc.): N//	٩	Local relief (concave, convex, none): none Slope (%):						
Subregion (LRR or MLRA): LRR U	Lat: 28.090481	1 Long: <u>-82.5</u>	68837	Datum: WGS84				
Soil Map Unit Name: Basinger fine sand			NWI classification: Shrub Wetland					
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes <u></u> ✓	No (If no, explain in F	Remarks)				
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances normal?	Yes <u> √</u> No				
Are Vegetation, Soil	or Hydrology	_naturally problematic?	(If needed, explain any answers in Re	emarks)				
SUMMARY OF FINDINGS - Attach site	e map showing samplir	ng point locations, tra	ansects, important features,	etc.				
Hydrophytic Vegetation Present?	Yes No							
Hydric Soil Present?	Yes No	Is the Sampled Area w	rithin a Wetland? Yes <u>√</u>	No				
Wetland Hydrology Present?	Yes No	]						
Remarks:								
HYDROLOGY			Conneder, Indicator (minimum of to	in required)				
Wetland Hydrology Indicators:	shook all that apply)		Secondary Indicators (minimum of two	vo requirea)				
Primary Indicators (minimum of one is required;   ✓ Surface Water (A1)	Water-Stained Leaves	(BQ)	Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2)	Aquatic Fauna (B13)	(55)	Drainage Patterns (B10)	dilace (Bo)				
✓ Saturation (A3)	Marl Deposits (B15) (LF	ווו מכ	Moss Trim Lines (B16)					
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Water Table (C2)					
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burrows (C8)					
Drift Deposits (B3)	Presence of Reduced In	-	Saturation Visible on Aerial Ima	niery (C9)				
Algal Mat or Crust (B4)	Recent from Reduction i		Geomorphic Position (D2)	igery (OO)				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)					
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	•	FAC Neutral Test (D5)					
Field Observations:			1					
Surface Water Present?	Yes No	Depth (inches): 0-6						
Water Table Present?	Yes✓ No		1					
Saturation Present?	Yes No	Depth (inches): 0	Wetland					
(includes capillary fringe)			Hydrology Present? Yes ✓	No				
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	us inspections), if available:						

VEGETATION - Use scientific nar	Samp	ling Point:	00			
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	4	(A)
2.				That Are OBL, FACW, or	<u> </u>	(/-)
3.				Total Number of Dominant	4	(B)
4.				Species Across All Strata:	<u> </u>	(0)
5.				That Are OBL, FACW, or	100.00	(A/B)
6.				FAC:	100.00	(, 0.0)
7.				Prevalance Index worksheet:		
	0 = Total Cover		er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			· · —	k1=	_
Acer rubrum	5	yes	OBL	· · —	<2=	_
2. Salix spp.	5	yes	FACW	· · · · · · · · · · · · · · · · · · ·	k3=	
Taxodium distichum	1	no	OBL	·	×4=	_
<b>4</b> . <b>5</b> .				· ' ———	x5=	_
				Column Totals:(	(A)	_(B)
6.						
7.				Prevalance Index = B/A =		
		= Total Cove	er	Hydrophytic Vegetation Indica		
Shrub Stratum (Plot size:	)		✓ Dominance Test is 50%			
Sambucus canadensis	11	yes	FACW	Prevalence Index is ≤3.0	1	
2. 3. 4.				Problematic Hydrophytic	Vegetation <sup>1</sup> (Ex	plain)
3.						
4.				Indicators of hydric soil and we	tland hydrology	must
5. 6.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ta:	
7.						
	1 = Total Cover			Tree- Woody plants, excluding woody vines,		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7.6		
Ludwigia peruviana	85	yes	OBL	cm) or larger in diameter at breast	t height (DBH).	
2. 3.				Sapling- Woody plants, excluding	woody vines,	
3.				approximately 20 ft (6m) or more in height and less than		
4. 5. 6. 7.				3 in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding v		
6.				approximately 3 to 20 ft (1 to 6 m)	in height.	
				Herb- All herbaceous (non-woody	)plants, including	3
8.				herbaceous vines, regardless of s	ize. Includes wo	ody
9.				plants, except woody vines, less t	han approximate	ly 3 ft
10.				(1 m) in height.		
11.				Woody vine- All woody vines, reg	ardless of height	t.
12.				]		
	85	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3						
4.				Hydrophytic		
5.			-	Vegetation Present? Yes	No	
	0	= Total Cove	er	1		
Remarks: (If observed, list morph	ological adapta	tions below).				
Percent cover estimates based or	n meandering s	survey of the b	roader coi	mmunity.		

rome bes	- define (December)	- 44 4	.41				4	Sampling Point:
	Conption: (Describe) Matrix	to the dep	Redox Features	ument the indicati	or or confirm the abs	ence of indica	tors.)	
ches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks
Cites)	Color (moist)		Color (moist)		1390		Texture	Remarks
	10 YR 2/1							black fine sand
8	10 YR 6/1				-	-		gray fine sand
	10 YR 5/3; 10 YR							
42	5/2							brown and grayish brown fine sand
80	10 YR 6/2							light brownish gray fine sand
				20.0.		ZI E E	B 12-2 14-14-1	<u> </u>
	oncentration, D=Dep	etion, RM	=Reduced Matrix, (	US=Covered or Co	ated Sand Grains.	*Location: P	L=Pore Lining, M=Matr	
anc Soll _Histol (/	Indicators:			Deliardine Pole	w Surface (S8) (LRR	C 7 III		Indicators for Problematic Hydric Soils 3: 1 cm Muck (a9) (LRR O)
	pidon (A2)				ace (S9) (LRR S, T, U			2 cm Muck (A10) (LRR S)
	listic (A3)				Mineral (F1) (LRR O)	,		Reduced Vertic (F18) (outside MLRA 150A, B)
	en Sulfide (A4)			Loamy Gleved				Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)			Depleted Matri				Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U)		Redox Dark St				(MLRA 153B)
5 cm M	ucky Mineral (A7) (LF	R P.T.U)		Depleted Dark	Surface (F7)			Red Parent Material (TF2)
	Presence (A8) (LRR (			Redox Depres	• •			Very Shallow Dark Surface (TF12) (LRR T, U)
_	uck (A9) (LRR P,T)	• •		Marl (F10) (LR				Other (Explain in Remarks)
_								Other (Explain in Remarks)
	ed Below Dark Surfac	e (A11)			ric (F11) (MLRA 151)			
_	ark Surface (A12)				e Masses (F12) (LRR	(O, P,T)		<sup>3</sup> l
_Coast F	Prairie Redox (A16) (f	/ILRA 150	A)	Umbric Surface	e (F13) (LRR P, T, U)			
_Sandy l	Mucky Mineral (S1) (L	.RR O, S)		Delta Orchric (	F17) (MLRA 151)			
_Sandy (	Gleyed Matrix (S4)			Reduced Verti	(F18) (MLRA 150A,	150B)		
Sandy	Redox (S5)			Piedmont Floo	dplain Soils (F19) (ML	RA 149A)		
_Strippe	d Matrix (S6)			Anomalous Bri	ght Loamy Soils (F20)	(MLRA 149A,	153C, 153D)	
Dark Si	urface (S7) (LRR P, S	5. T. U)						
	Layer (If observed)						1	
	ype:							
	Depth (inches):						Hydric Soil Presen	nt? Yes ✓ No .
emarks:	peper (meneo):						111, 4110 0011 1 100011	

Project/Site: Levy Nuclear Plant - Transmission L	inec	City/County: Hillshoro	iah	Sampling Date:	9/28/09
Applicant/Owner: Progress Energy Florida, Inc.		City/County: Hillsborough Sampling Date: 9/2  State: FL Sampling Point: PP			
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range			<u> </u>
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	•		Slone (9/):
Subregion (LRR or MLRA): LRR U		· ·			_ Slope (%) Datum:WGS84
	Lat: <u>28.091300</u>	5 Long: <u>-82.5</u>			•
Soil Map Unit Name: Smyrna fine sand	-i1 f 4bi- 4if0	Vos ./	_NWI classification _No		
Are climatic / hydrologic conditions on the site typ					
Are Vegetation, Soil,			Are circumstance		
Are Vegetation, Soil,			(If needed, explain	-	•
SUMMARY OF FINDINGS - Attach site Hydrophytic Vegetation Present?	e map snowing sampiii Yes✓No	ng point locations, tr	ansects, impor	tant leatures,	elc.
1 ′ ′ ′ °	Is the Sampled Area w	rithin a Wetland?	Ves /	No	
Hydric Soil Present?	is the Sampled Alea w	idiiii a vvedana:	103	140	
Wetland Hydrology Present? Remarks:	Yes No	4			
Remarks.					
HYDROLOGY					
Wetland Hydrology Indicators:				ors (minimum of t	wo required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)	
✓ Saturation (A3)	Mart Deposits (B15) (LI	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	s on Living Roots (C3)Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced I	ron (C4)Saturation Visible on Aerial Imagery (C9			agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6) Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7	)Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutra	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-96			
Water Table Present?	Yes No	Depth (inches): 0	]		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)			Hydrology Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previou	us inspections), if available:			
	•	• •			
Daniela					
Remarks:					
		•			
ł					

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling	g Point:	<u>PP</u>
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		•
· · · · · · · · · · · · · · · · · · ·	Covei	Opecies:	Status	Number of Dominant Species		
1. 2.				That Are OBL, FACW, or	<u>6</u>	(A)
3.				d		
	<del></del>			Total Number of Dominant	<u>6</u>	(B)
4.		·····		Species Across All Strata:		
5.				That Are OBL, FACW, or	100.00	(A/B)
6.				FAC:		
7.				Prevalance Index worksheet:		
Sapling Stratum (Plot size:	)	= Total Cove	er	Total % Cover of:  OBL species x1=	Multiply by:	
Acer rubrum	5	yes	OBL	FACW species x2=	:	
2.				FAC species x3=		_
3.				FACU species x4=		_
4.				UPL species x5=		_
5.				Column Totals: (A)		– (B)
6.	· ——	<del></del>		Column Totals.		<b>—</b> (D)
7.				Prevalance Index = B/A =		
[ <i>i</i> .		= Total Cove	\r	Hydrophytic Vegetation Indicator	re ·	
Shrub Stratum (Plot size:	١	- Total Cove	51	✓ Dominance Test is 50%	. <b>3.</b>	
			E40	Prevalence Index is ≤3.0 <sup>†</sup>		
Myrica cerifera	5	yes	FAC	<del></del>		
2. 3.				Problematic Hydrophytic Ve	getation (Ex	piain)
				<b>1</b> ,		
4.				Indicators of hydric soil and wetlan		must
5.				be present, unless disturbed or pro	blematic.	
6.				Definitions of Vegetation Strata:		
7.				4		
  Herb Stratum (Plot size:)	5	= Total Cove	er	Tree- Woody plants, excluding woody approximately 20 ft (6m) or more in h		. (7.6
Ludwigia peruviana	10	yes	OBL	cm) or larger in diameter at breast he	ight (DBH).	
Ludwigia octovalvis	5	yes	OBL	Sapling- Woody plants, excluding wo	odv vines.	
Sagittaria lancifolia	5	yes	OBL	approximately 20 ft (6m) or more in h		than
Lachnanthes caroliniana	5	yes	OBL	3 in. (7.6 cm) DBH.		
5. Andropogon virginicus	2	no	FAC	Shrub- Woody plants, excluding woo	dv vines.	
6. Solidago spp.	2	no	FACU	approximately 3 to 20 ft (1 to 6 m) in I		
7. Rhexia spp.	2	no	FACW	Herb- All herbaceous (non-woody)pla		,
8. Juncus megacephalus	2	no	OBL	herbaceous vines, regardless of size.		
9. Panicum hemitomon	2	no	OBL	plants, except woody vines, less than		-
10. Rhynchospora microcarpa	2	no	FACW	(1 m) in height.		•
11.				Woody vine- All woody vines, regard	lless of height	
12.				1	<b>3</b>	
	37	= Total Cove		1		
Woody Vine Stratum (Plot size:	١ .	rotal cove				
1	·/					
2.				1		
3.						
	· <del></del>			- Lindranbudia		
<b>4</b> . <b>5</b> .	·			Hydrophytic	∕ No	
J.		- Total Carr	<u> </u>	Vegetation Present? Yes		<del>-</del>
Remarks: (If observed, list morph	0 closical adapta	= Total Cove	<u> </u>	1		
Percent cover estimates based or	-		roader cor	mmunity		

SOIL	il: Hillsborough- Smyrr							Sampling Point:
	ecription: /Describe	to the den	th peeded to doc	rument the indic	ator or confirm the ab	sence of indicat	ore l	Camping Forti.
onie De epth	Matrix	to the acp	All needed to doo		K Features	Strice or mores.	ors.,	
ches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks
J. 100,	Color (s.s.)							
4	10 YR 3/1							very dark gray fine sand
12	10 YR 6/1							gray fine sand
-15	7.5 YR 3/2							dark brown fine sand
-20	10 YR 3/2	- —						very dark grayish brown fine sand
vpe: C=	Concentration, D=Dep	letion, RM	=Reduced Matrix	CS=Covered or C	Coated Sand Grains.	<sup>2</sup> Location: PL	=Pore Lining, M=Ma	atrix.
	il Indicators:						,	Indicators for Problematic Hydric Soils 3:
_Histol				Polyvalue Be	elow Surface (S8) (LRR	( S, T, U)		1 cm Muck (a9) (LRR O)
	Epidon (A2)				urface (S9) (LRR S, T, I			2 cm Muck (A10) (LRR S)
	Histic (A3)				y Mineral (F1) (LRR O)			Reduced Vertic (F18) (outside MLRA 150A, B
	gen Sulfide (A4)				ed Matrix (F2)	,		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)			Depleted Ma				Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR F	P. T. U)		Redox Dark				(MLRA 153B)
	, , ,			_	, ,			Red Parent Material (TF2)
					_Depleted Dark Surface (F7) _Redox Depressions (F8)			
_Muck	Presence (A8) (LRR	U)					Very Shallow Dark Surface (TF12) (LRR T, U)	
_1 cm l	Muck (A9) (LRR P,T)			Marl (F10) (L	.RR U)			Other (Explain in Remarks)
Deole	ted Below Dark Surfac	e (A11)		Depleted Orr	chric (F11) (MLRA 151)	)		
	Dark Surface (A12)	(, , , , ,			ese Masses (F12) (LR	•		
								<sup>3</sup> Indicators of hydrophytic vegetation and wetland
_Coast	Prairie Redox (A16) (	MLRA 150	A)	Umbric Surfa	ace (F13) (LRR P, T, U	)		hydrology must be present, unless disturbed or
_Sandy	Mucky Mineral (S1) (	LRR O, S)		Delta Orchrid	c (F17) (MLRA 151)			problematic.
Sandy	Gleyed Matrix (S4)			Reduced Ve	rtic (F18) (MLRA 150A	, 150B)		
	Redox (S5)			Piedmont Fix	oodplain Soils (F19) (M	LRA 149A)		
	ed Matrix (S6)				Bright Loamy Soils (F20		153C, 153D)	
	Surface (S7) (LRR P.	C T III		_	, , ,			
	e Layer (If observed)						<del></del>	
231110114	Type:	,.						
	Depth (inches):						Hydric Soil Prese	ent? Yes ✓ No .
marks:	Deput (inches).						Invalic Son Prese	entr res v No
emarks.								
								•

Project/Site: Levy Nuclear Plant - Transmission I	ines	City/County: Hillsborough		apling Date: 9/28/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		npling Point: QQ
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 35 27S 17E	
Landform (hillslope, terrace, etc.):N/	Α	Local relief (concave, con-	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.091483	3Long: <u>-82.5</u>	Datum: WGS84	
Soil Map Unit Name: Myakka fine sand				
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No (If no	o, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances nom	mal? YesNo
Are Vegetation Soil,			(If needed, explain any	answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing samplir	ng point locations, tr	ansects, important	features, etc.
Hydrophytic Vegetation Present?	YesNo			
Hydric Soil Present?	YesNo	Is the Sampled Area w	ithin a Wetland? Yes	✓ No
Wetland Hydrology Present?	Yes✓_No	1		
Remarks:		<b>-</b>		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (n	ninimum of two required)
Primary Indicators (minimum of one is required;	check all that annly)		Surface Soil Crack	
✓ Surface Water (A1)	Water-Stained Leaves	(BQ)		ed Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	(03)	Drainage Patterns	` '
<b>├</b> • • • • • • • • • • • • • • • • • • •		3B III		` ′
Saturation (A3)	Marl Deposits (B15) (LF	•	Moss Trim Lines (	`
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Wate	• *
Sediment Deposits (B2)	Oxidized Rhizospheres	<del></del> •		
Drift Deposits (B3)	Presence of Reduced In	• •	on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	, ,	Geomorphic Posit	, ,
Iron Deposits (B5)	Thin Muck Surface (C7)	•	Shallow Aquitard (	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	irks)	FAC Neutral Test	(D5)
Field Observations:	V (			
Surface Water Present?	Yes No		i	
Water Table Present?	Yes No	_Depth (inches):0	Wetland	
Saturation Present?	Yes No	_Depth (inches):0	Hydrology	
(includes capillary fringe)	da		Present? Yes	<u>✓ No</u>
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previou	us inspections), if available:		
Remarks:				

VEGETATION - Use scientific na	Absolute %	Dominant	Indicator	Dominance Test Workshe	et:	QC
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.			_	Number of Dominant Specie	es <u>8</u>	(A)
2. 3. 4.				That Are OBL, FACW, or	_	` '
3.			_	Total Number of Dominant	<u>8</u>	(B)
4.				Species Across All Strata:		( )
5.				That Are OBL, FACW, or	100.00	(A/B
6. 7.				FAC:		
<i>1</i> .				Prevalance Index workshe		
Capling Chatum (Dlat sing)	, 0	= Total Cov	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:			ODI	OBL species	x1=	
1. Acer rubrum		yes	OBL	FACW species	x2=	_
Quercus laurifolia		no	FACW	FAC species	x3=	
Quercus nigra	5	no	FAC	FACU species	x4=	_
4.	<del></del>			UPL species	x5=	<b>—</b> "
5.	<del></del>		<u> </u>	Column Totals:	(A)	(B)
6.	-		- ——	l		
7.		- T-4-1 O-1	<del>.</del> . <del></del>	Prevalance Index = B/A		
Church Church une (Diet eine)	30	= Total Cov	er/er	Hydrophytic Vegetation In		
Shrub Stratum (Plot size:	<del></del> )		<b>-</b> 40	✓ Dominance Test is 5		
Myrica cerifera	10	yes	<u>FAC</u>	Prevalence Index is		
2. 3.			_	Problematic Hydroph	nytic vegetation (Ex	xpiain)
				1		
4.				Indicators of hydric soil and		must
5. 6.				be present, unless disturbed		
	<del>-</del>		_	Definitions of Vegetation	otrata:	
7.		- Total Car		<del> </del>		
Herb Stratum (Plot size:)	10	= Total Cov	er	<b>Tree</b> - Woody plants, excluding approximately 20 ft (6m) or m		n (76
Lachnanthes caroliniana	25	yes	OBL	cm) or larger in diameter at b		11. (7.0
Woodwardia virginica	20	yes	OBL			
Andropogon virginicus	10	yes	FAC	Sapling- Woody plants, exclusion approximately 20 ft (6m) or m		s than
Andropogon virginicus     Rhynchospora microcarpa	10	yes	FACW	3 in. (7.6 cm) DBH.	iore in neight and les	o aran
Eleocharis spp.	10	yes	OBL	Shrub- Woody plants, exclud	ling woody vines	
Osmunda cinnamomea	10	yes	FACW	approximately 3 to 20 ft (1 to		
Sesbania spp.	5	no	FAC	Herb- All herbaceous (non-w	-	
Juncus megacephalus		no	OBL	herbaceous vines, regardless		
9. Xyris elliotti	5	no	OBL	plants, except woody vines, le		
10.				(1 m) in height.	••	•
11.				Woody vine- All woody vines	regardless of heigh	nt.
12.				1	, , , , , , , , , , , , , , , , , , , ,	
	100	= Total Cov	 /er	1		
Woody Vine Stratum (Plot size:	)					
1.	/					
2.				1		
3.						
4.				Hydrophytic		
				4 * * *	/oo / No	
5.				ivedefation Present/	62 ^ 1413	
5.		= Total Cov		Vegetation Present?	′es <u> </u>	<del></del>

					Sampling Point:
	depth needed to docu	ment the indicator or confirm t	ne absence of indicato	ors.)	•
oth Matrix		Redox Features			<u>.</u> .
nes) Color (moist) %	Color (moist)	<u>%</u> Тур	e¹ Loc²	Texture	Remarks
10 YR 3/1					very dark gray fine sand
10 YR 6/1					gray fine sand
N 2/0					black fine sand
5 YR 3/3					dark reddish brown fine sand
5 TK 3/3					dark reddish blown fine saild
<del></del>					
e: C=Concentration, D=Depletion,	RM=Reduced Matrix C	S=Covered or Coated Sand Grai	ns <sup>2</sup> Location: PL=	Pore Lining, M=Mate	ix
ric Soil Indicators:	TOWN-Treduced Middle, C	G-Govered or Godied Garia Gra	io. Location. i C		Indicators for Problematic Hydric Soils 3:
Histol (A1)	•	Polyvalue Below Surface (S8)	(LRR S. T. U)	•	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	-	Thin Dark Surface (S9) (LRR			2 cm Muck (A10) (LRR S)
Black Histic (A3)	-	Loamy Mucky Mineral (F1) (LI			Reduced Vertic (F18) (outside MLRA 150A,
	-		th Oj		Piedmont Floodplain Soils (F19) (LRR P, S, T
Hydrogen Sulfide (A4) Stratified Layers (A5)	=	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)			
Stratined Layers (A5) Organic Bodies (A6) (LRR P, T, U	٠ -	Depleted Matrix (F3) Redox Dark Surface (F6)	•		Anomalous Bright Loamy Soils (F20)
	-				(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,	T,U) _	Depleted Dark Surface (F7)			Red Parent Material (TF2)
fluck Presence (A8) (LRR U)Redox Depressions (F8)					Very Shallow Dark Surface (TF12) (LRR T, U
cm Muck (A9) (LRR P,T)	_	Marl (F10) (LRR U)			Other (Explain in Remarks)
Depleted Below Dark Surface (A1	1)	Depleted Orchric (F11) (MLR	A 151)		
Thick Dark Surface (A12)	·//	Iron-Manganese Masses (F12	•		_
• •	-	Umbric Surface (F13) (LRR P			Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) <b>(MLRA</b>	. 150A) _	, T, U)		hydrology must be present, unless disturbed or	
Sandy Mucky Mineral (S1) (LRR C	), S) _	Delta Orchric (F17) (MLRA 15	31)		problematic.
Sandy Gleyed Matrix (S4)	-,	Reduced Vertic (F18) (MLRA	150A, 150B)		
Sandy Redox (S5)	-	Piedmont Floodplain Soils (F1			
Stripped Matrix (S6)	-	Anomalous Bright Loamy Soil		53C 153D)	
	- 		> (1 20) (1112101 1 1011) 1	,	
Dark Surface (S7) (LRR P, S, T, U	')				
trictive Layer (If observed):					
Туре:				Hydric Soil Preser	t? Yes <u>√</u> No
Type: Depth (inches):					
Type: Depth (inches):	,				
Type: Depth (inches):					
Type: Depth (inches):	,				
Type: Depth (inches):	,				
Type: Depth (inches):	,				
Type: Depth (inches):	,				
Type: Depth (inches):	,				
Type: Depth (inches):	,				
Type: Depth (inches):					
Type: Depth (inches):	<del></del> ,				
Type:	,				
Type:					
Type:	<del></del> ,				
Type: Depth (inches):	,				
Type:					
Type:	,				
Type:					
Type: Depth (inches):	,				
Type: Depth (inches):	,				
Type: Depth (inches):	, ,				
Туре:					
Type: Depth (inches):	,				
Type:	,				

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	9/28/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	Sampling Point	RR	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: <u>36 27S 17E</u>		
Landform (hillslope, terrace, etc.): N/A	Α	Local relief (concave, conv	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.091946	3 Long: <u>-82.5</u>	Datum: WGS84		
Soil Map Unit Name: Myakka fine sand			_NWI classification: NL		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No (If no, explain ir	n Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances normal?	Yes_ ✓ No	
Are Vegetation, Soil,			(If needed, explain any answers in	Remarks)	
SUMMARY OF FINDINGS - Attach site			• • •	•	
Hydrophytic Vegetation Present?	Yes No	]			
Hydric Soil Present?	Yes No	s the Sampled Area w	rithin a Wetland? Yes_ ✓	No	
Wetland Hydrology Present?	Yes No	]			
Remarks:		<b></b>			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minimum of	two required)	
Primary Indicators (minimum of one is required;	check all that apply)				
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Surface Soil Cracks (B6)Sparsely Vegetated Concave	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	(/	Drainage Pattems (B10)	(- ,	
✓ Saturation (A3)	Mart Deposits (B15) (LF	RR I   )	Moss Trim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Water Table (C2	١	
· · · · · · · · · · · · · · · · · · ·					
Sediment Deposits (B2)	Oxidized Rhizospheres				
Drift Deposits (B3)	Presence of Reduced I		magery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction i				
Iron Deposits (B5)	Thin Muck Surface (C7)	•			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	ırks)	FAC Neutral Test (D5)		
Field Observations:					
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No	- , , , ,	Wetland		
Saturation Present?	Yes No	Depth (inches):0	- Hydrology		
(includes capillary fringe)			Present? Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	us inspections), if available:			
1					
Remarks:		<del></del>			
Tremane.					
į.					
,					
•					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	RR
Trop Stratum (Plot size:	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species:	Status	Number of Dominant Species	
<u>1.</u>				That Are OBL, FACW, or	(A)
2.				<b>4</b> = + -	
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	
5.				That Are OBL, FACW, or 80.00	(A/B)
6.				FAC:	
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	)	= Total Cove	er	Total % Cover of: Multiply by OBL species x1=	<u>:</u>
1. Salix spp.		yes	FACW	FACW species x2=	-
2.				FAC species x3=	
3.				FACU species x4=	_
4.				UPL species x5=	_
<del>5</del> .				Column Totals: (A)	— <sub>(B)</sub>
6.				Column rotals.	—\ <sup>()</sup>
7.				Prevalance Index = B/A =	
1.	5	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	١	- Total Cove	<b>51</b>	✓ Dominance Test is 50%	
			FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
Myrica cerifera	5	yes	FAC	<del></del>	m
2.				Problematic Hydrophytic Vegetation¹ (	Explain)
3.				1	
4.				Indicators of hydric soil and wetland hydrolog	y must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.		<del></del>		<u> </u>	
Hards Chartery (Distance)	5	= Total Cove	er	Tree- Woody plants, excluding woody vines,	:- (7.0
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3	
Panicum repens	25	yes	FACW	cm) or larger in diameter at breast height (DBH).	
Solidago spp.	5	yes	FACU	Sapling- Woody plants, excluding woody vines,	
Ludwigia peruviana	5	yes	OBL	approximately 20 ft (6m) or more in height and le	ss than
Rhexia spp.	3	no	FACW	3 in. (7.6 cm) DBH.	1
5. Sesbania spp.	3	no	FAC	Shrub- Woody plants, excluding woody vines,	
Polygonum punctatum	3	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Andropogon virginicus	2	no	FAC	Herb- All herbaceous (non-woody)plants, includ	
8. Sagittaria lancifolia	2	no	OBL	herbaceous vines, regardless of size. Includes	
9. Juncus megacephalus	2	no	OBL	plants, except woody vines, less than approxima	tely 3 ft
10. Panicum hemitomon	2	no	OBL	(1 m) in height.	
11.				Woody vine- All woody vines, regardless of height	Jht.
12.					
Woody Vine Stratum (Plot size:	52 \	= Total Cove	er		
1.			•	1	
2.					
3.				I budua u bu dia	J
4.				Hydrophytic	J
5.				Vegetation Present? YesNo_	<u> </u>
	0	= Total Cove	er		
Remarks: (If observed, list morphe Percent cover estimates based or			roader cor	mmunity.	

SOIL Profile De	scription: (Describe	to the do-	ath peeded to do	umant the in	dicator or or	antirm the abo	ance of indicat	tore )	Sampling Point: RI
rome De Jepth	escription: (Describe Matrix	to the dep	pun needed to doc		edox Feature		ence of indicat	iors.j	
nches)	Color (moist)	%	Color (moist)	<u>%</u>		Type <sup>1</sup>	Loc²	Texture	Remarks
5	10 YR 3/1								very dark gray fine sand
20	10 YR 6/1		<del></del>	<del></del>					gray fine sand
25	N 2/0								black fine sand
30	5 YR 3/3	- —							dark reddish brown fine sand
-30	3 TR 3/3							-	dark reddish brown line sand
				_					
	0	Japan 51	Dadward Matri	20-0	Ct-d C-	and Carina	Zi anntina: Di	-Dass Lining M-Ma	
	Concentration, D=Dep il Indicators:	лецоп, км	=Reduced Matrix,	US=Covered	or Coated Sa	and Grains.	Location: PL	=Pore Lining, M=Ma	Indicators for Problematic Hydric Soils <sup>3</sup> :
_Histol				Polyvalu	e Below Surfa	ace (S8) (LRR	S. T. U)		1 cm Muck (a9) (LRR O)
	Epidon (A2)					9) (LRR S, T, U			2 cm Muck (A10) (LRR S)
	Histic (A3)					(F1) (LRR O)	,		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				Sleyed Matrix				Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				Matrix (F3)	(12)			Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR F	2. T. U)			ark Surface (	F6)			(MLRA 153B)
		,		_	Dark Surfac				Red Parent Material (TF2)
	Mucky Mineral (A7) (L Presence (A8) (LRR				epressions (f				Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	0,		Mart (F10) (LRR U)					Other (Explain in Remarks)
	ted Below Dark Surface	~e (A11)				I) (MLRA 151)			
	Dark Surface (A12)	JC (A 11)			-	ses (F12) (LRR	O. P.T)		<b>3</b>
	Prairie Redox (A16) (	MI RA 150	DA)	Umbric Surface (F13) (LRR P, T, U)					<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (		•		chric (F17) (N				problematic.
	/ Mucky Milleral (31) ( / Gleyed Matrix (S4)	LKK 0, 3)	l			(MLRA 150A,	150B)		
						Soils (F19) (ML			
_	Redox (S5)						(MLRA 149A)	1520 1520)	
	ed Matrix (S6)	C T 11)		Anomaic	us origin Loa	arry Solis (F20)	(MLRA 149A,	1550, 1550)	
	Surface (S7) (LRR P, e Layer (If observed								
estrictiv	Type:	,.							
	Depth (inches):							Hydric Soil Prese	ent? Yes ✓ No .
emarks:	Deput (inches).							Triyana don'i rese	
emarks.									

Project/Site: Levy Nuclear Plant - Transmission I	ines	City/County: Hillsborough		oling Date: 9/28/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		oling Point: SS
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 36 27S 17E	
Landform (hillslope, terrace, etc.): N//	4	Local relief (concave, conv	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.092345	Long: <u>-82.5</u>	Datum: WGS84	
Soil Map Unit Name: Myakka fine sand			NWI classification: NL	
Are climatic / hydrologic conditions on the site type	oical for this time of year?	Yes <u>✓</u>	_ No (if no	, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances norm	al? Yes_✓_No
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain any a	nswers in Remarks)
SUMMARY OF FINDINGS - Attach site	e map showing samplir	ng point locations, tra	ansects, important t	eatures, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland? Yes_	✓ No	
Wetland Hydrology Present?				
Remarks:				
LIVERGLOGY				
HYDROLOGY			Conndon/ladicates (	inimum of two required)
Wetland Hydrology Indicators:	shock all that apply)		Secondary Indicators (m	
Primary Indicators (minimum of one is required;   Surface Water (A1)	<u> </u>	P0)	Surface Soil Crack	d Concave Surface (B8)
High Water Table (A2)	Water-Stained Leaves (	D9)	Drainage Patterns	· ·
✓ Saturation (A3)	Aquatic Fauria (B15)Marl Deposits (B15) (LR	)D ) II	Moss Trim Lines (E	
` ′	Hydrogen Sulfide Odor	*		·
Water Marks (B1)		(C1)Dry-Season Water Table (C2) on Living Roots (C3)Crayfish Burrows (C8)		
Sediment Deposits (B2) Drift Deposits (B3)	Presence of Reduced In	<del>-</del>		
Algal Mat or Crust (B4)	Recent Iron Reduction is	• •		
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Geomorphic Position	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai		FAC Neutral Test (	·
Field Observations:	otroi (Explain in Terrai		1770 Houridi Toory	50)
Surface Water Present?	Yes No	Denth (inches): 0-72	1	
Water Table Present?	Yes✓No			
Saturation Present?	Yes No	Depth (inches): 0	Wetland	
(includes capillary fringe)		. Dopan (o.100)	Hydrology Present? Yes	✓ No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:	1.00-1	
Remarks:	'			

VEGETATION - Use scientific nan	nes of plants		•	Sampling F	Point:	<u>SS</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1				Number of Dominant Species		
2.				That Are OBL, FACW, or	<u>6</u>	(A)
3.				Total Number of Dominant		
	<del></del>				<u>6</u>	(B)
4.				Species Across All Strata:		
5.				That Are OBL, FACW, or	100.00	(A/B)
6.				FAC:		
7.				Prevalance Index worksheet:		
	0	= Total Cover	r	Total % Cover of: M	ultiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=		
1. Salix spp.	20	yes	FACW	FACW species x2=		-
Magnolia virginiana	5	yes	FACW	FAC species x3=		-
Magnolia virginiana     .				FACU species x4=		-
4.				UPL species x5=		-
5.				Column Totals: (A)		- (B)
6.				—— (* 1)—		-\ <sup>\\\</sup>
7.				Decualance Index = B/A =		
<i>/</i> .		= Total Covo		Prevalance Index = B/A =		
	25	= Total Cove	ſ	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
Myrica cerifera	5	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>		
2. 3.				Problematic Hydrophytic Vege	etation¹ (Exp	olain)
3						
4.				<sup>1</sup> Indicators of hydric soil and wetland	hydrology r	nust
5.				be present, unless disturbed or proble		
6.				Definitions of Vegetation Strata:		
7.				1		
	5	= Total Cove	r	Tree- Woody plants, excluding woody v	ines	
Herb Stratum (Plot size:)		· <del>- · ·</del>	,	approximately 20 ft (6m) or more in heigh		(7.6
Ludwigia peruviana	5	yes	OBL	cm) or larger in diameter at breast heigh		(
Woodwardia virginica	5	yes	OBL	•		
Sagittaria lancifolia	3		OBL	Sapling- Woody plants, excluding wood approximately 20 ft (6m) or more in heigh		than
	<u> </u>	yes	UBL	3 in. (7.6 cm) DBH.	giit ailu iess	liidii
<b>4</b> . <b>5</b> . <b>6</b> .				•		
5.				Shrub- Woody plants, excluding woody		
6.				approximately 3 to 20 ft (1 to 6 m) in he	ight.	
7.				Herb- All herbaceous (non-woody)plant		
8. 9.				herbaceous vines, regardless of size.		
				plants, except woody vines, less than a	pproximatel	y 3 ft
10.				(1 m) in height.		1
11.				Woody vine- All woody vines, regardle	ss of height.	.
12.		<del></del>		1		
	13	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)					
1						
2.				·		ŀ
3. 4.	<del></del>			ł., , , ,,		
		·		Hydrophytic		
5.				Vegetation Present? Yes	No	<u> </u>
	0	= Total Cove	r			
Remarks: (If observed, list morpho	ological adapta	tions below).				
Percent cover estimates based on	meandering s	urvey of the b	roader cor	mmunity.		

SOIL	Hillsborough- Myakk	a							Sampling Point:SS
Profile Desc	cription: (Describe t	o the dep	th needed to doc	ument th	e indicator or o	onfirm the abs	ence of indicat	ors.)	
Depth _	Matrix				Redox Feature	es			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%		Type	Locz	Texture	Remarks
)-5	10 YR 3/1								very dark gray fine sand
5-20	10 YR 6/1								gray fine sand
20-25	N 2/0								black fine sand
25-30	5 YR 3/3								dark reddish brown fine sand
Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix,	S=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL:	=Pore Lining, M=Mat	trix.
lydric Soil I									Indicators for Problematic Hydric Soils 3:
Histol (A						face (S8) (LRR :			1 cm Muck (a9) (LRR O)
	oidon (A2)					9) (LRR S, T, U	) -		2 cm Muck (A10) (LRR S)
Black His					ny Mucky Minera				Reduced Vertic (F18) (outside MLRA 150A, B)
	n Sulfide (A4)				ny Gleyed Matrix				Piedmont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5) Bodies (A6) (LRR P	TID			eted Matrix (F3) ox Dark Surface				Anomalous Bright Loamy Soils (F20)
				_					(MLRA 153B)
	cky Mineral (A7) (LR				eted Dark Surfac				Red Parent Material (TF2)
	resence (A8) (LRR U	")		_	x Depressions (	(F8)			Very Shallow Dark Surface (TF12) (LRR T, U)
	ick (A9) (LRR P,T)				(F10) (LRR U)				Other (Explain in Remarks)
	d Below Dark Surface	e (A11)			eted Orchric (F1				
Thick Da	ark Surface (A12)			lron-l	Manganese Mas	sses (F12) (LRR	O, P,T)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)			Umbi	ric Surface (F13	) (LRR P, T, U)			hydrology must be present, unless disturbed or	
Sandy M	Mucky Mineral (S1) (L	.RR O, S)		Delta	Orchric (F17) (I	MLRA 151)			problematic.
Sandy G	Bleyed Matrix (S4)			Redu	iced Vertic (F18)	) (MLRA 150A,	150B)		
Sandy R	Redox (S5)			Piedr	nont Floodplain	Soils (F19) (ML	RA 149A)		
Stripped	Matrix (S6)			Anon	nalous Bright Lo	amy Soils (F20)	(MLRA 149A, 1	53C, 153D)	
	rface (S7) (LRR P, S								
	Layer (If observed):								
	ype:							l <u>-</u>	
	epth (inches):	<del> </del>						Hydric Soil Preser	<u>nt?</u> Yes <u></u> ✓ No
Remarks:									

Project/Site: Levy Nuclear Plant - Transmission L	Lines	City/County: Hillsborou	9/28/09					
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	Sampling Point:	TT				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: <u>36 27\$ 17E</u>					
Landform (hillslope, terrace, etc.): N/A	Α	Local relief (concave, conv	vex, none): none	Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: 28.092589	£ong: <u>-82.5</u>	62822	Datum: WGS84				
Soil Map Unit Name: Malabar fine sand			NWI classification: Shrub wetland	,				
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes <u>√</u>	_ No (If no, explain in	Remarks)				
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances normal?	YesNo				
Are Vegetation, Soil			(If needed, explain any answers in F	Remarks)				
SUMMARY OF FINDINGS - Attach site	e map showing samplir	ng point locations, tra	ansects, important features,	, et <u>c.</u>				
Hydrophytic Vegetation Present?	Yes No							
Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland? Yes No						
Wetland Hydrology Present?	Yes No							
Remarks:								
HYDROLOGY								
Wetland Hydrology Indicators:			Secondary Indicators (minimum of t	(wo required)				
Primary Indicators (minimum of one is required; of			Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Vegetated Concave	Surface (B8)				
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)					
Saturation (A3)	Marl Deposits (B15) (LF	•	Moss Trim Lines (B16)					
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season Water Table (C2)	1				
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burrows (C8)					
Drift Deposits (B3)	Presence of Reduced In	ron (C4)	Saturation Visible on Aerial Im	nagery (C9)				
Aigal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)						
Iron Deposits (B5)	Thin Muck Surface (C7)	)						
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	irks)	FAC Neutral Test (D5)					
Field Observations:								
Surface Water Present?	Yes No		_					
Water Table Present?	Yes No		Wetland					
Saturation Present?	Yes No		- Hydrology					
(includes capillary fringe)			Present? Yes ✓	No				
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	us inspections), if available:						
Remarks:	·							

VEGETATION - Use scientific na	mes of plants			Sam	npling Point:	TT
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	, , , , , ,		
1.				Number of Dominant Species	<u>3</u>	(4)
2.				That Are OBL, FACW, or	2	(A)
3.				Total Number of Dominant	3	<b>(D</b> )
4.				Species Across All Strata:	<u>3</u>	(B)
5.				That Are OBL, FACW, or	100.00	(A/D)
6.				FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1. Salix spp.	3	yes	FACW	FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	<u> </u>
4.				UPL species	x5=	_
5.	-			Column Totals:	(A)	(B)
6.				1		_ ` `
7.				Prevalance Index = B/A =		
	3	= Total Cove	er	Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Myrica cerifera	<del>=</del>	ves	FAC	Prevalence Index is ≤3.0		
2.			***-	Problematic Hydrophytic		olain)
3.			-	† , , , ,	, ,	ŗ,
4.				<sup>1</sup> Indicators of hydric soil and we	etland hydrology i	must
5.				be present, unless disturbed or		muot
6.	- —			Definitions of Vegetation Stra		
7.	-		<del></del>	1		
	2	= Total Cove		Tree- Woody plants, excluding w	oody vines.	
Herb Stratum (Plot size:)		• • • • • • • • • • • • • • • • • • • •	•	approximately 20 ft (6m) or more		. (7.6
Pontederia cordata	2	yes	OBL	cm) or larger in diameter at breas		
2.				Sapling- Woody plants, excludin	_	
3.				approximately 20 ft (6m) or more		s than
4.	-		-	3 in. (7.6 cm) DBH.		
5.			-	Shrub- Woody plants, excluding	woody vines.	
6.				approximately 3 to 20 ft (1 to 6 m		
7.				Herb- All herbaceous (non-wood	-	
8.				herbaceous vines, regardless of		
9.	-			plants, except woody vines, less		
10.	<del></del>			(1 m) in height.	-FF.	· <b>y</b> = · ·
11.				Woody vine- All woody vines, re	gardless of height	t
12.				1 100 dy 11110 7 111 1100 dy 111100, 10;	garaicoo oi noig	
12.		= Total Cove		4		
  Woody Vine Stratum (Plot size:	\	- Total Cove	i	1		
1. 2.				1		
3.						
				1.0.00000000000000000000000000000000000		
4. 5.				Hydrophytic	√ No	
J.		= Total Cove		Vegetation Present? Yes	No	<del></del>
Demarks: (If shapped list mamb						• • • • • • • • • • • • • • • • • • • •
Remarks: (If observed, list morph		•				
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.		

SOIL									Sampling Point:
rofile De	escription: (Describe	to the dep	oth needed to doo	ument the inc	licator or confir	m the abse	ence of indicate	ors.)	
Depth	Matrix			Re	dox Features				
inches)	Color (moist)	%	Color (moist)	%		Type <sup>3</sup>	Loc2	Texture	Remarks
-5	10 YR 3/1								very dark gray fine sand
-20	10 YR 6/1				_			<del> </del>	gray fine sand
0-25	N 2/0								black fine sand
5-30	5 YR 3/3								dark reddish brown fine sand
T C-	Canandratian D-Dan	lation DNA	-Dadward Matrix	CE-Caused .	Cooled Cood (	ina	ZI continue DI -	Pore Lining, M=Ma	
	Concentration, D=Dep oil Indicators:	etion, KM	=Reduced Matrix,	CS=Covered C	or Coated Sand C	rains.	Location: PL=	Pore Lining, M=Ma	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histol				Poharakio	Below Surface (	C0) // DD C	T 10		1 cm Muck (a9) (LRR O)
	Epidon (A2)				Surface (S9) (LI				2 cm Muck (A10) (LRR S)
	Histic (A3)				ucky Mineral (F1)				Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				eved Matrix (F2)				Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				Matrix (F3)				Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR F	P. T. UI			rk Surface (F6)				(MLRA 153B)
					Dark Surface (F)	7)			Red Parent Material (TF2)
_	Mucky Mineral (A7) (L				,	()			
Muck	Presence (A8) (LRR	U)		_	pressions (F8)				Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl (F10	) (LRR U)				Other (Explain in Remarks)
Deple	ted Below Dark Surface	e (A11)		Depleted	Orchric (F11) (M	LRA 151)			
	Dark Surface (A12)	,		Iron-Mano	anese Masses (	F12) (LRR	O. P.T)		
	, ,	MI DA 450			urface (F13) (LR		-,.,.,		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coasi	Prairie Redox (A16) (	MLKA 150	)A)						hydrology must be present, unless disturbed or
	y Mucky Mineral (S1) (	LRR O, S)	1		hric (F17) (MLRA				problematic.
Sand	y Gleyed Matrix (S4)				Vertic (F18) (ML				
Sand	y Redox (S5)				Floodplain Soils				
Stripp	ed Matrix (S6)			Anomalou	s Bright Loamy	Soils (F20)	(MLRA 149A, 1	53C, 153D)	
Dark :	Surface (S7) (LRR P,	S. T. U)							
	e Layer (If observed)								
	Type:								
	Depth (inches):							Hydric Soil Prese	ent? Yes ✓ No .
Remarks:					-			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
riomaino.									

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Hillsboro	ugh	9/28/09				
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	UU/VV			
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: <u>36 27S 17E</u>					
Landform (hillslope, terrace, etc.):N/.	Α	Local relief (concave, con-	vex, none): <u>none</u>		_Slope (%):			
Subregion (LRR or MLRA): LRR U		Long: <u>-82.5</u>	62218	·	Datum: WGS84			
Soil Map Unit Name: Winder fine sand			_NWI classification:	Shrub wetland				
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in F	Remarks)			
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo			
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)			
<b>SUMMARY OF FINDINGS - Attach sit</b>			ansects, impor	tant features,	etc.			
Hydrophytic Vegetation Present?	Yes✓_ No							
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	vithin a Wetland?	Yes	No			
Wetland Hydrology Present?	YesNo	<u></u>						
Remarks:								
HYDROLOGY								
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	vo required)			
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)					
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Lines (B16)					
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)				
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	rows (C8)				
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	Saturation Vi	sible on Aerial Ima	agery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	,	Shallow Aquitard (D3)					
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)				
Field Observations:								
Surface Water Present?	Yes No	Depth (inches):						
Water Table Present?	Yes No	. Depth (inches):						
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology					
(includes capillary fringe)			Present?	Yes ✓	No			
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previou	is inspections), if available:						
Remarks:								

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	UU/VV
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Taxodium distichum	5	yes	OBL	Number of Dominant Species	0 (0)
2. Quercus laurifolia	5	yes	FACW	That Are OBL, FACW, or	<u>8</u> (A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	<u>9</u> (B)
5.				That Are OBL, FACW, or	
6.				FAC:	3.89 (A/B)
7.				Prevalance Index worksheet:	
	10	= Total Cove	r	Total % Cover of: Multip	ly by:
Sapling Stratum (Plot size:	)			OBL species x1=	
Quercus laurifolia	10	yes	FACW	FACW species x2=	
2. Pinus elliottii	10	yes	FACW	FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	
5.				Column Totals: (A)	(B)
6.				` '	. ,
7.				Prevalance Index = B/A =	
	20	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation	on <sup>1</sup> (Explain)
3.					` ' ′
4.				<sup>1</sup> Indicators of hydric soil and wetland hydi	rology must
5.			-	be present, unless disturbed or problema	tic.
6.				Definitions of Vegetation Strata:	
7.					
	0	= Total Cove	r	Tree- Woody plants, excluding woody vines	.
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height a	
1. Panicum hemitomon	40	yes	OBL	cm) or larger in diameter at breast height (D	BH).
Blechnum serrulatum	10	yes	FACW	Sapling- Woody plants, excluding woody vi	nes,
3. Ludwigia peruviana	10	yes	OBL	approximately 20 ft (6m) or more in height a	
4. Urena lobata	10	yes	FACU	3 in. (7.6 cm) DBH.	
5. Euthamia spp.	10	yes	FAC	Shrub- Woody plants, excluding woody vine	es,
Eupatorium capillifolium	5	no	FACU	approximately 3 to 20 ft (1 to 6 m) in height.	
<ol><li>Andropogon virginicus</li></ol>	5	no	FAC	Herb- All herbaceous (non-woody)plants, in	cluding
8.				herbaceous vines, regardless of size. Inclu	des woody
9.				plants, except woody vines, less than appro	ximately 3 ft
10.				(1 m) in height.	
11.				<b>Woody vine-</b> All woody vines, regardless of	f height.
12.					
	90	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	ļ
5.				Vegetation Present? Yes <u>√</u>	_No
	0	= Total Cove	r		
Remarks: (If observed, list morpho	-	•			
Percent cover estimates based or	meandering s	urvey of the b	roader cor	nmunity.	

iption: (Describe to Matrix	the de							Sampling Point:UUA
Matrix		pth needed to doc				ence of indicat	ors.)	
Color (moist)	-%	Color (moist)	%_	Redox Feature	Type <sup>†</sup>	Loc²	Texture	Remarks
0 YR 3/1								very dark gray fine sand
0 YR 5/2			_					grayish brown fine sand
		10 YR 5/1; 10						
0 YR 4/2								dark grayish brown sandy loam
0 YR 6/1								gray sandy clay loam
	—							
centration, D=Depte	etion, RM	/=Reduced Matrix,	CS=Covere	ed or Coated S	and Grains.	<sup>2</sup> Location: PL	=Pore Lining, M=Mat	rix.
ndicators:								Indicators for Problematic Hydric Soils 3:
)							•	1 cm Muck (a9) (LRR O)
						)		2 cm Muck (A10) (LRR S)
								Reduced Vertic (F18) (outside MLRA 150A, B)Piedmont Floodplain Soils (F19) (LRR P, S, T)
					(FZ)			Anomalous Bright Loamy Soils (F20)
	T, U)				(F6)			(MLRA 153B)
ky Mineral (A7) (LR	R P,T,U)	)	Deplet	ted Dark Surfac	e (F7)			Red Parent Material (TF2)
esence (A8) (LRR U	)		Redox	Depressions (	F8)		٠.	Very Shallow Dark Surface (TF12) (LRR T, U)
k (A9) (LRR P,T)			Marl (F	-10) (LRR U)				Other (Explain in Remarks)
	(A11)							
, ,				•		O, P,T)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
airie Redox (A16) (M	LRA 15	0A)						hydrology must be present, unless disturbed or
	RR O, S	)						problematic.
							153C 153D)	
	T 11)			alous Bright Lot	anny Coms (1 20)	(112104 14074, 1	1000, 1000,	
	1, 0)						1	
pe:								
pth (inches):							Hydric Soil Preser	nt? Yes <u>✓ No</u>
	centration, D=Deplet dicators: ) don (A2) ic (A3) Sulfide (A4) Layers (A5) odies (A6) (LRR P, Ky Mineral (A7) (LR V) (LR	OYR 5/2  OYR 4/2  OYR 6/1  Centration, D=Depletion, RM dicators:  I) don (A2)  icic (A3)  Sulfide (A4)  Layers (A5)  Iodies (A6) (LRR P, T, U)  ks (A9) (LRR P,T)  Below Dark Surface (A11)  k Surface (A12)  Liric Redox (A16) (MLRA 15th  locky Mineral (S1) (LRR O, S)  gyed Matrix (S4)  dox (S5)  Matrix (S6)  ace (S7) (LRR P, S, T, U)  ayer (If observed):	DYR 5/2  10 YR 5/2  10 YR 5/1; 10 YR 6/4; 10 YR 6/6  DYR 6/1  Coentration, D=Depletion, RM=Reduced Matrix, idicators: ) fon (A2) isic (A3) Sulfide (A4) Layers (A5) iodies (A6) (LRR P, T, U) issence (A6) (LRR P, T, U) issence (A8) (LRR U) k (A9) (LRR P,T) Below Dark Surface (A11) k Surface (A12) irric Redox (A16) (MLRA 150A) irric Redox (A16) (MLRA 0, S) irric Redox (A16) (MLRA 0, S) irric Redox (A16) (MLRA 150A)	10 YR 5/2  10 YR 5/1; 10 YR 6/4; 10 YR 6/6  20 YR 6/1  10 YR 5/1; 10 YR 6/4; 10 YR 6/6  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/2  20 YR 6/1  20 YR 6/3  20 YR 6/1  20 YR 6/1  20 YR 6/4  20 YR 6/1  20 YR 6/4  20 YR 6/6  20 YR 6/6  20 YR 6/1  20 YR 6/6  20 YR 6/1  20 YR 6/4  20 YR 6/4  20 YR 6/4  20 YR 6/4  20 YR 6/4  20 YR 6/6  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/6  20 YR 6/1  20 YR 6/6  20 YR 6/1  20 YR 6/6  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/6  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1	10 YR 5/2	10 YR 5/2  10 YR 5/1; 10	10 YR 5/2  10 YR 5/1; 10 YR 6/4; 10 YR 6/6  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  20 YR 6/1  21 YR 6/2; 10 YR 6/6  21 YR 6/4; 10 YR 6/6  22 YR 6/1  23 YR 6/1  24 Ye 6/6  25 YR 6/1  26 YR 6/2  27 YR 6/1  28 Ye 6/6  29 Ye 6/6  20 YR 6/1  20 YR 6/1  20 YR 6/2  20 YR 6/1  20 YR 6/2  20 YR 6/1  20 YR 6/2  20 YR 6/1  20 YR 6/6  20 YR 6/1  20 YR 6/2  20 YR 6/2  20 YR 6/1  20 YR 6/2	10 YR 5/2

Project/Site: Levy Nuclear Plant - Transmission I	Lines	City/County: Hillsborou	ugh	_Sampling Date:_	9/28/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	ww
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: 36 27S 17E		
Landform (hillslope, terrace, etc.):N/.	Α	Local relief (concave, con-	vex, none): none		_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.09329	4 Long: <u>-82.5</u>	660373		Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification	: Shrub wetland	
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u>√</u>	_ No	_ (If no, explain in I	Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal?	YesNo
Are Vegetation, Soil,			(If needed, explain	n any answers in R	emarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, tr	ansects, impor	tant features,	etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland?	Yes	No
Wetland Hydrology Present?	Yes No	1			
Remarks:					
					*****
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indical	ors (minimum of to	en required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil		NO Tequileu,
✓ Surface Water (A1)	Water-Stained Leaves	/RO\		getated Concave S	Purface (RR)
High Water Table (A2)	Aquatic Fauna (B13)	(109)	Sparsely ve	-	Sulface (DO)
✓ Saturation (A3)	Marl Deposits (B15)	חו ממ	Moss Trim L	, ,	
· '		•		, ,	
Water Marks (B1)	Hydrogen Sulfide Odor	, ,	<del></del> -	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur		(00)
Drift Deposits (B3)	Presence of Reduced I	, ,		isible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	• •	-	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	·	Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutra	Test (D5)	
Field Observations:	Van / Na	Double (book as). CO			
Surface Water Present?	Yes/ No		-		
Water Table Present?	Yes / No		Wetland		
Saturation Present?	Yes No	_ Deptn (inches):u	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monito)	ring well serial photos previo	us inenections) if available	Present?	Yes _	No
Describe Recorded Data (stream gauge, monito	ang wen, aenai photos, previot	из іпэресцопэ), іі ачаналіс.			
Remarks:					
Remarks.					

					*	
VEGETATION - Use scientific na	mes of plants			Sampling	Point:	ww
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1. 2.				Number of Dominant Species That Are OBL, FACW, or	<u>7</u>	(A)
3.	<del></del>			Total Number of Dominant		
4.	-			Species Across All Strata:	<u>8</u>	(B)
5.				4 '		
6.				That Are OBL, FACW, or FAC:	<u>87.50</u>	(A/B)
7.	· ——		-	Prevalance Index worksheet:		
-		= Total Cov	·or	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	- 10(a) COV	, ei	OBL speciesx1		
Sapium sebiferum	7	yes	FAC	FACW speciesx2	=	_
2. Salix spp.	2	no	FACW	FAC species x3	=	_
Persea borbonia	2	no	FACW	FACU species x4	=	
4.	-			UPL species x5	=	
5.				Column Totals: (A	)	(B)
6.						_
7.				Prevalance Index = B/A =		
	11	= Total Cov	/er	Hydrophytic Vegetation Indicate	ors:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Baccharis glomeruliflora	10	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>		
Myrica cerifera	5	yes	FAC	Problematic Hydrophytic V	egetation <sup>1</sup> (Ex	(plain)
3.				·		
4.				<sup>1</sup> Indicators of hydric soil and wetla	ind hydrology	must
5.			_	be present, unless disturbed or pre-		
6.				Definitions of Vegetation Strata	:	
7.						
<u> </u>	15	= Total Cov	/er	Tree- Woody plants, excluding wood		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in	-	1. (7.6
Ludwigia peruviana	20	yes	OBL	cm) or larger in diameter at breast h		
Ludwigia octovalvis		yes	OBL	Sapling- Woody plants, excluding w		
Sagittaria lancifolia	15	yes	OBL	approximately 20 ft (6m) or more in 3 in. (7.6 cm) DBH.	neight and less	s tnan
4. Panicum repens	15	yes	FACW	<b>.</b> '		
5. Euthamia spp.	5	no	FAC	Shrub- Woody plants, excluding wo approximately 3 to 20 ft (1 to 6 m) in		
6. Cyperus odoratus	5	no	FACW			
Setaria geniculata     Eupatorium capillifolium	33	no	FAC	Herb- All herbaceous (non-woody)p		
	3 3	no	FACU	herbaceous vines, regardless of size plants, except woody vines, less that		
		no	FACW	(1 m) in height.	парріоліпас	1 <b>y</b> 5 1t
10. Sesbania spp.	3 3	no	FAC FAC	Woody vine- All woody vines, regar	rdlace of boigh	
11. Andropogon virginicus		no	FAC	Woody ville- All woody villes, regar	diess of fielgit	ι.
12.	95	= Total Cov		-		
Manda Vina Stratum (Blat sins)	95	- Total Cov	/ei	†		
Woody Vine Stratum (Plot size:			EACH			
Rubus spp.	5	yes	FACU	1		
3.						
3. 4.	-			Hydrophytic		
5.			_	Hydrophytic  Vegetation Present? Yes	√ No	
-	5	= Total Cov	_ · /er	Test   Test		<del>-</del>
Remarks: (If observed, list morph				<u> </u>		
in opposition, not morph	J J . J . J . J . J . J . J . J .		<del>.</del>			

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region- Interim Version

Percent cover estimates based on meandering survey of the broader community.

SOIL								Sampling Point:W
		to the dep	oth needed to doc	ument th	ne indicator or confirm the abse	ence of indicat	ors.)	
epth	Matrix Color (moist)	%	Color (moist)	%	Redox Features Type <sup>1</sup>	Loc²	Texture	Remarks
nches)	Color (moist)		Color (moist)		Type	Loc	lexture	Kemarks
-7	10 YR 2/1							black fine sand
28	10 YR 6/1				<del></del>			gray fine sand
	10 YR 5/3; 10 YR							<u> </u>
8-42	5/2							brown and grayish brown fine sand
2-80	10 YR 6/2							light brownish gray fine sand
		. —						· · · · · · · · · · · · · · · · · · ·
Type: C=	Concentration D=Den	letion PM	=Peduced Matrix	CS=Cov	ered or Coated Sand Grains.	21 ocation: PI	=Pore Lining, M=Matri	·
	il Indicators:	Diedori, INIV	-iteduced Matrix,	00-00V	sted of Coated Saild Grains.	LOCATION. 1 L		ndicators for Problematic Hydric Soils 3:
Histol				Poly	value Below Surface (S8) (LRR S	S, T, U)		1 cm Muck (a9) (LRR O)
	Epidon (A2)				Dark Surface (S9) (LRR S, T, U)		_	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loar	my Mucky Mineral (F1) (LRR O)		_	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matrix (F2)		_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				leted Matrix (F3)		_	Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR F				ox Dark Surface (F6)			(MLRA 153B)
	Mucky Mineral (A7) (L				leted Dark Surface (F7)		-	Red Parent Material (TF2)
<u>✓_</u> Muck	Presence (A8) (LRR	U)		Red	ox Depressions (F8)		-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm l	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)		_	Other (Explain in Remarks)
Deple	ted Below Dark Surfac	ce (A11)		Dep	leted Orchric (F11) (MLRA 151)			
	Dark Surface (A12)	` '		lron-	Manganese Masses (F12) (LRR	O, P,T)	3	
Coast	Prairie Redox (A16) (	MI RA 150	A)	 Umb	oric Surface (F13) (LRR P, T, U)			Indicators of hydrophytic vegetation and wetland nydrology must be present, unless disturbed or
	Mucky Mineral (S1) (		•		a Orchric (F17) (MLRA 151)			problematic.
	/ Mucky Milleral (S1) ( / Gleyed Matrix (S4)	LKK U, S)		_	uced Vertic (F18) (MLRA 150A, 1	150B)	•	
	Redox (S5)				mont Floodplain Soils (F19) (MLF			
	ed Matrix (S6)				malous Bright Loamy Soils (F20)		153C, 153D)	
	Surface (S7) (LRR P,	C T 11)				(,	,,	
	e Layer (If observed)						1	
Nesti icuv	Type:	,.						
	Depth (inches):						Hydric Soil Present	t? Yes ✓ No .
Remarks:							11.72110 00111 100011	
						•		
								·

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ugh	Sampling Date:	9/29/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: <u>36 27S 17E</u>		
Landform (hillslope, terrace, etc.): N/	Α	Local relief (concave, con-	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.093276	S Long: <u>-82.5</u>	59660		Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification	NL	
Are climatic / hydrologic conditions on the site type	oical for this time of year?	Yes	_ No	(If no, explain in F	temarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normal?	YesNo
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Re	emarks)
<b>SUMMARY OF FINDINGS - Attach site</b>	e map showing samplir	ng point locations, tr	ansects, impor	tant features, d	etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes	No
Wetland Hydrology Present?	Yes No				
Remarks:					
<u> </u>		· · · · · · · · · · · · · · · · · · ·			
HYDROLOGY					
Wetland Hydrology Indicators:			Cocondon Indicat	ors (minimum of tw	o roquirod)
Primary Indicators (minimum of one is required;	chack all that apply)		Surface Soil		o required)
	Water-Stained Leaves (	(20)	· · · · · · · · · · · · · · · · · · ·	getated Concave S	urface (BR)
✓ Surface Water (A1) High Water Table (A2)	Aquatic Fauna (B13)	(09)	Spansely veg		dirace (BO)
✓ Saturation (A3)	Aquatic Fauria (B15)Marl Deposits (B15) (LF	DD 111	Moss Trim L	• •	
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burn		
Drift Deposits (B3)	Presence of Reduced In	-		isible on Aerial Ima	nery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	, ,		Position (D2)	gery (CS)
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Shallow Aqu	, ,	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai		FAC Neutral	• •	
Field Observations:		,	1	,,,,,	
Surface Water Present?	Yes No	Depth (inches): 0-3			
Water Table Present?	Yes✓ No				
Saturation Present?	Yes✓ No		Wetland		
(includes capillary fringe)			Hydrology Present?	Yes ✓	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	is inspections), if available:	<del></del>		
Remarks:					
			•		

VEGETATION - Use scientific na	mes of plants			Sam	pling Point:	XX
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
Quercus laurifolia	25	yes	FACW	Number of Dominant Species	<u>9</u>	(A)
Pinus elliottii	15	yes	FACW	That Are OBL, FACW, or	<u>~</u>	(,,
Taxodium distichum	10	yes	OBL	Total Number of Dominant	<u>9</u>	(B)
4.				Species Across All Strata:	<u>~</u>	(5)
5. 6.				That Are OBL, FACW, or	100.00	(A/B)
6.				FAC:	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	()
7.				Prevalance Index worksheet:		
0 11 01 1 101 1	, 50	= Total Cov	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	<del></del> )		E40)44	· · —	x1=	_
Quercus laurifolia	30	yes	FACW	- ' <del></del>	x2=	_
2. Salix spp.	25	yes	FACW		x3=	_
3. Pinus elliottii		no	FACW	- · — —	x4=	_
4. Taxodium distichum	. 5	no	OBL		x5=	<del>-</del>
Schinus terebinthifolius	5	no	FAC	Column Totals:	(A)	(B)
6.				Drawalan as Inday - B/A -		
7.	80	= Total Cov		Prevalance Index = B/A = Hydrophytic Vegetation Indic	atore:	
Shrub Stratum (Plot size:	)	- 10tal C0V	CI	✓ Dominance Test is 50%	ators.	
Baccharis glomeruliflora	<del>/</del> 	V00	FACW	Prevalence Index is ≤3.0	<sub>5</sub> 1	
Myrica cerifera	5	yes no	FAC	Problematic Hydrophytic		(niela)
3.			- 170	1 Toblematic Trydrophytic	vegetation (L)	(piairi)
4.				Indicators of hydric soil and we	etland hydrology	must
5.				be present, unless disturbed or		must
6.	-			Definitions of Vegetation Stra		
7.	-			1		
	30	= Total Cov	er	Tree- Woody plants, excluding w	oodv vines.	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		n. (7.6
1. Blechnum serrulatum	25	yes	FACW	cm) or larger in diameter at breas	st height (DBH).	
Ludwigia peruviana	20	yes	OBL	Sapling- Woody plants, excluding	g woody vines,	
3. Ludwigia octovalvis	20	yes	OBL	approximately 20 ft (6m) or more	in height and les	s than
Cyperus odoratus	10	no	FACW	3 in. (7.6 cm) DBH.		
5. Rhynchospora microcarpa	5	no	FACW	Shrub- Woody plants, excluding		
Andropogon glomeratus	5	no	FACW	approximately 3 to 20 ft (1 to 6 m	) in height.	
7. Osmunda cinnamomea	5	no	FACW	Herb- All herbaceous (non-wood	y)plants, including	g
Andropogon virginicus	5	no	<u>FAC</u>	herbaceous vines, regardless of		
9. Sesbania spp.	5	no	FAC	plants, except woody vines, less	than approximate	ly 3 ft
10. Onoclea sensibilis	5	no	FACW	(1 m) in height.		
11. Imperata cylindrica	3	no	NL NL	Woody vine- All woody vines, re	gardless of heigh	t.
12.				4		
	108	= Total Cov	er			
Woody Vine Stratum (Plot size:	)					
1.				4		
2.						
3.				4		
<u>4.</u> 5.			-	Hydrophytic	./ Na	
J.		- Total Car		Vegetation Present? Yes	No	<del></del>
Demontos (If observed list or such	0	= Total Cov		1		
Remarks: (If observed, list morph Percent cover estimates based o	-			mmunity		
i Cicciil Covci Collinaleo Daoed U				rrrr to the contract of the co		

County/soil	1: Hillsborough- Basing	jer						Sampling Point: XX
	scription: (Describe (	to the dep	th needed to doc	ument the ind	licator or confirm the abs	ence of indicat	tors.)	Camping Form. 70
Depth	Matrix				dox Features		•	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>z</sup>	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR			· <del></del>				
28-42	5/2			- —				brown and grayish brown fine sand
42-80	10 YR 6/2						<del></del>	light brownish gray fine sand
				· <del></del>		<del></del>		
		letion, RM	=Reduced Matrix,	CS=Covered o	or Coated Sand Grains.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix	
	il Indicators:							ndicators for Problematic Hydric Soils 3:
Histol (					Below Surface (S8) (LRR S		-	1 cm Muck (a9) (LRR O)
	Epidon (A2) Histic (A3)				Surface (S9) (LRR S, T, U	)	_	2 cm Muck (A10) (LRR S)
_	gen Sulfide (A4)				ucky Mineral (F1) (LRR O) eyed Matrix (F2)		-	Reduced Vertic (F18) (outside MLRA 150A, B) Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				Matrix (F3)		-	Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P	, T, U)			rk Surface (F6)			(MLRA 153B)
5 cm M	Jucky Mineral (A7) (LF	R P.T.U)		Depleted f	Dark Surface (F7)			Red Parent Material (TF2)
	Presence (A8) (LRR L				pressions (F8)		_	Very Shallow Dark Surface (TF12) (LRR T, U)
	Juck (A9) (LRR P,T)	•		Marl (F10)			_	Other (Explain in Remarks)
_	ed Below Dark Surface	0 (011)			Orchric (F11) (MLRA 151)		_	
	Dark Surface (A12)	e (ATT)			anese Masses (F12) (LRR	0.87)	_	
	` ,	II DA 450			urface (F13) (LRR P, T, U)	0,1,1,		ndicators of hydrophytic vegetation and wetland
	Prairie Redox (A16) (M		•					ydrology must be present, unless disturbed or roblematic.
_	Mucky Mineral (S1) (L	.RR O, S)			nric (F17) (MLRA 151)		P	Toblematic.
	Gleyed Matrix (S4)				Vertic (F18) (MLRA 150A,			
	Redox (S5) ed Matrix (S6)				Floodplain Soils (F19) (MLI is Bright Loamy Soils (F20)		153C 153D)	
	Surface (S7) (LRR P, S	T 111			3 Bright Coarry Cons (1 20)	(MEION 145A,	1550, 1550)	
	e Layer (If observed):						I	
	Type:							
	Depth (inches):						Hydric Soil Present	? Yes <u> </u>
Remarks:							<del>-14 </del>	
i								
I								

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Hillsborough Sampling Date: 9/29/				
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: YY				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Rang				
Landform (hillslope, terrace, etc.): N/	A	Local relief (concave, cor			Slope (%):	
Subregion (LRR or MLRA): LRR U		9 Long:82.	559015		Datum: WGS84	
Soil Map Unit Name: Smyrna fine sand			_NWI classification			
Are climatic / hydrologic conditions on the site ty	pical for this time of year?	Yes <u></u> ✓	No	(If no, explain in I	Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo	
	or Hydrology		(If needed, explain	any answers in R	lemarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impor	tant features,	etc.	
Hydrophytic Vegetation Present?	Yes ✓ No		•			
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes	No	
Wetland Hydrology Present?	YesNo	]				
Remarks:		•				
	Contract of the Contract of th					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of to	wo required)	
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave S	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	rows (C8)		
Drift Deposits (B3)	Presence of Reduced I			isible on Aerial Im	agery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction			Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7		Shallow Aqu			
Inundation Visible on Aerial Imagery (B7)	<del></del>		FAC Neutral			
Field Observations:	Otter (Explain in recine	arkoj	1 // O Nedital	1031 (50)		
Surface Water Present?	Yes No	Donth (inchas): 0.72				
1	Yes No					
Water Table Present?			- Wetland			
Saturation Present?	Yes No	_ Depth (inches):0	- Hydrology			
(includes capillary fringe)  Describe Recorded Data (stream gauge, monito	ring wall, garial photog, proving	us inspections) if available	Present?	Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monito	ring well, aenai photos, previol	us inspections), il avallable				
Remarks:						
1						

VEGETATION - Use scientific na	mes of plants			Sampling Point: _	YY
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.	00101	opcoics:	Otatas	Number of Dominant Species	
2.	· ——			That Are OBL, FACW, or	(A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	(B)
5.	-			•	
	-			That Are OBL, FACW, or 100.0	<u>0</u> (A/B)
6. 7.	<del></del>			FAC:	
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	)	= Total Cove	r	Total % Cover of: Multiply b OBL species x1=	<u>'Y'.</u>
1.	-			FACW species x2=	
2.			_	FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	
5.	• ———			Column Totals: (A)	—_ <sub>(В)</sub>
6.				( ,,	<del></del> \'-'
7.				Prevalance Index = B/A =	
	0	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	. 0.0 00.0	•	✓ Dominance Test is 50%	
1.	/			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup>	(Evolain)
3.		<del></del>		Problematic Hydrophytic Vegetation	(Explain)
4.				Anadiantana af budaia a di anad unational budanta	
5.				Indicators of hydric soil and wetland hydrolo be present, unless disturbed or problematic.	gy must
6.				Definitions of Vegetation Strata:	
7.				benintions of vegetation offata.	
-		= Total Cove		T 1M double 4	
Herb Stratum (Plot⋅size:)	U	- Total Cove		Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and	3 in. (7.6
Bacopa monnieri	3	yes	OBL	cm) or larger in diameter at breast height (DBH)	
2. Eleocharis spp.	3	yes	OBL	Sapling- Woody plants, excluding woody vines	
Ludwigia repens	2	yes	OBL	approximately 20 ft (6m) or more in height and	
Panicum repens	2	yes	FACW	3 in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, includ	dina
8.				herbaceous vines, regardless of size. Includes	- 1
9.	-			plants, except woody vines, less than approxim	- 1
10.				(1 m) in height.	
11.				Woody vine- All woody vines, regardless of hei	iaht.
12.					]
12.	10	= Total Cove	r		
Woody Vine Stratum (Plot size:	)	101010101			
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	
	0	= Total Cover	<u></u>	100	<del></del>
Remarks: (If observed, list morph			·		
Percent cover estimates based or	-	•	oader con	nmunity.	

County/soil: Hillsborough- Smyrna SOIL Sampling Point: escription: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Profile Depth Redox Features Color (moist) Color (moist) % Type<sup>T</sup> Loc<sup>2</sup> Texture Remarks very dark gray fine sand 4-12 10 YR 6/1 gray fine sand 7.5 YR 3/2 dark brown fine sand very dark grayish brown fine sand 15-20 10 YR 3/2 <sup>2</sup>Location: PL=Pore Lining, M=Matrix Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Indicators for Problematic Hydric Soils 3; 1 cm Muck (a9) (LRR O) Hydric Soil Indicators: Polyvalue Below Surface (S8) (LRR S, T, U) Histol (A1) \_Histic Epidon (A2) \_Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) \_Hydrogen Sulfide (A4) \_Stratified Layers (A5) Loamy Gleyed Matrix (F2)
Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) Organic Bodies (A6) (LRR P, T, U) (MLRA 153B) Red Parent Material (TF2) \_5 cm Mucky Mineral (A7) (LRR P,T,U) \_Depleted Dark Surface (F7) \_Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) \_1 cm Muck (A9) (LRR P,T) \_Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Orchric (F11) (MLRA 151) \_Depleted Below Dark Surface (A11) \_Thick Dark Surface (A12) \_Iron-Manganese Masses (F12) (LRR O, P,T) <sup>3</sup>Indicators of hydrophytic vegetation and wetland \_Umbric Surface (F13) (LRR P, T, U) \_Coast Prairie Redox (A16) (MLRA 150A) hydrology must be present, unless disturbed or problematic. \_Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) \_Sandy Gleyed Matrix (S4) \_Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) \_Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes <u>✓</u> No Remarks:

Project/Site: Levy Nuclear Plant - Transmission I	ines	City/County: Hillsborough Sampling			9/29/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling			ZZ	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range				
Landform (hillslope, terrace, etc.): N//	4	Local relief (concave, con	_Slope (%):			
Subregion (LRR or MLRA): LRR U		82 Long:82.558367 Datum: _				
Soil Map Unit Name: Smyrna fine sand			_NWI classification:	NL		
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in F	Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	YesNo	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)	
SUMMARY OF FINDINGS - Attach sit	e map showing samplir	ng point locations, tr	ansects, import	tant features,	etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	is the Sampled Area w	ithin a Wetland?	Yes	No		
Wetland Hydrology Present?	Yes No					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	vo required)	
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Veg	etated Concave S	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)			
Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	rim Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season \	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)				
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	agery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	1	Shallow Aqui	tard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No		1			
Water Table Present?	Yes No	Depth (inches):	1001-01			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology			
(includes capillary fringe)				Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:				
Remarks:						
•						

VEGETATION - Use scientific na					Sampling Point:	ZZ
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Workshe	et:	
1.		-		Number of Dominant Specie		/^\
2.				That Are OBL, FACW, or Fa	AC: <u>3</u>	(A)
3.				Total Number of Dominant	2	(D)
4.				Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Specie	es 400.00	/ A / P3
6.				That Are OBL, FACW, or FA		(A/B)
7.				Prevalance Index worksho		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.				FACW species	x2=	_
2.				FAC species	x3=	
3.				FACU species	x4=	
4.				UPL species	x5=	_
5.				Column Totals:	(A)	(B)
6.						_ '
7.				Prevalance Index = B/		
	0	= Total Cove	r	Hydrophytic Vegetation In	dicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 5	0%	
1.				Prevalence Index is	≤3.0 <sup>1</sup>	
2.				Problematic Hydroph	nytic Vegetation¹ (Ex	plain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and	wetland hydrology	must
5.				be present, unless disturbed	d or problematic.	
6.				Definitions of Vegetation	Strata:	
7.						
	0	= Total Cove	r	Tree- Woody plants, excludir		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or m		. (7.6
Panicum repens	33	yes	FACW	cm) or larger in diameter at b	reast height (DBH).	
Bacopa monnieri	3	yes	OBL	Sapling- Woody plants, exclu		
Ludwigia repens	2	yes	OBL	approximately 20 ft (6m) or m		s than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, exclud		
6.				approximately 3 to 20 ft (1 to	6 m) in height.	
7.				Herb- All herbaceous (non-w	oody)plants, including	3
8.				herbaceous vines, regardless		
9.				plants, except woody vines, le	ess than approximate	ly 3 ft (1
10.				m) in height.		
11.	-			Woody vine- All woody vines	, regardless of height	t.
12.	-			]	•	
Woody Vine Stratum (Plot size:	8	= Total Cove	r			
1.						
2.				1		
3.	·					
	-			Hydrophytic		
5. 5.				Hydrophytic Vegetation Present?	Yes ✓ No_	

Remarks: (If observed, list morphological adaptations below).
Percent cover estimates based on meandering survey of the broader community.

Depth (inches)	Matrix		orn needed to doc	ument th	e indicator o	r confirm the ab	sence of indicator	s.)		
0-4 1					Features		,	•		
	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks		
	10 YR 3/1							very dark gray fine sand		
4-14 1	10 YR 6/1							gray fine sand		
12-15 7	7.5 YR 3/2		• • • • • • • • • • • • • • • • • • • •			•		dark brown fine sand		
15-20 1	10 YR 3/2							very dark grayish brown fine sand		
	•••	·			-					
							7			
	ncentration, D=Dep	letion, RM	=Reduced Matrix,	US=Cove	red or Coated	Sand Grains.	*Location: PL=Pi	ore Lining, M=Matrix.		
Hydric Soil I				0-1-	t D-1 0-	(CO) (I DD		Indicators for Problematic Hydric Soils 3:		
Histol (A	•					urface (S8) (LRR		1 cm Muck (a9) (LRR O)		
	oidon (A2)					(S9) (LRR S, T,	•	2 cm Muck (A10) (LRR S)		
Black His	, ,					eral (F1) (LRR O)	)	Reduced Vertic (F18) (outside MLRA 150A, B)		
	n Sulfide (A4) I Layers (A5)				ny Gleyed Mat eted Matrix (F:			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
		7 T III						Anomalous Bright Loamy Soils (F20)		
Organic Bodies (A6) (LRR P, T, U)Redox Dark Surface (F6)  5 cm Mucky Mineral (A7) (LRR P,T,U)Depleted Dark Surface (F7)					(MLRA 153B)Red Parent Material (TF2)					
✓ Muck Presence (A8) (LRR U) Redox Depressions (F8)					Very Shallow Dark Surface (TF12) (LRR T, U)					
1 cm Muck (A9) (LRR P,T)Mari (F10) (Li		•	` '		Other (Explain in Remarks)					
Depleted	Below Dark Surfac	æ (A11)		Depl	eted Orchric (F	-11) (MLRA 151	)			
Thick Da	ark Surface (A12)			Iron-	_Iron-Manganese Masses (F12) (LRR O, P,T)			<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
Coast Pr	rairie Redox (A16) (I	MLRA 150	)A)	Umb	Umbric Surface (F13) (LRR P, T, U)			hydrology must be present, unless disturbed or		
Sandy M	lucky Mineral (S1) (I	LRR O, S)		Delta	Orchric (F17)	(MLRA 151)		problematic.		
Sandy G	leyed Matrix (S4)			Redu	uced Vertic (F1	18) (MLRA 150A	, 150B)			
Sandy Re	edox (S5)			Pied	mont Floodplai	in Soils (F19) (M	LRA 149A)			
Stripped	Matrix (S6)			Anor	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 153	C, 153D)		
Dark Sur	rface (S7) (LRR P,	S, T, U)								
	ayer (If observed)	:								
	/pe:	· · · · · · · · · · · · · · · · · · ·								
De Remarks:	epth (inches):		<del></del>				Hydric Soil Pres	ent? Yes <u>√</u> No		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date:	9/29/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	Sampling Point:	AB		
Investigator(s): Justin Styer, Amy Piko	<u> </u>	Section, Township, Range				
Landform (hillslope, terrace, etc.): N/A	4	Local relief (concave, conv	ex, none): none	SI	ope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.093190	Long:82.5	55035	Da	atum: WGS84	
Soil Map Unit Name: Winder fine sand			_NWI classification:	: Shrub wetland		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		esNo	
Are Vegetation, Soil,	or Hydrology					
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features	s, etc.	
Hydrophytic Vegetation Present?	Yes∕ No					
Hydric Soil Present?	Is the Sampled Area within a Wetland? YesNo					
Wetland Hydrology Present?	Yes✓ No					
Remarks:						
					!	
L						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of t	wo required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (E	B9)	Sparsely Veç	getated Concave	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)		
Saturation (A3)	Marl Deposits (B15) (LR	RU)	Moss Trim Li	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season	Water Table (C2)	)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burn	rows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	isible on Aerial Im	nagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in		· <u></u>	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)			Test (D5)			
Field Observations:		··-/	T			
Surface Water Present?	Yes No	Depth (inches): 0-4				
Water Table Present?	Yes✓ No		1			
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)	110	, Dopan (monos)	Hydrology Present?	Yes <u>√</u> Ne	0	
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous	inspections), if available:	Fiesent:	169	<u> </u>	
, , , , , , , , , , , , , , , , , , , ,						
<u></u>						
Remarks:						
1						
1						

VEGETATION - Use scientific na	imes of plants				Sampling Point:	AB
	Absolute %	Dominant	Indicator	Dominance Test Worksh	eet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
Quercus laurifolia	10	yes	FACW	Number of Dominant Spec	cies _	
2.				That Are OBL, FACW, or I	FAC: 7	(A)
3.				Total Number of Dominant	_	
4.				Species Across All Strata:	<u>8</u>	(B)
5.	-			Percent of Dominant Spec		
6.				That Are OBL, FACW, or I		(A/B)
7.				Prevalance Index worksh		
	10	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	10101 0010	<b>21</b>	OBL species	x1=	
1. Salix spp.	<del></del> ′ 5	yes	FACW	FACW species	x2=	_
Taxodium distichum	5	yes	OBL	FAC species	x3=	_
		<u>ycs</u>	ODL	FACU species	x4=	
3. 4.	- —			UPL species	x5=	<del></del>
5.						— <sub>(B)</sub>
5. 6.				Column Totals:	(A)	(B)
7.				A Barrelana Jadan B		
7.				Prevalance Index = B		
Claresta Charata and (DI-4 - i	10	= Total Cove	er	Hydrophytic Vegetation I		
Shrub Stratum (Plot size:	<del>_</del> _)			✓ Dominance Test is		
Myrica cerifera	10	yes	FAC	Prevalence Index is		
Baccharis glomeruliflora	10	yes	FACW	Problematic Hydrop	ohytic Vegetation <sup>1</sup> (Ex	plain)
3.						
4.				<sup>1</sup> Indicators of hydric soil ar		must
5.				be present, unless disturbe		
6.				Definitions of Vegetation	Strata:	
7.						
,	20	= Total Cove	er	Tree- Woody plants, excludi	ing woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or i		. (7.6
Andropogon virginicus	20	yes	FAC	cm) or larger in diameter at l	breast height (DBH).	
2. Solidago spp.	20	yes	FACU	Sapling- Woody plants, exc	luding woody vines,	
3. Ludwigia peruviana	15	yes	OBL	approximately 20 ft (6m) or i	more in height and less	than 3
4. Osmunda cinnamomea	10	no	FACW	in. (7.6 cm) DBH.		
5. Euthamia spp.	10	no	FAC	Shrub- Woody plants, exclu	iding woody vines,	
6. Lachnanthes caroliniana	5	no	OBL	approximately 3 to 20 ft (1 to	6 m) in height.	
7. Blechnum serrulatum	5	no	FACW	Herb- All herbaceous (non-v	woody)plants_including	ı
8. Woodwardia virginica	5	no	OBL	herbaceous vines, regardles		
9. Xyris elliotti	5	no	OBL	plants, except woody vines,		
10. Juncus megacephalus	5	no	OBL	m) in height.	• •	• '
11.				Woody vine- All woody vine	s regardless of height	
12.				1	o, rogaraices or neight	•
12.	100	= Total Cove		1		
Woody Vine Stratum (Plot size:	100	- Total Cove	21			
1.		<del></del>		4		
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present?	YesNo	<del></del>
	0		er			
5.  Remarks: (If observed, list morph Percent cover estimates based o	nological adapta	· · · · · · · · · · · · · · · · · · ·		Vegetation Present?	YesNo	

	scription: (Describe	to the dep	oth needed to do			confirm the ab	sence of indicators.	)
Depth	Matrix			Redox F				
inches)	Color (moist)	<u>%</u>	Color (moist)	<u> </u>	Type <sup>1</sup>	Loc²	Texture	Remarks
)-4	10 YR 3/1							very dark gray fine sand
-10	10 YR 5/2							grayish brown fine sand
10-14	10 YR 4/2 10 YR 6/1		10 YR 5/1; 10 YR 6/4; 10 YR 6/6				common, medium distinct mottles	dark grayish brown sandy loam
4-30	10 1 K 6/1	·		·				gray sandy clay loam
		_						
Type: C=0	Concentration, D=Dep	letion, RM	=Reduced Matrix,	CS=Covered	d or Coated S	and Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.
lydric So	il Indicators:		· · · · · ·					Indicators for Problematic Hydric Soils 3:
Histol				Polyva	lue Below Sur	face (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin Da	ark Surface (S	9) (LRR S, T, I	U) ·	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loamy	Mucky Minera	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	gen Sulfide (A4)			Loamy	Gleyed Matrix	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5) sic Bodies (A6) (LRR F	P, T, U)			ed Matrix (F3) Dark Surface	(F6)		Anomalous Bright Loamy Soils (F20) (MLRA 153B)
5 cm l	Mucky Mineral (A7) (L	RR P.T.U	1	Deplete	ed Dark Surfa	ce (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR		,	Redox	Depressions	(F8)		Very Shaflow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	-		Marl (F	10) (LRR U)			Other (Explain in Remarks)
Deple	ted Below Dark Surfac	æ (A11)				1) (MLRA 151)		
Thick	Dark Surface (A12)				_	sses (F12) (LRI		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)		•	Umbric Surface (F13) (LRR P, T, U)			)	hydrology must be present, unless disturbed or	
	Mucky Mineral (S1) (	LRR O, S	•		Orchric (F17) (			problematic.
	Gleyed Matrix (S4) Redox (S5)				,	) (MLRA 150A, Soils (F19) (MI		
	ed Matrix (S6)						)) (MLRA 149A, 153C	, 153D)
Dark \$	Surface (S7) (LRR P,	S, T, U)						
	e Layer (If observed)	):						
	Type:						III. della Cella Deserva	ut? Yes √ No
Remarks:	Depth (inches):						Hydric Soil Presen	t? Yes <u>√ No</u> .

Project/Site: Levy Nuclear Plant - Transmission Li	nes	City/County: Hillsborou	gh	Sampling Date:_	9/29/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	AC	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range:	: 36 27S 17E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	SI	ope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.093269	Long:82,5	50662	Da	tum: WGS84	
Soil Map Unit Name: Basinger fine sand			_NWI classification:	Shrub wetland		
Are climatic / hydrologic conditions on the site typi	cal for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	Remarks)	
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances	normal? Ye	sNo	
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing samplii	ng point locations, tr	ransects, impo	rtant features	, etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	YesNo	is the Sampled Area w	ithin a Wetland?	Yes/_No	***************************************	
Wetland Hydrology Present?	Yes No					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of ty	vo required)	
Primary Indicators (minimum of one is required; c	neck all that apply)		Surface Soil 0	_Surface Soil Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (E	39)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir	nes (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season V	Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burn	rrows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vis	/isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic I	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	uitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-8				
Water Table Present?	Yes No					
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)	-		Present?	Yes ✓ No	,	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	·			
Remarks:			· · · · · · · · · · · · · · · · · · ·			
iverialis.						
					}	

VEGETATION - Use scientific nar	mes of plants			;	Sampling Point:	AC
	Absolute %	Dominant	Indicator	Dominance Test Workshe	et:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
Taxodium distichum	5	yes	OBL	Number of Dominant Specie	es ,	(4)
2.				That Are OBL, FACW, or F		(A)
3.				Total Number of Dominant		
4.				Species Across All Strata:	<u>4</u>	(B)
5.				Percent of Dominant Specie	98	
6.				That Are OBL, FACW, or FA		(A/B)
7.				Prevalance Index workshop		
	5	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	١	- Total Cove	•	OBL species	x1=	
Acer rubrum	<del></del> / 5	ves	OBL	FACW species	x2=	_
2.		<u>yes</u>	OBL	FAC species	x3=	-
	·			<del></del>	<del></del>	- 1
3.	· <del></del>			FACU species	x4=	-
4.	· <del></del>			UPL species	x5=	- <u>,</u> ,
5.	·			Column Totals:	(A)	_ <sup>(B)</sup>
<u>6.</u> 7.				┥		
7.				Prevalance Index = B//		
	5	= Total Cove	r	Hydrophytic Vegetation In		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 5		
1.				Prevalence Index is		
2.				Problematic Hydroph	nytic Vegetation¹ (Exp	olain)
3.						
4.				Indicators of hydric soil and	d wetland hydrology r	nust
5.				be present, unless disturbed	d or problematic.	
6.				Definitions of Vegetation	Strata:	
7.				1		
	0	= Total Cove	r	Tree- Woody plants, excludir	ig woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or m		(7.6
Ludwigia peruviana	50	yes	OBL	cm) or larger in diameter at b	reast height (DBH).	
2. Panicum repens	25	yes	FACW	Sapling- Woody plants, exclu	ıdina woody vines.	
Polygonum punctatum	15	no	FACW	approximately 20 ft (6m) or m	•	than 3
Bacopa monnieri	5	no	OBL	in. (7.6 cm) DBH.	Ū	
5.	•			Shrub- Woody plants, exclud	ling woody vines.	
6.				approximately 3 to 20 ft (1 to		
7.				Herb- All herbaceous (non-w		
8.				herbaceous vines, regardless		
9 ·		-		plants, except woody vines, le		
10.				m) in height.		, (.
11.	· ——			Woody vine- All woody vines	regardless of height	
	<del></del>			Twoody vines All woody vines	s, regardless of fleight.	•
12.		- T-4-1 C		4		
M. L.M. Ott. A. (Dist.)	, 95	= Total Cove	er .			
Woody Vine Stratum (Plot size:	)					
1.				4		
2.						
3.						
4.				Hydrophytic		
5. ·				Vegetation Present?	Yes <u>     ∕         </u> No	<u>.</u>
	0	= Total Cove	r			
Remarks: (If observed, list morph						
Percent cover estimates based or	n meandering s	survey of the b	roader co	mmunity.		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)   Depth   Matrix   Redox Feature   Remarks	SOIL								Sampling Point:A
Color (moist)			to the dep	oth needed to doc			confirm the ab	sence of indicator	s.)
10 YR 2/1							<del></del>	<u>.</u> .	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   Location: PL=Pore Lining, M=Matrix.	(inches)	Color (moist)		Color (moist)		Type.	Loc*	Texture	Remarks
10 YR 5/3; 10 YR 5/3; 10 YR 5/2;	0-7	10 YR 2/1							black fine sand
Section   Part	7-28	10 YR 6/1							gray fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thydric Soil Indicators: Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Histic Epidon (A2)  Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Suffide (A4) Stratified Layers (A5) Depleted Matrix (F2) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F6) Mari (F10) (LRR U) Depleted Dark Surface (F7) Red Parent Material (TF2) Mari (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Loamy Mucky Mineral (F1) (MLRA 150A) Depleted Dark Surface (F12) (LRR O, P, T) Depleted Dark Surface (F13) Depleted Dark Su									
Hydric Soil Indicators:  Histor (A1)  Histic Epidon (A2)  Elack Histic (A3)  Elack Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Tom Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F6)  Loamy Mucky Mineral (F1) (LRR U)  Depleted Below Dark Surface (A12)  Depleted Below Dark Surface (A12)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Peldomont Floodplain Soils (F19) (LRR P, T, U)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Med Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Umbric Surface (F13) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Delta Orchric (F17) (MLRA 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes Vo	12-80	10 YR 6/2					·		light brownish gray fine sand
Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Elack Histic (A3)  Hydrogen Sulfide (A4)  Elack Histic Layers (A5)  Organic Bodies (A6)  Torm Mucky Mineral (A7) (LRR P, T, U)  Depleted Delow Dark Surface (A12)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Endedow Dark Surface (F10) (MLRA 150A)  Delta Orchric (F11) (MLRA 151)  Sandy Gleyed Matrix (S6)  Dark Surface (A12)  Delta Orchric (F13) (MLRA 150A)  Sandy Redox (S5)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (LRR P, T, U)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Hydrogen Sulfide (A4)  Depleted Dark Surface (F6)  Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No									
Hydric Soil Indicators:	- A		<del></del> .					7)	
Histol (A1)			etion, RM	=Reduced Matrix,	JS=Cove	red or Coated	Sand Grains.	Location: PL=P	
Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR O)  Reduced Vertic (F18) (outside MLRA 150A, B)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Score Mucky Mineral (A7) (LRR P, T, U)  Pepleted Matrix (F3)  Score Mucky Mineral (A7) (LRR P, T, U)  Pepleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Pedox Dark Surface (F10)  I cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Redox Dark Surface (A12)  Depleted Dark Surface (F13) (LRR O, P, T)  Jepleted Dark Surface (F13) (LRR O, P, T, U)  Pepleted Dark Surface (F13) (LRR O, P, T, U)  Pepleted Below Dark Surface (A12)  Lron-Manganese Masses (F12) (LRR O, P, T, U)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No					Daka	valua Dalavi Ci	-f (CO) // DD	C T III	
Black Histic (A3)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR O)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR P,T)  Depleted Dark Surface (F7)  Redox Depressions (F8)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Redox Depressions (F8)  Loamy Mucky Mineral (F18) (outside MLRA 150A, 153D)  Piedmont Floodplain Soils (F19) (LRR O, P, T)  Mari (F10) (LRR U)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes V No									
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Depleted Dark Surface (F6)  Thick Dark Surface (A11)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Medox (S5)  Sandy Redox (S7) (LRR P, T, U)  Depleted Orchric (F17) (MLRA 150A)  Sandy Redox (S7) (LRR P, T, U)  Depleted Orchric (F17) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S7) (LRR P, T, U)  Depleted Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy (F2)  Anomalous Bright Loamy Soils (F20)  Mart (F2)  Anomalous Bright Loamy Soils (F20)  MLRA 153B)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  MLRA 153B)  Piedmont Floodplain Soils (F19) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 151)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Depth (inches):  Hydric Soil Present?  Yes  No   Piedmont Floodplain Soils (F19) (MLRA 150A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Hydric Soil Present?		. , ,						•	
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks) Other (Explain in Remarks)  Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No  Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (P20) Present? Yes No  Anomalous Bright Loamy Soils (F20)  Hydric Soil Present? Yes No  Anomalous Bright Loamy Soils (F20)  Hydric Soil Present?		, ,							
Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR T, U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Dother (Explain in Remarks)  John (Explain in Remarks)									_
			. T. U)						
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Redux Depressions (F8)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F17) (MLRA 151)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No		- , ,					• •		
1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Iron-Manganese Masses (F12) (LRR O, P,T)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Poelta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No  No  No  Poelted Orchric (F11) (MLRA 151)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.							` '		
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Prediment Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Depth (inches):  Depth (inches):  Depth (inches):  Iron-Manganese Masses (F12) (LRR O, P, T)  JIndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Network (F17) (MLRA 151)  Problematic.  Network (F18) (MLRA 149A)  Nomalous Bright Loamy Soils (F20) (MLRA 149A)  Hydric Soil Present?  Yes  No  Pledmont Floodplain Soils (F20) (MLRA 149A)  No  Pledmont Floodplain Soils (F20) (MLR		. , .	J)			•	• •		
Thick Dark Surface (A12)			- (044)						Other (Explain in Normal Roy
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Umbric Surface (F13) (LRR P, T, U)  New Hording And Hordin		· ·	e (A11)			,			
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Delta Orchric (F17) (MLRA 151)  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Anomalous Bright Loamy Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No		` ,	MI DA 150	14)		•			
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes  No		, ,,		•		•	• • • • • •	,	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes ✓ No			-RR O, 3)		_	, ,	•	150P)	·
Stripped Matrix (S6)Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):									
		, ,							3C. 153D)
Restrictive Layer (If observed):         Type:            Depth (inches):         Hydric Soil Present?         Yes✓ No		` '	S T 11)			raious singin t	ourry cons (r 20	) (MEIOT 1407), 100	, 1005)
Depth (inches): Hydric Soil Present? Yes No								1	
		Type:							
Remarks:		Depth (inches):						Hydric Soil Prese	ent? Yes <u>√</u> No
	Remarks:								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ugh	_Sampling Dat	te: 9/29/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poi	int: <u>AD</u>
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: 31 27S 18E		
Landform (hillslope, terrace, etc.): N/A	4	Local relief (concave, con-			Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28,093281	Long:82.	550225		Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_ NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes	No	_ (If no, explain	ı in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		Yes/_No
Are Vegetation, Soil,			(If needed, explain	n any answers i	n Remarks)
SUMMARY OF FINDINGS - Attach sit			transects, impo	ortant featu	res, etc.
Hydrophytic Vegetation Present?	YesNo	]	-		
Hydric Soil Present?	Yes No	is the Sampled Area v	vithin a Wetland?	Yes	No
Wetland Hydrology Present?	Yes✓ No	1			
Remarks:		1			
LIVEROL OCV					
HYDROLOGY			Casandon Indical	(inimum	-ft va samuland)
Wetland Hydrology Indicators:	5 - 11 41: -4 1. A		Secondary Indicat		of two required)
Primary Indicators (minimum of one is required; o			Surface Soil	` '	2 ( (D0)
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	<u> </u>	•	ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa		
Saturation (A3)	Marl Deposits (B15) (LR	•	·Moss Trim L	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season	Water Table (0	C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rrows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation V	/isible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	ı	Shallow Aqu	uitard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	I Test (D5)	
Field Observations:			T	_	
Surface Water Present?	Yes No		_		
Water Table Present?	Yes No	Depth (inches): 0	- [.,,,		
Saturation Present?	Yes No	_Depth (inches):0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u>	_No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:			
Remarks:					
İ					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	AD
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Quercus laurifolia	5	•	FACW	Number of Dominant Species	
2.		yes	FACVV	That Are OBL, FACW, or FAC:	(A)
3.	-				
				Total Number of Dominant	(B)
4.				Species Across All Strata:	
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	) 5	= Total Cove	r	Total % Cover of: Multiply by:  OBL species x1=	_
1.				FACW species x2=	_
2.				FAC species x3=	
3.				FACU species x4=	-
4.				UPL species x5=	_
5.				Column Totals: (A)	(B)
6.	-			<del></del> :	• ` '
7.	. ——			Prevalance Index = B/A =	
		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	<del>-</del> -'			Prevalence Index is ≤3.0¹	
2.	•			Problematic Hydrophytic Vegetation <sup>1</sup> (Expl	lain)
3.				1 Tobiernatio Hydrophytio Vogotation (Exp.	airi
4.				11. 17. Annual of hands and make and hands for an	4
	• ——			Indicators of hydric soil and wetland hydrology m	ust
5.				be present, unless disturbed or problematic.	
6.	- ——			Definitions of Vegetation Strata:	
7.				4	
Herb Stratum (Plot size:)		= Total Cove		Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (	(7.6
Ludwigia peruviana	10	yes	OBL	cm) or larger in diameter at breast height (DBH).	-
Panicum repens	5	yes	FACW	Sapling- Woody plants, excluding woody vines,	
3. Bidens alba	55	yes	NL	approximately 20 ft (6m) or more in height and less t	han 3
4. Typha spp.	5	yes	OBL	in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wood	yŁ
9.				plants, except woody vines, less than approximately	3 ft (1
10.	•			m) in height.	
11.	• —			Woody vine- All woody vines, regardless of height.	
12.				1	
	25	= Total Cove	r.	1	
Woody Vine Stratum (Plot size:	)				
1.			ı		
2.				1	
3.					
4.			-	- Hydrophytic	
5.				Vegetation Present?   YesNo	
		= Total Cove	r		
Remarks: (If observed, list morph			•	<u> </u>	
Percent cover estimates based or		•	roader cor	mmunity.	

e Description: (Describe to the depth needed Matrix		confirm the absence of indic	ators.)
Matrix	Dada Cast san		
	Redox Features		
s) Color (moist) % Color (m	noist) % Type¹	Loc <sup>2</sup> Texture	Remarks
40.VD 044			black for and
10 YR 2/1			black fine sand
10 YR 6/1			gray fine sand
10 YR 5/3; 10 YR			
5/2			brown and grayish brown fine sand
10 YR 6/2			light brownish gray fine sand
: C=Concentration, D=Depletion, RM=Reduced	Matrix. CS=Covered or Coated S	Sand Grains. <sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
c Soil Indicators:			Indicators for Problematic Hydric Soils 3:
listol (A1)	Polyvalue Below Su	rface (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
listic Epidon (A2)	Thin Dark Surface (		2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Miner		Reduced Vertic (F18) (outside MLRA 150A, B)
	Loamy Gleyed Matr		Piedmont Floodplain Soils (F19) (LRR P, S, T)
lydrogen Sulfide (A4) stratified Lavers (A5)	Depleted Matrix (F3		
	Depleted Matrix (F3		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	<del></del>	• •	(MLRA 153B)
cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surfa	ace (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions	(F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F	11) (MI RA 151)	
•	<b>—</b> ·		
hick Dark Surface (A12)		isses (F12) (LRR O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F1	3) (LRR P, T, U)	hydrology must be present, unless disturbed or
andy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17)	(MLRA 151)	problematic.
andy Gleyed Matrix (S4)		8) (MLRA 150A, 150B)	
		n Soils (F19) (MLRA 149A)	
sandy Redox (S5)			4500 4500)
stripped Matrix (S6)	Anomalous Bright L	oamy Soils (F20) (MLRA 149A	, 153C, 153D)
Park Surface (S7) (LRR P, S, T, U)			
ictive Layer (If observed):			
Туре:	_		
Depth (inches):		Hydric Soil I	Present? Yes <u></u>
ırks:			
	•		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	Sampling Date: 9/29/09
Applicant/Owner: Progress Energy Florida, Inc.	· · ·	State: FL		Sampling Point: AE
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 31 27S 18E	
Landform (hillslope, terrace, etc.): N/A				Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.093144	Long:82.5	4759	Datum: WGS84
Soil Map Unit Name: Basinger fine sand				Freshwater Pond
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances	
	or Hydrology		(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	YesNo			•
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No
Wetland Hydrology Present?	YesNo			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Sacandary Indicate	rs (minimum of two required)
Primary Indicators (minimum of one is required; c	hack all that apply)		Surface Soil (	
Surface Water (A1)	Water-Stained Leaves (	Ro\	<del></del>	etated Concave Surface (B8)
High Water Table (A2)	·	D9)	Sparsery veg	
<u> </u>	Aquatic Fauna (B13)	ID III		• •
Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim Lir	, ,
Water Marks (B1)	Hydrogen Sulfide Odor (		<del></del> ·	Vater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burn	, ,
Drift Deposits (B3)	Presence of Reduced Iro			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Solls (C6)	Geomorphic I	• •
Iron Deposits (B5)	Thin Muck Surface (C7)	4>	Shallow Aquit	•
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Lest (D5)
Field Observations:	V No /	Darth (inches)		
Surface Water Present?	Yes No✓			
Water Table Present?	Yes No		Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	W
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori		incorrections \ if a validable.	Present?	Yes <u>✓ No</u>
Describe Recorded Data (stream gauge, monitori	ng weir, aenai priotos, previous	mspections), if available.		
Remarks:				

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	AE
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(A)
2.				That Are OBL, FACW, or FAC:	(~)
3.				Total Number of Dominant	(B)
4.	•			Species Across All Strata:	(D)
5.				Percent of Dominant Species 100.00	(A/D)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1. Salix spp.	5	yes	FACW	FACW species x2=	
2.				FAC species x3=	_
3.				FACU species x4=	_
4.				UPL species x5=	
5.	-			Column Totals: (A)	— <sub>(B)</sub>
6.				``_	<b>-</b> ` ′
7.				Prevalance Index = B/A =	
	5	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	<del>.    </del>			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				. Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.	· ——			robiomatio rijaroprijate vogetation (Ex	<b>P</b> ,
				Indicators of hydric soil and wetland hydrology	muet
<b>4</b> . <b>5</b> .	•			be present, unless disturbed or problematic.	iiust
6.				Definitions of Vegetation Strata:	
7.					
<u>' : </u>		= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	o o	101010000	•	approximately 20 ft (6m) or more in height and 3 in	(7.6
Ludwigia peruviana	5	yes	OBL	cm) or larger in diameter at breast height (DBH).	. (
Panicum repens	5	yes	FACW	Sapling- Woody plants, excluding woody vines,	
Panicum hemitomon	5	yes	OBL	approximately 20 ft (6m) or more in height and less	s than 3
Tripsacum dactyloides	2	no	FAC	in. (7.6 cm) DBH.	
5.	· ——		1710	Shrub- Woody plants, excluding woody vines,	
6	· ——			approximately 3 to 20 ft (1 to 6 m) in height.	
6. 7.	· — — —			1	_
8.	·			Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes wo	
9.	• ——	•		plants, except woody vines, less than approximate	
10.	· ——	<del></del>		m) in height.	,, (.
11.				Woody vine- All woody vines, regardless of height	•
12.	·			Troody vines, regardless of height	
12.	17	= Total Cove			
Moody Vino Stratum (Plot size:	١/	- Total Cove	1		
Woody Vine Stratum (Plot size:	· ——/				
1. 2.				•	
3.	· ——			ht - t	·
				11. 1	
<b>4</b> . <b>5</b> .				Hydrophytic	
J.		= Total Cove		Vegetation Present? YesNo	<del></del>
Pomarke: (If changed list mark			<u> </u>	L	
Remarks: (If observed, list morph	-			on mountains	
Percent cover estimates based or	i meandering s	survey of the b	roauer col	mmumity.	

	scription: (Describe t	o the dep	oth needed to doo			confirm the abs	ence of indicators.)			
Depth	Matrix			Redox	r Features					
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture			Remarks
0-7	10 YR 2/1							black fine sand		
7-28	10 YR 6/1						•	gray fine sand		
	10 YR 5/3; 10 YR									
28-42	5/2							brown and gray	sh brov	vn fine sand
42-80	10 YR 6/2							light brownish g	ray fine	sand
				—						
Type: C=	Concentration, D=Deple	etion, RM:	=Reduced Matrix,	CS=Cove	ered or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.		
Hydric So	il Indicators:							ndicators for Pro	blemat	ic Hydric Soils 3:
Histol						face (S8) (LRR S		1 cm Muck (at		•
	Epidon (A2)				•	59) (LRR S, T, U	_	2 cm Muck (A		
	Histic (A3)					al (F1) (LRR O)	_		٠,	(outside MLRA 150A, B)
	gen Sulfide (A4)				my Gleyed Matri		_	_	•	Soils (F19) (LRR P, S, T)
	ied Layers (A5)				leted Matrix (F3		-			amy Soils (F20)
	nic Bodies (A6) (LRR P				ox Dark Surface			(MLRA 153E		
	Mucky Mineral (A7) (LF				leted Dark Surfa	` '	=	Red Parent M	•	,
Muck	Presence (A8) (LRR L	J)		_	ox Depressions	(F8)	-			rface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	I (F10) (LRR U)		=	Other (Explain	in Ren	narks)
Deple	ted Below Dark Surface	e (A11)		Dep	leted Orchric (F	11) (MLRA 151)				
Thick	Dark Surface (A12)			Iron-	-Manganese Ma	sses (F12) (LRR	O, P,T) 3	Indiantors of budge	nhı din :	vegetation and wetland
Coast	Prairie Redox (A16) (M	/LRA 150	)A)	Umb	oric Surface (F1	3) (LRR P, T, U)				t, unless disturbed or
	Mucky Mineral (S1) (L		•	Delt	a Orchric (F17)	(MLDA 151)		problematic.	preseri	, unicas disturbed of
		.KK (), (3)		_		(MLRA 150A, <sup>2</sup>	•			
	/ Gleyed Matrix (S4) / Redox (S5)					Soils (F19) (MLI				
	ed Matrix (S6)						(MLRA 149A, 153C,	153D)		
	Surface (S7) (LRR P, S	T 11			maiodo Engrit E	July 30115 (1 20)	(1112101 1407, 1000,	.002,		
	e Laver (If observed):									
restrictiv	Type:									
	Depth (inches):						Hydric Soil Present	? Yes	1	No .
Remarks:	Bopar (monocy:						,,,u,,,, co,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
				-	,					
						•				
						•				
						•				

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Dat	e: 9/29/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Poi	nt:AF
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	31 27S 18E		
Landform (hillslope, terrace, etc.):N/A	\	Local relief (concave, conv	rex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.093459	Long: <u>-82.5</u>	46820		Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification	: Freshwater F	Pond
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstance		YesNo
			(If needed, explain	n any answers i	n Remarks)
SUMMARY OF FINDINGS - Attach si			ransects, impo	ortant featu	res, etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes✓	No
Wetland Hydrology Present?	Yes No	]			
Remarks:					
<u> </u>					
HYDROLOGY					
Wetland Hydrology Indicators:		<u> </u>	Secondary Indicat	tors (minimum o	of two required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	l Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Ve	getated Conca	ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (0	:2)
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Bu	•	,2,
Drift Deposits (B3)	Presence of Reduced Iro		<del></del>	/isible on Aerial	Imanen/(C9)
<del></del>		` '			mayery (00)
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	•	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutra	l Test (D5)	
Field Observations:	V / N	TO 00			
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:			
Remarks:					
-					
1					
•					

VEGETATION - Use scientific na	mes of plants			Sa	ampling Point:	AF
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status			
1.				Number of Dominant Species	;	/A)
2.				That Are OBL, FACW, or FAC	c: <u>2</u>	(A)
3.				Total Number of Dominant	2	(D)
4.				Species Across All Strata:	2	(B)
5.				Percent of Dominant Species	100.00	(* ID)
6.				That Are OBL, FACW, or FAC		(A/B)
7.			,	Prevalance Index workshee		
Sapling Stratum (Plot size:	)	= Total Cove	∍r	<u>Total % Cover of:</u> OBL species	Multiply by: x1=	.
Salix spp.		yes	FACW	FACW species	x2=	_
2.	- — —	<u>yes</u>	TACTT	FAC species	x3=	_
3.		<del></del>		FACU species	x3	!
4.				UPL species	x4 x5=	<b>-</b> j
5.				Column Totals:		<sub>/B</sub> \
6.				1 Column Totals.	(A)	_ <sup>(B)</sup>
7.				- Branches Indox = B/A		
<del>/</del>		= Total Cove		Prevalance Index = B/A		
Objects Charles (Diet eige)	, 5	= Total Cove	;r	Hydrophytic Vegetation Ind		
Shrub Stratum (Plot size:	<del></del> )			✓ Dominance Test is 50°		ļ
1.				Prevalence Index is ≤3		
2.		<del></del>		Problematic Hydrophy	tic Vegetation' (Exp	olain)
3.				1		
4.				Indicators of hydric soil and v		nust
5.				be present, unless disturbed		
6.				Definitions of Vegetation St	rata:	_
7.				]		
Herb Stratum (Plot size:)	0	= Total Cove	er	Tree- Woody plants, excluding approximately 20 ft (6m) or more	re in height and 3 in.	(7.6
1. Typha spp.	50	yes	OBL	cm) or larger in diameter at bre	ast height (DBH).	
Cajanus cajan	20	yes	NL	Sapling- Woody plants, exclud	ing woody vines,	
3. Panicum repens	5	no	FACW	approximately 20 ft (6m) or mo	re in height and less	than 3
4.				in. (7.6 cm) DBH.		
5.	_			Shrub- Woody plants, excludin	g woody vines,	
6.				approximately 3 to 20 ft (1 to 6	•	
7.			-	Herb- All herbaceous (non-woo	ndv)nlants including	
8.				herbaceous vines, regardless of		odv
8. 9.				plants, except woody vines, les		
10.	-			m) in height.	., -	
11.				Woody vine- All woody vines, i	regardless of height.	
12.		<del></del>		1	ogaraioss si	
12.	75	= Total Cove		1		
Woody Vine Stratum (Plot size:	)	- Total Cove	Л			
1.						
2.						
3.				]		
4.				Hydrophytic		
5.				• • • • • • • • • • • • • • • • • • • •	es <u> </u>	
	0	= Total Cove	er :	1		
Remarks: (If observed, list morph	nological adapta	ations below).				
Percent cover estimates based of	-		roader cor	mmunity		

	: Hillsborough- Basing	jer							Sar	mpling Point: AF
SOIL Dee	anintian. (Danasiba	10 1b0 dan	th mandad to don		- indicator or	andien the sh	anno of indicators )		Sai	nping Font. Ar
		to the dep	tn needed to doc			confirm the ab	sence of indicators.)			
Depth	Matrix		0.1.7.10		Features	12	T. 4		D	
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture		Rema	irks
0-7	40 VD 0/4							block fine cond		
	10 YR 2/1						<del></del>	black fine sand		
7-28	10 YR 6/1							gray fine sand		
	10 YR 5/3; 10 YR									
28-42	5/2							brown and gray		sand
42-80	10 YR 6/2							light brownish of	ray fine sand	
	**************************************									
Type: C=C	oncentration, D=Depl	etion. RM=	Reduced Matrix.	CS=Cove	ered or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix		
	I Indicators:							ndicators for Pr		dric Soils 3:
Histol (				Poly	value Below Sun	face (S8) (LRR		1 cm Muck (a	•	
	Epidon (A2)				Dark Surface (S			2 cm Muck (A		
_	Histic (A3)				my Mucky Minera					side MLRA 150A, B)
_	ien Sulfide (A4)				my Gleved Matrix		-			
	ed Layers (A5)				leted Matrix (F3)		-			F19) (LRR P, S, T)
	c Bodies (A6) (LRR F	T 111			ox Dark Surface		-		right Loamy S	OIIS (F2U)
								(MLRA 153	•	
5 cm M	/lucky Mineral (A7) (L	RR P,T,U)		Dep	leted Dark Surfa	ice (F7)	-	Red Parent N	laterial (TF2)	
_✓_Muck I	Presence (A8) (LRR I	U)		Red	lox Depressions	(F8)	_	Very Shallow	Dark Surface	(TF12) (LRR T, U)
	fluck (A9) (LRR P,T)			Man	(F10) (LRR U)			Other (Explai	n in Remarks)	
							-		,,	
Deplete	ed Below Dark Surfac	æ (A11)			leted Orchric (F1					
Thick [	Dark Surface (A12)			lron-	-Manganese Mas	sses (F12) <b>(LRf</b>	RO, P,T) 3	Indicators of byde	onhytic veget:	ation and wetland
Coast	Prairie Redox (A16) (	MI RA 150	Δ)	Umb	bric Surface (F13	3) (LRR P. T. U)		nydrology must be		
			^,		•			problematic.	; present, une	ss disturbed or
_	Mucky Mineral (S1) (I	LRR O, S)			a Orchric (F17) (		•	problemanc.		
Sandy	Gleyed Matrix (S4)				luced Vertic (F18					
Sandy	Redox (S5)			Pied	lmont Floodplain	Soils (F19) (Mi	_RA 149A)			
Strippe	ed Matrix (S6)			Ano	malous Bright Lo	oamy Soils (F20	) (MLRA 149A, 153C,	, 153D)		
Dark S	Surface (S7) (LRR P.	S T III								
	Layer (If observed)					<del></del>	Υ			
	• •	•								
	Type:		<del></del>				U. data Call Danas and	.o V	✓ No	
	Depth (inches):						Hydric Soil Present	t? Yes	No_	<del></del> -
Remarks:										
ŀ										
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l										
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]										

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	_Sampling Date:	9/29/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point	:AG
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 31 27S 18E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	s	lope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.093792	Long: <u>-82.5</u>	45070		atum: WGS84
Soil Map Unit Name: Myakka fine sand			_NWI classification:	NL	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain ir	n Remarks)
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances		esNo
	or Hydrology	naturally problematic?	(If needed, explain	any answers in I	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant feature	s, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes <u></u> ✓ N	lo
Wetland Hydrology Present?	Yes No				
Remarks:					
LIVERED COV					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate		two required)
Primary Indicators (minimum of one is required; c			Surface Soil		
Surface Water (A1)	Water-Stained Leaves (E	39)		getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	, ,	
✓ Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim Li	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (C2)	)
Sediment Deposits (B2)	Oxidized Rhizospheres of		Crayfish Burr		
Drift Deposits (B3)	Presence of Reduced Iro	•		isible on Aerial In	nagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)		Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	1)	Shallow Aqui		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	KS)	FAC Neutral	Test (D5)	
Field Observations:	Voc. / N-	D45 (35) 20 70			
Surface Water Present?	Yes No				
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na well periol photos previous	inenactione) if available:	Present?	Yes <u>√</u> N	o
Describe Recorded Data (stream gauge, monitori	ng weir, aenai photos, previous	inspections), if available.			
Remarks:					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	AG
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
	30101	Spc0.00:	Julio	Number of Dominant Species	
<u>1.</u> 2.			-	That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
4.			-	Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				Percent of Dominant Species That Are OBL, FACW, or FAC:  100.00	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	·r	Total % Cover of: Multiply by	•
Sapling Stratum (Plot size:	<u></u> )	- 10tal Cove	:1	OBL speciesx1=	<u>.                                    </u>
1.				FACW speciesx2=	
2.				FAC speciesx3=	
3.				FACU species x4=	
4.				UPL speciesx5=	
5.				Column Totals: (A)	(B)
6.					
7.				Prevalance Index = B/A =	
	0	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.	-			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (E	xplain)
3.	·			<u> </u>	. ,
4.				Indicators of hydric soil and wetland hydrology	/ must
5.				be present, unless disturbed or problematic.	, <b></b>
6.				Definitions of Vegetation Strata:	
7.	· <del></del>			1	
	0	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3	ın. (7.6
1. Typha spp.	15	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Ludwigia octovalvis	10	yes	OBL	Sapling- Woody plants, excluding woody vines,	
Andropogon glomeratus	5	no	FACW	approximately 20 ft (6m) or more in height and le	ss than 3
4.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, includir	
8.				herbaceous vines, regardless of size. Includes w	
9.				plants, except woody vines, less than approximat	ely 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of heig	ht.
12.				]	
	30	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? YesNo_	<u>÷</u>
	0	= Total Cove	er	1	
Remarks: (If observed, list morph	ological adapta	ations below).		•	
Percent cover estimates based or			roader co	mmunity.	

Cou	nty/soil: Hillsborough- Myakka		
SOII	L	Sampling Point:	AC

	scription: (Describe	to the dep	th needed to doc			confirm the abs	sence of indicators.	)
Depth	Matrix		0 1 ( ) 11		x Features		<b>-</b> .	
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc²	Texture	Remarks
0-5	10 YR 3/1							very dark gray fine sand
5-20	10 YR 6/1			—				gray fine sand
20-25	N 2/0							black fine sand
25-30	5 YR 3/3							dark reddish brown fine sand
			<del></del>					
								· ·
<sup>1</sup> Type: C=0	Concentration, D=Depl	etion, RM=	Reduced Matrix, C	S=Cove	ered or Coated S	and Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol						rface (S8) (LRR		1 cm Muck (a9) (LRR O)
_	Epidon (A2)			Thin	Dark Surface (	89) ( <b>LRR S, T, U</b>	J)	2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				my Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				leted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	', I, U)			ox Dark Surface			(MLRA 153B)
5 cm !	Mucky Mineral (A7) (LI	RR P,T,U)		Dep	leted Dark Surfa	ice (F7)		Red Parent Material (TF2)
Muck	Presence (A8) (LRR I	U)		Red	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm !	Muck (A9) (LRR P,T)			Mar	I (F10) (LRR U)			Other (Explain in Remarks)
_	ed Below Dark Surfac	o (A11)		Den	leted Orchric (F	11) (MLRA 151)		
.— -	Dark Surface (A12)	C (A11)	•		•	sses (F12) (LRR	O D T)	
_					-		· ·	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	MLRA 150	A) .	Umi	onc Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (I	LRR O, S)		Delt	a Orchric (F17)	(MLRA 151)		problematic.
Sandy	Gleyed Matrix (S4)			Red	uced Vertic (F18	B) (MLRA 150A,	150B)	
Sandy	Redox (S5)			Pied	lmont Floodplair	Soils (F19) (ML	.RA 149A)	
Strippe	ed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20)	(MLRA 149A, 153C	, 153D)
	Surface (S7) (LRR P, \$							
4	E Layer (If observed)	:						
	Type:							
<del></del>	Depth (inches):						Hydric Soil Presen	ıt? Yes <u>√</u> No
Remarks:	•							
							•	
1								
1								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date	e: 9/30/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: AH				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: 31 27S 18E				
Landform (hillslope, terrace, etc.):N/A	\	Local relief (concave, conv	ex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.095722	2 Long: <u>-82.5</u>	42669		Datum: WGS84	
Soil Map Unit Name: Smyrna fine sand			_NWI classification	: <u>NL</u>		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo	
	or Hydrology		(If needed, explain	n any answers ir	Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featur	es, etc.	
Hydrophytic Vegetation Present?	Yes/No					
Hydric Soil Present?	Yes/No	Is the Sampled Area w	ithin a Wetland?	Yes	No	
Wetland Hydrology Present?	Yes/ No	]				
Remarks:		•				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum o	f two required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)Sparsely Vegetated Co			e Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)Dry-Season Water Table (C2)			2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)				
Drift Deposits (B3)	Presence of Reduced In	ron (C4)Saturation Visible on Aerial Imagery			Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	7)Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	_ Depth (inches): 72-96	<u> </u>			
Water Table Present?	Yes No					
Saturation Present?	Yes✓ No	Depth (inches): 0	Wetland Hydrology			
(includes capillary fringe)		- , , , ,	Present?	Yes <u></u> ✓	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	1			
Remarks:						
internative.						
	•					

VEGETATION - Use scientific na				Sampling Point:	AH
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		•		Number of Dominant Species	(4)
2.			-	That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(0)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	(1 /D)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	_
1. Salix spp.	3	yes	FACW	FACW species x2=	_
2. Sapium sebiferum	2	yes	FAC	FAC speciesx3=	_
3.				FACU species x4=	_
4.				UPL speciesx5=	_
5.				Column Totals: (A)	(B)
6.				1 — — —	_
7.				Prevalance Index = B/A =	
	5	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
Myrica cerifera	33	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.					
4.				$oxedsymbol{f l}^1$ Indicators of hydric soil and wetland hydrology n	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
	3	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in.	(7.6
1. Typha spp.	25	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Ludwigia octovalvis	7	no	OBL	Sapling- Woody plants, excluding woody vines,	
3. Alternanthera philoxeroides	5	no	OBL	approximately 20 ft (6m) or more in height and less	than 3
Pontederia cordata	5	no	OBL	in. (7.6 cm) DBH.	
Polygonum punctatum	3	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Ludwigia peruviana	2	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	•
9.				plants, except woody vines, less than approximately	y 3 ft (1
10.				m) in height.	
11.		<del></del>		Woody vine- All woody vines, regardless of height.	
12.					
	47	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
5.	·			Vegetation Present? Yes <u>✓ No</u> No	<u>.</u>
	0	= Total Cove	r		
Remarks: (If observed, list morph	iological adapta	itions below).			

Percent cover estimates based on meandering survey of the broader community.

IL					Sampling Point:	
ofile Description: (Describe to the dep	th needed to docu		confirm the abse	nce of indicators.)		
pth Matrix		Redox Features				
ches) Color (moist) %	Color (moist)	% Type	Loc²	Texture	Remarks	
10 YR 3/1					very dark gray fine sand	
2 10 YR 6/1					gray fine sand	
15 7.5 YR 3/2					dark brown fine sand	
20 10 YR 3/2					very dark grayish brown fine sand	
20 10 11( 0)2					tory dark grayion provincial conta	
		<del></del>				
pe: C=Concentration, D=Depletion, RM:	=Reduced Matrix, C	S=Covered or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.	
dric Soil Indicators:				· 1	ndicators for Problematic Hydric Soils 3:	
_Histol (A1)	_	Polyvalue Below Su	face (S8) (LRR S	T, U) _	1 cm Muck (a9) (LRR O)	
_Histic Epidon (A2)	_	Thin Dark Surface (	9) (LRR S, T, U)	_	2 cm Muck (A10) (LRR S)	
Black Histic (A3)	_	Loamy Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)	
Hydrogen Sulfide (A4)	_	Loamy Gleved Matri		_	Piedmont Floodplain Soils (F19) (LRR P, S, T)	
Stratified Layers (A5)	_	Depleted Matrix (F3	) ` <i>´</i>	-	Anomalous Bright Loamy Soils (F20)	
Organic Bodies (A6) (LRR P, T, U)	_	Redox Dark Surface		-	(MLRA 153B)	
	<del>-</del>	Depleted Dark Surfa			Red Parent Material (TF2)	
_5 cm Mucky Mineral (A7) (LRR P,T,U)		Redox Depressions		-	Very Shallow Dark Surface (TF12) (LRR T, U)	
_Muck Presence (A8) (LRR U)	-		(1 0)	-	<del></del>	
_1 cm Muck (A9) (LRR P,T)	=	Marl (F10) (LRR U)		-	Other (Explain in Remarks)	
Depleted Below Dark Surface (A11)	_	Depleted Orchric (F	11) (MLRA 151)			
Thick Dark Surface (A12)	_	Iron-Manganese Ma	sses (F12) (LRR (	), P,T) 3	hadinatan of badasah tip appetation and antique	
Coast Prairie Redox (A16) (MLRA 150	٠٨١	Umbric Surface (F1		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		
	•					
_Sandy Mucky Mineral (S1) (LRR O, S)	-	Delta Orchric (F17)			Dioblematic.	
_Sandy Gleyed Matrix (S4)	-	Reduced Vertic (F18		•		
_Sandy Redox (S5)	_	Piedmont Floodplair				
_Stripped Matrix (S6)	_	Anomalous Bright L	oamy Soils (F20) (	MLRA 149A, 153C,	, 153D)	
_Dark Surface (S7) (LRR P, S, T, U)						
strictive Layer (If observed):				•		
Type:						
Depth (inches):			[)	lydric Soil Present	t? Yes <u>√</u> No	
marks:						

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	Sampling Date: 9/30/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: Al				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: 31 27S 18E				
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.096189	Long: <u>-82.5</u>	41993	Datum: WGS84		
Soil Map Unit Name: Malabar fine sand			_NWI classification:	NL		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	. No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology		Are circumstances			
	or Hydrology		(If needed, explain	any answers in Remarks)		
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, etc.		
Hydrophytic Vegetation Present?	YesNo		•	· · · · · · · · · · · · · · · · · · ·		
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	YesNo		
Wetland Hydrology Present?	YesNo	]				
Remarks:	· · · · · · · · · · · · · · · · · · ·					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)		
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil (	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	etated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season V	Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)				
Drift Deposits (B3)	Presence of Reduced In	• , ,		sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic I			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral			
Field Observations:		,	1	. 44. (44)		
Surface Water Present?	Yes ✓ No	Depth (inches): 24-36				
Water Table Present?	Yes No	Depth (inches): 0	1			
Saturation Present?	Yes No	Depth (inches): 0	Wetland			
	140	Deptil (iliches)	Hydrology Present?	Yes ✓ No		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ng well aerial photos previous	inspections) if available:	Fresentr	Yes No		
Describe Nessiaca Data (stream gauge, memor)	ng wen, denai priotos, previous	mopeonono, n'avanable.				
Remarks:						
·						

VEGETATION - Use scientific nar	mes of plants			Sampling Po	oint:	<u> </u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	2	(4)
2.	• • • • • • • • • • • • • • • • • • • •			That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.	·			Total Number of Dominant	_	
4.				Species Across All Strata:	<u>3</u>	(B)
5.				'		
	·			Percent of Dominant Species	00.00	(A/B)
6.				That Are OBL, FACW, or FAC:		
7.		- Total Cause		Prevalance Index worksheet:	:	
Sapling Stratum (Plot size:	)	= Total Cove	er .	Total % Cover of: Multi OBL species x1=	iply by:	
Cornus foemina	·/ 1	yes	FACW	FACW species x2=		-
2.	·		171011	FAC species x3=		-
3.						-
	· <del></del>					-
4.				UPL species x5=		- ,_,
5.				Column Totals:(A)		_(B)
6.						
7.				Prevalance Index = B/A =		
	1	= Total Cove	er	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Vegetati	on <sup>1</sup> (Expl	lain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and wetland hyd	irology m	ust
5.				be present, unless disturbed or problema		
6.				Definitions of Vegetation Strata:		
7.						
	0	= Total Cove	er	Tree- Woody plants, excluding woody vines	s,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height	and 3 in. (	(7.6
1. Ludwigia peruviana	35	yes	OBL	cm) or larger in diameter at breast height ([	DBH).	
Blechnum serrulatum	20	yes	FACW	Sapling- Woody plants, excluding woody v	ines	
3. Thelypteris spp.	10	no	FACW	approximately 20 ft (6m) or more in height		han 3
Bidens alba	5	no	NL	in. (7.6 cm) DBH.		
5. Panicum hemitomon	2	no	OBL	Shrub- Woody plants, excluding woody vin	nes	
6.				approximately 3 to 20 ft (1 to 6 m) in height		
7.				Herb- All herbaceous (non-woody)plants, in		
8.				herbaceous vines, regardless of size. Inclu		dv
9.				plants, except woody vines, less than appro		
10.				m) in height.		• ( .
11.				Woody vine- All woody vines, regardless o	of hoight	
				Woody ville- All woody villes, regardless of	n neignt.	
12.				,		
l	72	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.	•					
2.						
3.						
4.				Hydrophytic		
5.	- <del> </del>			Vegetation Present? Yes <u>✓</u>	No	<u>.</u>
	0	= Total Cove	er	1		
Remarks: (If observed, list morph	ological adapta	itions below).				
Percent cover estimates based or	-	· ·	roader cor	mmunity.		

SOIL								Sampling Point:A		
Profile De	escription: (Describe Matrix	to the dep	th needed to do		ne indicator or Features	confirm the ab	sence of indicators.			
(inches)	Color (moist)	<del>%</del>	Color (moist)	%	Type	Loc²	Texture	Remarks		
(IIICHES)	Color (moist)		Color (moist)		Турс		Texture	Remarks		
0-4	10 YR 4/1							dark gray fine sand		
4-12	10 YR 6/2							light grayish brown fine sand		
12-30	10 YR 6/6							brownish yellow fine sand		
30-50	10 YR 6/3	- —						pale brown fine sand		
	***************************************	. —								
								-		
¹Type: C=	Concentration, D=Dep	letion, RM	Reduced Matrix,	CS=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M≃Matrix.		
-	oil Indicators:							Indicators for Problematic Hydric Soils 3:		
Histol						rface (S8) ( <b>LRR</b>		1 cm Muck (a9) (LRR O)		
	Epidon (A2)					S9) <b>(LRR S, T, I</b>		2 cm Muck (A10) (LRR S)		
	Histic (A3)					al (F1) (LRR O)	,	Reduced Vertic (F18) (outside MLRA 150A, B)		
	ogen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	fied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)		
Orgai	nic Bodies (A6) (LRR I	P, 1, U)			ox Dark Surface	• •		(MLRA 153B)		
5 cm	Mucky Mineral (A7) (L	RR P,T,U)		Depl	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)		
<u></u> ✓_Muck	Presence (A8) (LRR	U)		Red	ox Depressions	(F8)	,	Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm	Muck (A9) (LRR P,T)			Mart	(F10) (LRR U)			Other (Explain in Remarks)		
— Donle	eted Below Dark Surface	o (A11)		Denl	leted Orchric (F	11) (MLRA 151)				
	Dark Surface (A12)	æ (ATI)			•	sses (F12) (LRI	O D T)			
					=			Indicators of hydrophytic vegetation and wetland		
Coas	t Prairie Redox (A16) (	MLRA 150	A)	Umb	onc Surface (F1	3) (LRR P, T, U		hydrology must be present, unless disturbed or		
Sand	y Mucky Mineral (S1) (	LRR O, S)		Delta	a Orchric (F17)	(MLRA 151)	I	problematic.		
Sand	y Gleyed Matrix (S4)			Redu	uced Vertic (F18	B) (MLRA 150A,	150B)			
Sand	y Redox (S5)			Pied	mont Floodplair	Soils (F19) (MI	_RA 149A)			
Stripp	ed Matrix (S6)			Anor	malous Bright L	oamy Soils (F20	) (MLRA 149A, 153C	, 153D)		
Dark	Surface (S7) (LRR P,	S, T, U)								
	e Layer (If observed)						T T T T T T T T T T T T T T T T T T T			
	Type:									
	Depth (inches):						Hydric Soil Presen	t? Yes✓_ No		
Remarks:										
							•			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date: 9/30/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: AJ				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 31 27S 18E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.096517	7 Long: -82.5	41484	Datum: WGS84		
Soil Map Unit Name: Malabar fine sand		and an option to the state of t	_NWI classification	: Freshwater Pond		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Yes ✓ No		
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ing point locations, t	ransects, impo	ortant features, etc.		
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	YesNo		
Wetland Hydrology Present?	Yes No					
LIVEROLOGY						
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two required)		
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil			
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	<del></del>	getated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	()	Drainage Pa	• , ,		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L			
Water Marks (B1)	Hydrogen Sulfide Odor	· ·	<del></del>	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	` ,		
Drift Deposits (B3)	Presence of Reduced In		-	isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction i			Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	` '	Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema		FAC Neutral			
Field Observations:			1			
Surface Water Present?	Yes No	Depth (inches): 72-96				
Water Table Present?	YesNo					
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)			Present?	Yes ✓No		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:				
Remarks:						
i						
	•					
	, · ·					
	•					
				•		

VEGETATION - Use scientific na	mes of plants			Sampling Point:	AJ
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.	· ——			Total Number of Dominant	
4.	· ———	·		Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.	. ——			That Are OBL, FACW, or FAC:	(A/B)
7.		-		Prevalance Index worksheet:	
••		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	- 10tai 00Vt	-1	OBL species x1=	
Schinus terebinthifolius		yes	FAC	FACW species x2=	-
2. Salix spp.	3	yes	FACW	FAC species x3=	_
3.	. — —			FACU species x4=	
4.	· ——			UPL species x5=	-
5.				Column Totals: (A)	<sub>(B)</sub>
6.					-\' <sup>'</sup>
7.	· <del></del>			Prevalance Index = B/A =	
	8	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	- 10101 0010	<b>-1</b>	✓ Dominance Test is 50%	
	/ _		EAC	Prevalence Index is ≤3.0¹	
	5	yes	FAC	<del></del>	ادعنماء
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.	. ———			l <sub>1</sub>	
4.				Indicators of hydric soil and wetland hydrology n	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
	5	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) or more in height and 3 in.	(7.6
Ludwigia peruviana	5	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Blechnum serrulatum	5	yes	FACW	Sapling- Woody plants, excluding woody vines,	
<ol><li>Thelypteris spp.</li></ol>	2	no	FACW	approximately 20 ft (6m) or more in height and less	than 3
4. Typha spp.	2	no	OBL	in. (7.6 cm) DBH.	i
5. Alternanthera philoxeroides	1	no	OBL	Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	
9.				plants, except woody vines, less than approximately	/ 3 ft (1
10.				m) in height.	ļ
11.				Woody vine- All woody vines, regardless of height.	
12.					
	15	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1. Rubus spp.	3	yes	FACU		
2.					
3.					
4.				Hydrophytic	
5.	. ———			Vegetation Present? Yes <u>√</u> No	
·	3	= Total Cove			
Remarks: (If observed, list morph	ological adapta				
Percent cover estimates based or			roader cor	mmunity.	

Color (moist) %   Color (moist) %   Type   Loc'   Texture   Remarks	ile Description: (Describe to the depth ne			indicators.)
10 YR 4/1				
10 YR 6/2   light grayish brown fine sand   brownish yellow fine sand   brownish yellow fine sand   brownish yellow fine sand   pale brown fine sand   pale br	nes) Color (moist) % Col	or (moist) % Typ	e <sup>t</sup> Loc <sup>2</sup> Te:	exture Remarks
10 YR 6/2   light grayish brown fine sand   brownish yellow fine sand   brownish yellow fine sand   brownish yellow fine sand   pale brown fine sand   pale br	10 YR 4/1			dark gray fine sand
pale brown fine sand    Second Concentration   Description	10 YR 6/2			light grayish brown fine sand
pale brown fine sand    Second Concentration   Description				brownish yellow fine sand
e: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ic Soil Indicators:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 4:  Indicators for Problematic Hydric Soils 6:  Indicators for Problematic Hydric Soil Present?  Indicators for Problematic Hydric Soils 6				
Indicators: Histol (A1) Histol Epidon (A2) Histol (A3) Histol (A3) Histol (A3) Histol (A3) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Reduced Vertic (F18) (outside MLRA 150A, I Anomalous Bright Loamy Soils (F20) Muck Presence (A8) (LRR P, T, U) Pepleted Dark Surface (F6) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Histol (A3) Depleted Orchric (F11) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Mucky Mineral (S1) (LRR 0, S) Dark Surface (F7) Redox Dark Surface (F10) Hydroc (F11) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Frictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Indicators for Problematic Hydric Soils 3:  1 cm Muck (A9) (LRR S, T, U) 1 cm Muck (A9) (LRR S, T, U)  Reduced Vertic (F18) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR 0, S) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Frictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  In milcators for Problematic Hydric Soils 3:  1 cm Muck (A9) (LRR S, T, U)  Reduced Vertic (F18) (MLRA 149A, 153C, 153D)  In milcators of Problematic Hydric Soils (F20) (MLRA 149A, 153C, 153D)				pare area.
Indicators: Histol (A1) Histol Epidon (A2) Histol (A3) Histol (A3) Histol (A3) Histol (A3) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Histol (A4) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Reduced Vertic (F18) (outside MLRA 150A, I Anomalous Bright Loamy Soils (F20) Muck Presence (A8) (LRR P, T, U) Pepleted Dark Surface (F6) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Histol (A3) Depleted Orchric (F11) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Mucky Mineral (S1) (LRR 0, S) Dark Surface (F7) Redox Dark Surface (F10) Hydroc (F11) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Frictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Indicators for Problematic Hydric Soils 3:  1 cm Muck (A9) (LRR S, T, U) 1 cm Muck (A9) (LRR S, T, U)  Reduced Vertic (F18) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR 0, S) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Frictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  In milcators for Problematic Hydric Soils 3:  1 cm Muck (A9) (LRR S, T, U)  Reduced Vertic (F18) (MLRA 149A, 153C, 153D)  In milcators of Problematic Hydric Soils (F20) (MLRA 149A, 153C, 153D)				
Histol (A1)	e: C=Concentration, D=Depletion, RM=Redu	ced Matrix, CS=Covered or Co	pated Sand Grains. <sup>2</sup> Location	on: PL=Pore Lining, M=Matrix.
Histic Epidon (A2) Black Histic (A3)	ric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Elack Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Crganic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  Muck Presence (A8) (LRR P, T)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  rictive Layer (If observed):  Type:  Depth (inches):  Depteted Matrix (S4)  Loamy Mucky Mineral (F1) (LRR O, S)  Reduced Vertic (F18) (outside MLRA 150A, 1  Piedmont Floodplain Soils (F19) (LRR P, S, T, V)  Piedmont Floodplain Soils (F19) (LRR P, S, T, U)  wind (F10) (LRR P, S, T, U)  Piedmont Floodplain Soils (F10)  Matrix (F2)  Anomalous Bright Loamy Soils (F20)  Mannalous Bright Loamy Soils (F20)  Mucky Mineral (A1)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Umbric Surface (F13) (LRR O, P,T)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  **Tope:  Depth (inches):  Hydric Soil Present? Yes ✓ No  **No	Histol (A1)	Polyvalue Bel	ow Surface (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F19) (LRR P, S, T, Mardifed Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  For Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (AB) (LRR U)  1 cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (MLRA 150A)  Depleted Orchric (F19) (MLRA 151)  Priedmont Floodplain Soils (F19) (LRR P, S, T, U)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A)  Derictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	Histic Epidon (A2)	Thin Dark Sur	face (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR \$)
Stratified Layers (À5)  Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Redox Dark Surface (F7)  Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Delta Orchric (F18) (MLRA 151)  Delta Orchric (F18) (MLRA 151)  Delta Orchric (F19) (MLRA 151)  Delta Orchric (F19) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  **Totrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	Black Histic (A3)	Loamy Mucky	Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B
Stratified Layers (À5)  Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Redox Dark Surface (F7)  Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Delta Orchric (F18) (MLRA 151)  Delta Orchric (F18) (MLRA 151)  Delta Orchric (F19) (MLRA 151)  Delta Orchric (F19) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  **Totrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	Hydrogen Sulfide (A4)	Loamy Gleve	d Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P. S. T)
Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  Red Parent Material (TF2)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Lery Shallow Dark Surface (TF12) (LRR T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (A16)  Sandy Redox (A16)  Delta Orchric (F17) (MLRA 151)  Predmont Floodplain Soils (F19) (MLRA 149A)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, T, U)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Red Parent Material (TF2)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Depleted Dark Surface (F11) (MLRA 151)  Tother (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Type:  Depth (inches):  Hydric Soil Present?  Yes  No				
Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  I cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 0, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S7) (LRR P, S, T, U)  Trictive Layer (If observed):  Type:  Depth (inches):  Depleted Dark Surface (F7)  Redox Depressions (F8)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Marl (F10) (LRR U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  I cm Mucky (F11) (MLRA 151)  I ron-Manganese Masses (F12) (LRR O, P,T)  J ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F13) (MLRA 151)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Type:  Depth (inches):  Hydric Soil Present?  Yes  No				
Muck Presence (AB) (LRR U)  Redox Depressions (F8)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 0)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  rictive Layer (If observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F13) (MLRA 151)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No		_	' '	
Marl (F10) (LRR U)Other (Explain in Remarks)  Depleted Below Dark Surface (A11)Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)Iron-Manganese Masses (F12) (LRR O, P,T)3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17) (MLRA 151)problematic.  Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  **Type:			• •	
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Dark Surface (S7) (LRR P, S, T, U)  Type:  Depth (inches):  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Pirictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No	• ' ' '		` '	
Trick Dark Surface (A12)	, ,, , ,		•	Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)  — Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbed or problematic.  — Delta Orchric (F17) (MLRA 151) problematic.  — Reduced Vertic (F18) (MLRA 150A) (MLRA 150B)  — Reduced Vertic (F18) (MLRA 150A), 150B)  — Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6) — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  **rictive Layer (If observed):  — Type: — Depth (inches): — Hydric Soil Present? Yes _ ✓ No			, , ,	
Coast Prairie Redox (A16) (MLRA 150A)  — Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Enduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (F13) (LRR P, S, T, U)  **Type:  Depth (inches):  Hydric Soil Present?  Yes No	Thick Dark Surface (A12)	iron-Mangane	ese Masses (F12) (LRR O, P,T)	3Indicators of hydrophytic vagatation and watland
Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Siripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Irrictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present?  Yes  No  Reduced Vertic (F18) (MLRA 150A, 150B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No	Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surfa	ce (F13) (LRR P, T, U)	
Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Siripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Irrictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present?  Yes  No  Reduced Vertic (F18) (MLRA 150A, 150B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No	Sandy Musicy Minoral (S1) (LDD O. S)	Delta Orchric	(F17) (MLRA 151)	problematic.
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  trictive Layer (If observed):  Type: Depth (inches): Hydric Soil Present? Yes✓ No		<del></del>		·
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  trictive Layer (If observed):  Type: Depth (inches): Hydric Soil Present? Yes✓ No				•
Dark Surface (S7) (LRR P, S, T, U)         trictive Layer (If observed):         Type:				
rictive Layer (If observed):  Type:  Depth (inches): Hydric Soil Present? Yes _✓ No	Stripped Matrix (S6)	Anomalous B	nght Loamy Soils (F20) (MLRA 1	149A, 153C, 153D)
Type:	Dark Surface (S7) (LRR P, S, T, U)			
Depth (inches): Hydric Soil Present? Yes  No	trictive Layer (If observed):		j	
	Туре:			
arks:	Depth (inches):		Hydric S	Soil Present? Yes <u>√</u> No
	narks:			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Date:	9/30/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	·	Sampling Point:	AK
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: <u>31 27S 18E</u>		
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con	vex, none): none	Slop	oe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.098117	Long:82.5	539836	Datu	um: <u>WGS84</u>
Soil Map Unit Name: Water				Freshwater Pond	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in R	emarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		✓_No
	or Hydrology	naturally problematic?	(If needed, explain	any answers in Re	marks)
SUMMARY OF FINDINGS - Attach sit			transects, impo	rtant features,	etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Yes/No	is the Sampled Area v	vithin a Wetland?	Yes/No_	
Wetland Hydrology Present?	Yes✓No				
Remarks:	· · · · · · · · · · · · · · · · · · ·	•			
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two	required)
Primary Indicators (minimum of one is required; of	shock all that apply)		Surface Soil		<u>required)</u>
✓ Surface Water (A1)	Water-Stained Leaves (	Ro)		getated Concave Su	uface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	БЭ)	Oparsery ve		mace (Bo)
	Marl Deposits (B15) (LR	P (I)	Moss Trim Li		
✓ Saturation (A3)  Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (C2)	
` ′	Oxidized Rhizospheres		Crayfish Buri	. ,	
Sediment Deposits (B2)	Presence of Reduced Ire			isible on Aerial Imag	renu (CQ)
Drift Deposits (B3)	Recent Iron Reduction in		Geomorphic		gery (CS)
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqui	, ,	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral		
Field Observations:	Other (Explain in Nema)	KO <sub>j</sub>	1 AO IVERIIGI	rest (Bo)	
Surface Water Present?	Yes No	Denth (inches): 72-96			
Water Table Present?	Yes_ ✓ No		7		
Saturation Present?	Yes No		Wetland		
	140	Deptit (menes)o	Hydrology Present?	Yes <u>✓</u> No	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ing well serial photos previous	inenections) if available:	Fresents	res <u>v</u> No	
pessibe resorded bala (stream gauge, monitor	ing well, dental priotos, previous	mopeonono), n avaliable.			
Remarks:					
ivernaixs.					
			•		

VEGETATION - Use scientific na	mes of plants			Samplir	ng Point:	AK
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	7	(4)
2.				That Are OBL, FACW, or FAC:	<u>7</u>	(A)
3.				Total Number of Dominant	7	(0)
4.				Species Across All Strata:	7	(B)
5.			-	Percent of Dominant Species	400.00	(A (D)
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.	·			Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1		
Sapium sebiferum	. 2	yes	FAC	FACW species x2	=	_
2.	·			FAC species x3	=	_
3.				FACU species x4	=	_
4.	·			UPL species x5	=	_
5.	• ———			Column Totals: (A)	)	– (B)
6.					·	_ `-'
7.	. ———			Prevalance Index = B/A =		
		= Total Cove		Hydrophytic Vegetation Indicator	rs:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Myrica cerifera	<del>.</del>	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>		
2.	·	<u></u>	1710	Problematic Hydrophytic Ve	egetation <sup>1</sup> (Exc	ılain)
3.				1 Toblematio Tryarophytic ve	getation (Exp	,iuiii,
4.	·			Indicators of hydric soil and wetlar	ad hydrology n	nuct
5.		<del></del>		be present, unless disturbed or pro		iust
6.	. ———			Definitions of Vegetation Strata:		
7.	· —		-	Tomasons or regulation official.		
		= Total Cove		Tree- Woody plants, excluding wood	v vinos	
Herb Stratum (Plot size:)	_	- 101010010	••	approximately 20 ft (6m) or more in h		(7.6
Ludwigia peruviana	3	yes	OBL	cm) or larger in diameter at breast he		(1.0
Typha spp.	3	yes	OBL	Sapling- Woody plants, excluding wo		
Nymphaea spp.	3	yes	OBL	approximately 20 ft (6m) or more in h		than 3
Nuphar luteum	3	ves	OBL	in. (7.6 cm) DBH.	eight and less	unan o
Panicum repens	3	yes	FACW	Shrub- Woody plants, excluding woo	ndy vines	'
Osmunda cinnamomea	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in		
Diodia virginiana	1	no	FACW	1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	-	
Panicum hemitomon	1	no	OBL	Herb- All herbaceous (non-woody)planerbaceous vines, regardless of size		odv
Nelumbo spp.	- <del></del> 1	no	OBL	plants, except woody vines, less than		
10.	·		ODL	m) in height.	approximatory	0 11 (1
11.				Woody vine- All woody vines, regard	tlees of height	
12.	. —			Woody vine- All Woody vines, regard	ness of neight.	
12.	20	= Total Cove		1		
Moody Vino Stratum (Blot size:	\	- Total Cove	;1			
Woody Vine Stratum (Plot size:	<del>/</del>					
1.				4		
2.	<u> </u>					
3.				1		
4.	<del> </del>			Hydrophytic	/ N-	
5.	- <del></del>	= Tatal O:		Vegetation Present? Yes	<u>√No</u>	<del></del>
December (If the control of the cont	0	= Total Cove	er			
Remarks: (If observed, list morph	-					
Percent cover estimates based or	n meandering s	survey of the b	roader co	mmunity.		

SOIL	il: Hillsborough- Water								Sampling Point:	A
Profile De	scription: (Describe	to the der	pth needed to do	ument t	he indicator or	confirm the abs	sence of indicators	's.)		
Depth	Matrix			Redo	x Features					
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc²	Texture		Remarks	
		<u> </u>		:						
		<u> </u>		· —						
		· —								
	Concentration, D=Depl	letion, RM	=Reduced Matrix,	CS=Cov	ered or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pc	ore Lining, M=Matrix		
Hydric Soi Histol	il Indicators:			Dol	archio Bolow Cu	rface (S8) (LRR \$	e T III	Indicators for Pro 1 cm Muck (a	oblematic Hydric Soils 3:	
	(A1) Epidon (A2)				•	пасе (58) (LRR : S9) (LRR S, T, U		1 cm Muck (a	· · · · · · · · · · · · · · · · · · ·	
	Histic (A3)				amy Mucky Miner				tic (F18) (outside MLRA 150A	- 11
	gen Sulfide (A4)				amy Gleyed Matri	, , , , ,			odplain Soils (F19) (LRR P, S,	
	ied Layers (A5)				pleted Matrix (F3)				Bright Loamy Soils (F20)	',
	nic Bodies (A6) (LRR P	∂, T, U)			dox Dark Surface			(MLRA 153		
	Mucky Mineral (A7) (LI		1		pleted Dark Surfa			Red Parent M	•	
	Presence (A8) (LRR I		,		dox Depressions				Dark Surface (TF12) (LRR T, I	111
	Muck (A9) (LRR P,T)	5,			d (F10) (LRR U)				in in Remarks)	٥,
Deplet	ted Below Dark Surfac	:e (А11)		Der	pleted Orchric (F	11) (MLRA 151)				
Thick	Dark Surface (A12)	•		lror	n-Manganese Ma	sses (F12) (LRR	₹ O, P,T)	31-diagtors of buds		
	Prairie Redox (A16) (I	MI RA 15	<b>ΛΔ</b> )		bric Surface (F1				rophytic vegetation and wetland e present, unless disturbed or	i
			•	_	•			problematic.	s present, unless disturbed of	
	Mucky Mineral (S1) (t	LRR O, S)	1		ta Orchric (F17)			problematic.		
_	Gleyed Matrix (S4)				•	8) (MLRA 150A,	•			
	Redox (S5)					n Soils (F19) (ML		- rem		
	ed Matrix (S6)			Ano	malous Bright Lo	pamy Soils (F20)	) (MLRA 149A, 153	3C, 153D)		
	Surface (S7) (LRR P, S									
	e Layer (If observed)	/I								
	Type:							:		
	Depth (inches):						Hydric Soil Prese	ent? Yes	No	
Remarks:										
i										
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıah	Sampling Date: 9/3	30/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL			
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range			
Landform (hillslope, terrace, etc.): N//		Local relief (concave, conv		Slope (	%):
Subregion (LRR or MLRA): LRR U					WGS84
Soil Map Unit Name: Smyrna fine sand			_NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_	(If no, explain in Rema	arks)
* *	or Hydrology		Are circumstances		No
Are Vegetation, Soil,		=		any answers in Remark	
SUMMARY OF FINDINGS - Attach si			•	-	•
Hydrophytic Vegetation Present?	Yes No			•	
Hydric Soil Present?	YesNo	Is the Sampled Area v	rithin a Wetland?	Yes/ No	<del></del>
Wetland Hydrology Present?	Yes No	<b></b>			
Remarks:					
•					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two red	quired)
Primary Indicators (minimum of one is required; o	heck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Veg	getated Concave Surfac	ce (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	ttems (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	rows (C8)	
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Saturation V	sible on Aerial Imagery	(C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	irks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	_ Depth (inches):0-2			
Water Table Present?	Yes No				
Saturation Present?	Yes No		Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u> </u>	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	•		
Remarks:					

VEGETATION - Use scientific nar	mes of plants			Sampling	Point:	AL
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.		,		Number of Dominant Species	•	
2.				That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.				Total Number of Dominant		
4.				Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
Sapling Stratum (Plot size:	0	= Total Cove	r	Total % Cover of: MOBL species x1=	Multiply by:	
Sapium sebiferum		yes	FAC	FACW species x2=		-
2.			1710	FAC species x3=		-
3.				FACU species x4=		-
4.				UPL species x5=		-
5.				Column Totals: (A)		- (B)
6.				——(A)_		_(D)
7.				Provolance Index = R/A =		
1.	5	= Total Cove		Prevalance Index = B/A = Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:	,	- Total Cove	1	✓ Dominance Test is 50%		
				Prevalence Index is ≤3.0 <sup>1</sup>		
<u>1.</u> 2.				<del></del>	Andian 1 (Fum	ادمنما
3.				Problematic Hydrophytic Vege	tation (Exp	iain)
4.			<u> </u>	1,		
5.				Indicators of hydric soil and wetland		iust
5. 6.				be present, unless disturbed or proble Definitions of Vegetation Strata:	matic.	
7.				Definitions of vegetation Strata.		
Herb Stratum (Plot size:)	0	= Total Cove	r	Tree- Woody plants, excluding woody v approximately 20 ft (6m) or more in heig		(7.6
Sesbania spp.	20	yes	FAC	cm) or larger in diameter at breast heigh	it (DBH).	
2. Bidens alba	20	yes	NL	Sapling- Woody plants, excluding wood	ly vines,	
3. Panicum repens	15	yes	FACW	approximately 20 ft (6m) or more in heig	ht and less t	han 3
Ludwigia peruviana	10	no	OBL	in. (7.6 cm) DBH.		
5. Panicum hemitomon	10	no	OBL	Shrub- Woody plants, excluding woody	vines,	
6. Juncus effusus	10	no	FACW	approximately 3 to 20 ft (1 to 6 m) in hei	ght.	
<ol><li>Cyperus spp.</li></ol>	10	no	FACW	Herb- All herbaceous (non-woody)plant	s, including	
8. Urochloa mutica	5	no	NL	herbaceous vines, regardless of size. In	ncludes wood	dy
9.				plants, except woody vines, less than ap	proximately	3 ft (1
10.				m) in height.		
11.				<b>Woody vine</b> - All woody vines, regardles	s of height.	
12.						
	100	= Total Cove	r			
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes <u>✓</u>	No	<u> </u>
	0	= Total Cove	r			
Remarks: (If observed, list morpho Percent cover estimates based on		•	roader cor	mmunity		

ile Description: (Describe to the depth needs	d to document the indicator or confir	rm the absence of indicator	rs.)
h Matrix	Redox Features		
es) Color (moist) % Color (	moist) % Type¹	Loc <sup>2</sup> Texture	Remarks
10 YR 3/1			very dark gray fine sand
10 YR 6/1			gray fine sand
5 7.5 YR 3/2			dark brown fine sand
0 10 YR 3/2			very dark grayish brown fine sand
10 113/2			very dark grayion brown line band
e: C=Concentration, D=Depletion, RM=Reduced	Matrix, CS=Covered or Coated Sand C	Grains. <sup>2</sup> Location: PL=P	ore Lining, M=Matrix.
ric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (		1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (L		2 cm Muck (A10) (LRR \$)
Black Histic (A3)	Loamy Mucky Mineral (F1)	) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	<b>(</b>	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P.T.U)	Depleted Dark Surface (F)	7)	Red Parent Material (TF2)
		• 1	Very Shallow Dark Surface (TF12) (LRR T, U)
Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P,T)	Redox Depressions (F8)  Marl (F10) (LRR U)		Other (Explain in Remarks)
		U DA 454\	,
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (M	· ·	
Thick Dark Surface (A12)	Iron-Manganese Masses (	(F12) (LRR O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LR		hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLR/	A 151)	problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (ML	RA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils	(F19) (MLRA 149A)	
Stripped Matrix (S6)	Anomalous Bright Loamy	Soils (F20) (MLRA 149A, 15	3C, 153D)
Dark Surface (S7) (LRR P, S, T, U)			
rictive Layer (If observed):			
Type:	_	i i	
Depth (inches):	_	Hydric Soil Pres	ent? Yes <u>√</u> No
arks:			
			•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	_Sampling Date	9/30/09			
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	Sampling Point	t:AM			
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: 30 27S 18E/29 27S 18E					
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none		Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.102082	Long: <u>-82.5</u>	353050		Datum: WGS84		
Soil Map Unit Name: Smyrna fine sand			_NWI classification:	Shrub wetland	1		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_ No	(If no, explain i	n Remarks)		
Are Vegetation, Soil,	or Hydrology		Are circumstances		′es <u> </u>		
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in	Remarks)		
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant feature	es, etc.		
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	YesNo	Is the Sampled Area w	vithin a Wetland?	Yes/_N	lo		
Wetland Hydrology Present?	Yes✓ No	1					
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)		
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li				
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2	)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	ows (C8)	,		
Drift Deposits (B3)	Presence of Reduced In	on (C4)	on (C4)Saturation Visible on Aerial Imagery (C9				
Algal Mat or Crust (B4)	Recent Iron Reduction is	Tilled Soils (C6)Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral				
Field Observations:		,	1	· · · · · ·			
Surface Water Present?	Yes No	Depth (inches): 6-12	1		(		
Water Table Present?	Yes No		1				
Saturation Present?	Yes No		Wetland				
(includes capillary fringe)	,,,,		Hydrology Present?	Yes <u>✓</u>	lo		
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous	inspections), if available:	i resenti	1001			
	g, p, p	,,,					
<u></u>							
Remarks:							

VEGETATION - Use scientific nar	nes of plants			Sampl	ling Point:	AM
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	4.4	, a.
2.				That Are OBL, FACW, or FAC:	<u>11</u>	(A)
3.				Total Number of Dominant		
4.				Species Across All Strata:	<u>11</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.		-		Prevalance Index worksheet:		
		= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	rotal cove	•		(1=	
Sapium sebiferum		yes	FAC	<u> </u>	(2=	- I
Salix spp.	10	yes	FACW	· · · · · · · · · · · · · · · · · · ·	:3=	-
Acer rubrum	5	yes	OBL	———	4=	-
4.			<u> </u>	<del></del>	(5=	- [
5.					A)	- (B)
6.		<u> </u>		Column Totals.	^)	- <sup>(B)</sup>
7.				Dravalance Index - B/A -		
1.	25	= Total Cove		Prevalance Index = B/A = Hydrophytic Vegetation Indicat		
Shrub Stratum (Plot size:	. 25	- Total Cove	1	✓ Dominance Test is 50%	ors.	
Shrub Stratum (Plot size:	_)		E4 0144			
Sambucus canadensis	20	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	1	
2.				Problematic Hydrophytic V	/egetation (Exp	ilain)
3.				1.		
4.				Indicators of hydric soil and wetle		nust
5.				be present, unless disturbed or p		
6.				Definitions of Vegetation Strata	a:	
7.				1		
	20	= Total Cove	r	Tree- Woody plants, excluding woo		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in		(7.6
Ludwigia peruviana	20	yes	OBL	cm) or larger in diameter at breast l	neignt (DBH).	
Polygonum punctatum	15	yes	FACW	Sapling- Woody plants, excluding v		1
Panicum repens	10	yes	FACW	approximately 20 ft (6m) or more in	height and less	than 3
Ludwigia octovalvis	10	yes	OBL	in. (7.6 cm) DBH.		
<ol><li>Sesbania spp.</li></ol>	10	yes	FAC	Shrub- Woody plants, excluding we		
6. Cyperus spp.	10	yes	FACW	approximately 3 to 20 ft (1 to 6 m) i	n height.	
7. Blechnum serrulatum	10	yes	FACW	Herb- All herbaceous (non-woody);	plants, including	
8. Juncus effusus	5	no	FACW	herbaceous vines, regardless of siz		-
Commelina diffusa	5	no	FACW	plants, except woody vines, less that	an approximately	3 ft (1
10. Colocasia esculenta	5	no	FACW	m) in height.		
11.				Woody vine- All woody vines, rega	rdless of height.	
12.						
	100	= Total Cove	r	]		
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes _	√ No	
	0	= Total Cove	r	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		<del></del>
Remarks: (If observed, list morph				<u> </u>		
Percent cover estimates based or			roader cor	mmunity.		
		-,				

SOIL	l: Hillsborough- Smyrn	a						Sampling Point:AN		
Profile De	scription: (Describe	to the dep	oth needed to doo	ument th	e indicator or	confirm the abs	sence of indicators.	)		
Depth	Matrix			Redox Features						
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc	Texture	Remarks		
0-4	10 YR 3/1							very dark gray fine sand		
4-12	10 YR 6/1							gray fine sand		
12-15	7.5 YR 3/2							dark brown fine sand		
15-20	10 YR 3/2							very dark grayish brown fine sand		
Time: C=	Concentration, D=Dep	letion PM:	- Peduced Matrix		red or Coated S	Sand Grains	<sup>2</sup> l ocation: PI =Por	e Lining, M=Matrix.		
	il Indicators:	icuori, ixivi	-iteduced ividuix,	00-00 <b>v</b> 0	ica or coalca c	dia Orana.		Indicators for Problematic Hydric Soils 3:		
Histol				Poly	value Below Su	rface (S8) (LRR		1 cm Muck (a9) (LRR O)		
	Epidon (A2)					89) (L <b>RR S, T,</b> L		2 cm Muck (A10) (LRR S)		
Black	Histic (A3)			Loan	ny Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ied Layers (A5) iic Bodies (A6) (LRR F	P, T, U)			eted Matrix (F3) ox Dark Surface			Anomalous Bright Loamy Soils (F20) (MLRA 153B)		
5 cm Mucky Mineral (A7) (LRR P,T,U)Depl				eted Dark Surfa	ace (F7)		Red Parent Material (TF2)			
✓ Muck Presence (A8) (LRR U)			Redo	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)			
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)		
Deple	ted Below Dark Surfac	æ (A11)		Depl	eted Orchric (F	11) (MLRA 151)				
Thick	Dark Surface (A12)			lron-	Manganese Ma	sses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
Coast	Prairie Redox (A16) (	MLRA 150	DA)	Umbric Surface (F13) (LRR P, T, U)				hydrology must be present, unless disturbed or		
Sandy	Mucky Mineral (S1) (i	LRR O, S)		Delta	a Orchric (F17)	(MLRA 151)		problematic.		
Sandy	Gleyed Matrix (S4)			Redu	uced Vertic (F18	B) (MLRA 150A,	150B)			
Sandy	Redox (S5)				•	Soils (F19) (ML	•			
Stripp	ed Matrix (S6)			Anor	malous Bright L	oamy Soils (F20)	) (MLRA 149A, 153C	c, 153D)		
	Surface (S7) (LRR P,						1	<del></del>		
	e Layer (If observed) 	:								
	Type: Depth (inches):		=				Hydric Soil Presen	nt? Yes ✓ No .		
Remarks:	Depti (alches).						Triyane Gon Fresch			
}										
								•		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10			10/1/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: AN				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range				
Landform (hillslope, terrace, etc.): N/A	4	Local relief (concave, con-	vex, none): <u>none</u>	Slop	pe (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.104270</u>	70 Long: -82.529977 Datum: WGS84				
Soil Map Unit Name: Smyrna fine sand				n: _NA		
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes	No	_ (If no, explain in R	(emarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstance:		s∕No	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in Re	emarks)	
SUMMARY OF FINDINGS - Attach si			ransects, impo	ortant features,	, etc	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	YesNo		
Wetland Hydrology Present?	Yes No					
HYDROLOGY						
Wetland Hydrology Indicators:				tors (minimum of two	o required)	
Primary Indicators (minimum of one is required; of			Surface Soil	, ,		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)		egetated Concave Si	urface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	•		
✓ Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim L	• •		
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres				,	
Drift Deposits (B3)	Presence of Reduced Ir				gery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	· · · · · · · · · · · · · · · · · · ·				
Iron Deposits (B5)	Thin Muck Surface (C7)					
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutra	I Test (D5)		
Field Observations:	· · · · · · · · · · · · · · · · · · ·					
Surface Water Present?	Yes No		-{			
Water Table Present?	Yes No	_ Depth (inches):0	Wetland			
Saturation Present?	Yes No	_Depth (inches):0	Hydrology			
(includes capillary fringe)		* * * * * * * * * * * * * * * * * * *	Present?	Yes <u>✓ No</u>		
Describe Recorded Data (stream gauge, monitor	ring well, aenal photos, previous	s inspections), if available:				
Remarks:	<u> </u>					
Tromanic.						

VEGETATION - Use scientific nar					ampling Point:	AN
	Absolute %	Dominant	Indicator	Dominance Test Workshee	rt:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Specie		(A)
2.				That Are OBL, FACW, or FA	C: <u>3</u>	(A)
3.				Total Number of Dominant	2	(D)
4.				Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species	3 400.00	(A (D)
6.			-	That Are OBL, FACW, or FA		(A/B)
7.				Prevalance Index workshe		
	0	= Total Cove	<del></del>	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.	<del>- '</del>			FACW species	x2=	_
2.				FAC species	x3=	_
3.	-			FACU species	x4=	_
4.	·	-	•	UPL species	x5=	<del></del>
<del>5</del> .	<del></del>			Column Totals:	(A)	— <sub>(B)</sub>
6.				Coldinii Totais.	— <sup>(^)</sup>	_(5)
7.				Prevalance Index = B/A	_	
1.		= Total Cove		Hydrophytic Vegetation Inc		
Shrub Stratum (Blot size:	,	- Total Cove	'	✓ Dominance Test is 50		
Shrub Stratum (Plot size:	<del>-</del> -'			<u> </u>		
1.				Prevalence Index is ≤		. 1 - 1 - 1
2.				Problematic Hydrophy	tic vegetation (Ex	piain)
3.				1		
4.	. <u></u>			Indicators of hydric soil and		must
5.				be present, unless disturbed		
6.				Definitions of Vegetation S	trata:	
7.						
_	0	= Total Cove	r	Tree- Woody plants, excluding		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or mo	_	. (7.6
Ludwigia peruviana	5	yes	OBL	cm) or larger in diameter at bre	east height (DBH).	
<ol><li>Ludwigia octovalvis</li></ol>	2	yes	OBL	Sapling- Woody plants, exclude	ding woody vines,	
<ol><li>Hydrocotyle spp.</li></ol>	2	yes	OBL	approximately 20 ft (6m) or mo	re in height and less	than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excludi	ng woody vines,	
6.				approximately 3 to 20 ft (1 to 6	m) in height.	
7.				Herb- All herbaceous (non-wo	ody)plants, including	
8.	·			herbaceous vines, regardless	of size. Includes wo	ody
9.				plants, except woody vines, les	ss than approximatel	y 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines,	regardless of height.	
12.						
	9	= Total Cove	r			
Woody Vine Stratum (Plot size:	)		•			
1.	/					
2.						
3.	· ——					
				Hydronbytic		
<b>4</b> . <b>5</b> .	•			Hydrophytic  Vegetation Present? Y	'es ✓ No	
J.		= Total Cove		jvegetation riesentr i		<del></del>
		tions below).		I		

Percent cover estimates based on meandering survey of the broader community.

Color (moist)	Redox Features % Type  CS=Covered or Coated S.	Loc <sup>2</sup> Text	very dark gray fine sand gray fine sand dark brown fine sand very dark grayish brown fine sand
			very dark gray fine sand gray fine sand dark brown fine sand
RM=Reduced Matrix,	CS=Covered or Coated S		gray fine sand dark brown fine sand
RM=Reduced Matrix,	CS=Covered or Coated S		dark brown fine sand
RM=Reduced Matrix, (	CS=Covered or Coated S		
, RM=Reduced Matrix,	CS=Covered or Coated S		very dark grayish brown fine sand
, RM=Reduced Matrix,	CS=Covered or Coated S		
, RM=Reduced Matrix,	CS=Covered or Coated S		
		and Grains. <sup>2</sup> Location	n: PL=Pore Lining, M=Matrix.
			Indicators for Problematic Hydric Soils 3:
		face (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
	Thin Dark Surface (S	, , , , ,	2 cm Muck (A10) (LRR S)
	Loamy Mucky Minera		Reduced Vertic (F18) (outside MLRA 150A, E
	Loamy Gleyed Matrix	(F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Depleted Matrix (F3)	(FC)	Anomalous Bright Loamy Soils (F20)
J)	Redox Dark Surface	• •	(MLRA 153B)
,T,U)	Depleted Dark Surface	` '	Red Parent Material (TF2)
	Redox Depressions	(F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
	Marl (F10) (LRR U)		Other (Explain in Remarks)
l <b>1</b> )	Depleted Orchric (F1	1) (MLRA 151)	
•	Iron-Manganese Mas	ses (F12) (LRR O, P,T)	3
Δ 150Δ)	<del></del>		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
•			problematic.
O, S)		•	рговетнаце,
	Anomalous Bright Lo	amy Soils (F20) (MLRA 14	19A, 153C, 153D)
U)			
		l	
		Hydric Sc	oil Present? Yes _ ✓ No
,	11) A 150A) O, S)	Marl (F10) (LRR U)  — Depleted Orchric (F1 — Iron-Manganese Mas  A 150A)  — Delta Orchric (F17) ( — Reduced Vertic (F18 — Piedmont Floodplain — Anomalous Bright Lo	11)Depleted Orchric (F11) (MLRA 151)Iron-Manganese Masses (F12) (LRR O, P,T)  A 150A)Umbric Surface (F13) (LRR P, T, U)  O, S)Delta Orchric (F17) (MLRA 151)Reduced Vertic (F18) (MLRA 150A, 150B)Piedmont Floodplain Soils (F19) (MLRA 149A)Anomalous Bright Loamy Soils (F20) (MLRA 14

Project/Site: Levy Nuclear Plant - Transmission L	nes	City/County: Hillsborou	City/County: Hillsborough Sampling Date: 10/				
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	State: FL Sampling Point				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	Section, Township, Range: 29 27S 18E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: <u>28.1</u>	04494 Long: <u>-82.5</u>	29247	Datum: <u>WGS84</u>			
Soil Map Unit Name: Smyrna fine sand			_NWI classification:	Freshwater Pond			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_ No	(If no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology		Are circumstances				
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)			
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sa	mpling point locations, t	ransects, impor	tant features, etc.			
Hydrophytic Vegetation Present?	Yes ✓ No						
Hydric Soil Present?	YesNo	Is the Sampled Area w	ithin a Wetland?	Yes✓No			
Wetland Hydrology Present?	Yes No						
Remarks:							
			har-an-				
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of two required)			
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Lea	aves (B9)	Sparsely Veg	etated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B1	13)	Drainage Patt	erns (B10)			
✓ Saturation (A3)	Marl Deposits (B1	5) (LRR U)	Moss Trim Lin	nes (B16)			
Water Marks (B1)	Hydrogen Sulfide	Odor (C1)	Dry-Season V	Vater Table (C2)			
Sediment Deposits (B2)		neres on Living Roots (C3)	n Living Roots (C3)Crayfish Burrows (C8)				
Drift Deposits (B3)	Presence of Redu		on (C4)Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)		ction in Tilled Soils (C6)					
Iron Deposits (B5)	Thin Muck Surface						
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in F	Remarks)	FAC Neutral 1	Test (D5)			
Field Observations:		· · · · · · · · · · · · · · · · · · ·	1				
Surface Water Present?	Yes No	Depth (inches): 0-72					
Water Table Present?		Depth (inches): 0		i			
Saturation Present?		Depth (inches): 0	Wetland Hydrology				
(includes capillary fringe)			1 -	Yes <u>✓ No</u>			
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, pre	evious inspections), if available:	<u></u>				
Remarks:							
	•						

<b>VEGETATION</b> - Use scientific na	mes of plants			Samp	ling Point:	<u> AO</u>
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.		•		Number of Dominant Species		
2.			-	That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.			·	Total Number of Dominant		
	-	****		Species Across All Strata:	<u>6</u>	(B)
4.				• •		
5.				Percent of Dominant Species	<u>83.33</u>	(A/B)
<u>6.</u>				That Are OBL, FACW, or FAC:		
7.				Prevalance Index worksheet:		
0 1: 0:	, 0	= Total Cov	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)				<1=	_
Schinus terebinthifolius	70	yes	FAC	· · —	<2=	
2. Salix spp.	10	no	FACW	·	<b>κ3=</b>	_
Quercus laurifolia	3	no	FACW	<u></u>	<4=	_
Sabal palmetto	2	no	FAC	UPL species>	<5=	_
5.				Column Totals:(	(A)	_(B)
6.						_
7.				Prevalance Index = B/A =		
	85	= Total Cov	er	Hydrophytic Vegetation Indicat	tors:	
nrub Stratum (Plot size:)			✓ Dominance Test is 50%			
Sambucus canadensis	- 15	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic \		olain)
3.			. ———		9 (	,
4.				<sup>1</sup> Indicators of hydric soil and wetl	and hydrology r	muct
<del>5</del> .				be present, unless disturbed or p		iiust
<u>6.</u>			. ———	Definitions of Vegetation Strat		
<del>7</del> .				Deminions of Vegetation Strate	<b>a.</b>	
1.	15	- Total Cav				
Herb Stratum (Plot size:)	15 = Total Cover			Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6		
			ODL	cm) or larger in diameter at breast		(7.0
Bacopa monnieri	3	yes	OBL			
2. Ludwigia repens	2	yes	OBL	Sapling- Woody plants, excluding		45 0
3. Cyperus spp.		no	FACW	approximately 20 ft (6m) or more ir in. (7.6 cm) DBH.	neignt and less	tnan 3
4. Eriocaulon spp.	_ 1	no	OBL	4 ` '		
5. Ludwigia peruviana	_ 1	no	OBL	Shrub- Woody plants, excluding w	•	
6.				approximately 3 to 20 ft (1 to 6 m) i	in height.	
7.				Herb- All herbaceous (non-woody)	plants, including	
8.				herbaceous vines, regardless of size		-
9.				plants, except woody vines, less th	an approximatel	y 3 ft (1
10.				m) in height.		
11.	<b>-</b>			Woody vine- All woody vines, rega	ardless of height.	
12.				1		
	8	= Total Cov	er			
Woody Vine Stratum (Plot size:_	)					
1. Rubus spp.	20	yes	FACU			
Vitus rotundifolia	15	yes	FAC	1		
3.	<del></del>		•			
4.				Hydrophytic		
5.			-	Vegetation Present? Yes	✓ No	-
	35	= Total Cov	er	1		
Remarks: (If observed, list morph				1		
Percent cover estimates based of				mmunity.		

County/soil: Hi	illsborough-	Smyrna
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SOIL								Sampling Point:AO
	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the ab	sence of indicators	.)
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	_ %_	Type¹	Loc²	Texture	Remarks
0-4	10 YR 3/1							very dark gray fine sand
4-12	10 YR 6/1							gray fine sand
12-15	7.5 YR 3/2							dark brown fine sand
15-20	10 YR 3/2							very dark grayish brown fine sand
<u> </u>			<del></del>					
¹Type: C=0	Concentration, D=Depl	etion, RM=	Reduced Matrix, (	S=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Por	re Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol				Polyv	alue Below Su	face (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (	89) <b>(LRR S, T, l</b>	J)	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loam	y Mucky Miner	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)			Loam	y Gleyed Matri	x (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				ted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	, T, U)		Redo	x Dark Surface	(F6)		(MLRA 153B)
5 cm N	Mucky Mineral (A7) (LF	RR P,T,U)		Deple	eted Dark Surfa	ice (F7)		Red Parent Material (TF2)
✓ Muck	Presence (A8) (LRR L	J)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm M	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
Deplet	ed Below Dark Surface	e (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
Thick I	Dark Surface (A12)	` '		Iron-l	Manganese Ma	sses (F12) (LRF	R O. P.T)	3
Coast	Prairie Redox (A16) (N	AL RA 150	Δ)			3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
_	Mucky Mineral (S1) (L				Orchric (F17)			problematic.
	Gleyed Matrix (S4)	, 0, 0,				B) (MLRA 150A,	150B)	
	Redox (S5)				•	Soils (F19) (ML	•	
	ed Matrix (S6)						) (MLRA 149A, 1530	: 153D)
I	Surface (S7) (LRR P, S	i. T. U)	,		idiodo Brigin E	July 5000 (1 20)	, (III.C. 14051, 100C	, 1002)
	Layer (If observed):							
,	Туре:							
	Depth (inches):		<del></del>				Hydric Soil Preser	nt? Yes <u>✓</u> No
Remarks:								
i								

Applicant/Owner Progress Entraty Entritle Inc. State FL Sampling Point AP Investigator(s)tutalin Stret, Amy Pilso	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date: 10/1/09
Landform (hillslope, terrace, etc.): N/A LR U Lat: 28.107323 Long: .82.520711 Datum: .WGS84 Soli Map Unit Name: .Myakka fine sands Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation Soil or Hydrology naturally problematic? (if needed, explain any answers in Remarks) Are Vegetation Soil or Hydrology naturally problematic? (if needed, explain any answers in Remarks) Are Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Indicators:  HYDROLOGY  Wetland Hydrology Indicators:  Hydrophytic Vegetation Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Water Table (A2) Aquatic Fauna (B13) Spraysly Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13) Drining Roots (C3) Saturation (A3) Mand Deposits (B16) (LRR U) Moss Trim Lines (B16) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Craylish Burrows (C8) Sediment Deposits (B3) Presence of Reduced fron (C4) Saturation Visible on Aerial Imagery (C9) Agal Mat or Crust (E4) Recent In Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Field Observations:  Ves No Depth (inches):	Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: AP
Subregion (LRR or MLRA): LRR U Lat: 28.107323 Long -82.520711 Datum: WGS84  Soil May Unit Name. Myskks fine sands  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Soil or Hydrology naturally problematic?  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophysic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required. check all that apply)  Surface Soil Cracks (88)  Sparsely Vegetated Concave Surface (88)  Water Table (A2) Aquatic Fauna (813) Drainage Patterns (810)  Water Marks (811) Hydrogen Sulfide Odor (C1) Doy-Season Water Table (C2)  Sediment Deposits (83) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Deposits (83) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Presence of Reduced fron (C4) Saturation (V3) Saturation (V3) Presence (V5) Saturation (V3) Presence (V5) Saturation (V5) Presence (V5) P					
Soil Map Unit Name. Myakka fine sands  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or thydrology significantly disturbed? Are circumstances normal? Yes _ No	Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con-	vex, none): none	Slope (%):
Are climate / hydrologic conditions on the site typical for this time of year?  Are legitation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  Soil or Hydrology naturally problematic?  Wes No Hydrology (If necedet, explain any answers in Remarks)  Are Vegetation Present?  Yes No Hydrology point locations, transects, important features, etc.  Hydrophic Vegetation Present?  Yes No Hydrology Present?  Yes No Hydrology Present?  Yes No No No No No No No No No No No No No	Subregion (LRR or MLRA): LRR U	Lat: 28.107323	Long: <u>-82.5</u>	20711	Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No Welfand Hydrology Present? Yes No Sulfand Hydrology Present? Yes No Sulfand Hydrology Indicators:  Welfand Hydrology Indicators:  Welfand Hydrology Indicators:  Primary Indicators (iminimum of one is required, check all that apply) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)  Saturation (A3) Mari Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced fron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  In no Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches) Depth (inches) Present? Yes No No Depth					
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No Welfand Hydrology Present? Yes No Sulfand Hydrology Present? Yes No Sulfand Hydrology Indicators:  Welfand Hydrology Indicators:  Welfand Hydrology Indicators:  Primary Indicators (iminimum of one is required, check all that apply) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)  Saturation (A3) Mari Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced fron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  In no Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No Depth (inches) Depth (inches) Present? Yes No No Depth	Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Yes V No    Hydrology Present? Yes V No    Wetland Hydrology Present? Yes No    Wetland Hydrology Indicators:  HYDROLOGY  Wetland Hydrology Indicators:  Bis the Sampled Area within a Wetland? Yes No    Surface Soil Cracks (B6) S	Are Vegetation, Soil,	or Hydrology			
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydroky Soil Present?  Yes					
Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrosphytic Vegetation Present? Hydrosphytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Water Albe (A1) High Water Table (A2) Water Table (A3) Water Marks (B1) Water Marks (B1) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Ir				ransects, impo	ortant features, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Saturation Visible on Aerial Imagery (B7)  Saturation Posent?  Yes ✓ No Depth (inches): D-72  Wetland  Wetland  Wetland  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	·			•	
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Wetland Hydrology  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland Imagery  Wetland  Hydrology  Present?  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	YesNo
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Drift Deposits (B2)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Fried Observations:  Surface Water (A7)  Algal Mat or Crust (B4)  Field Observations:  Surface Water No  Depth (inches):  Obeth (inches):  Obeth (inches):  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Drainage Patterns (B10)  Assuration Visite on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): O  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): O  Present?  Yes ✓ No Depth (inches): O  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydrology Present?	Yes No			
Wetland Hydrology Indicators: (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Remarks:				. 1 - 14 80%
Wetland Hydrology Indicators: (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)					
Wetland Hydrology Indicators: (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)				,	
Wetland Hydrology Indicators: (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)					
Wetland Hydrology Indicators: (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	HYDDOLOGY				
Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  ✓ Saturation (A3)  Water Marks (B1)  Water Marks (B1)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)         ✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)	1				····
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Field Observations:  Surface Water Present?		* * * * * * * * * * * * * * * * * * *			. ,
Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Water Table Present?  Yes ✓ No Depth (inches): 0  Saturation Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	· '		B9)		- '
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Shallow Aquitard (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Field Observations:  Surface Water Present?	<del></del>				, ,
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Sturation Visible on Aerial Imagery (C9)Sturation Visible on Aerial Imagery (C9)Sturation Visible on Aerial Imagery (C9)Stallow Aquitard (D2)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)Stallow Aquitard (D5)	· ′		•		• •
Drift Deposits (B3)	Water Marks (B1)	· ·	` '		• •
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)	Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes NoDepth (inches):0		Presence of Reduced Ir	on (C4)	Saturation V	isible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes	Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)		
Field Observations:  Surface Water Present?  Yes	<del></del>				
Surface Water Present?  Yes / No Depth (inches):0  Water Table Present?  Yes / No Depth (inches):0		Other (Explain in Rema	rks)	FAC Neutral	Test (D5)
Water Table Present?  Yes / No Depth (inches): _0					
Saturation Present?  Yes No Depth (inches):0				-{	
(includes capillary fringe)  Present?  Yes   No  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				Wetland	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Yes No	_ Depth (inches):0	1	
		:	innerties Vitarialista	Present?	Yes No
Remarks:	Describe Recorded Data (stream gauge, monitor	ing well, aerial priotos, previous	s inspections), if available:		
Remarks:  .					
	Remarks:				

VEGETATION - Use scientific na	mes of plants			Sampling Point:	AP
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		•		Number of Dominant Species	
2.	·			That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
4.	·			Species Across All Strata:	(B)
5.				Percent of Deminant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	10101 0010		OBL speciesx1=	_
Schinus terebinthifolius	20	yes	FAC	FACW speciesx2=	_
2.				FAC speciesx3=	
3.				FACU speciesx4=	_
4.				UPL speciesx5=	
5.	·	<del> </del>		Column Totals:(A)	(B)
6.					
7.				Prevalance Index = B/A =	
	20	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	<u></u> )			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0¹	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.					
4.				Indicators of hydric soil and wetland hydrology i	must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
Herb Stratum (Plot size:)	0	= Total Cove	er	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in	. (7.6
Bacopa monnieri	3	yes	OBL	cm) or larger in diameter at breast height (DBH).	
<ol><li>Ludwigia peruviana</li></ol>	1	yes	OBL	Sapling- Woody plants, excluding woody vines,	
3.				approximately 20 ft (6m) or more in height and less	than 3
4.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wo	ody
9.				plants, except woody vines, less than approximatel	y 3 ft (1
10.				m) in height.	
11.				<b>Woody vine</b> - All woody vines, regardless of height	
12.					
	4	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.					
2.				·	
3.					
4.	- <del>-</del>			Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	
	0	= Total Cove	r		
Remarks: (If observed, list morph	ological adapta	tions below).			
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	

ofile Description: (Describe to the	e depth needed to doo	ument the indicator or	confirm the abse	nce of indicators.)	
epth Matrix	<b>,</b>	Redox Features		,	
	% Color (moist)	% Type¹	Loc²	Texture	Remarks
10 YR 3/1					very dark gray fine sand
10 YR 6/1					gray fine sand
25 N 2/0					black fine sand
30 5 YR 3/3					dark reddish brown fine sand
					MAIN TOWNS OF THE COLUMN TO TH
pe: C=Concentration, D=Depletion	, RM=Reduced Matrix,	CS=Covered or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	
dric Soil Indicators:		21 1 21 2			ndicators for Problematic Hydric Soils 3:
_Histol (A1)		Polyvalue Below Surf		. T, U) _	1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)		Thin Dark Surface (S		-	2 cm Muck (A10) (LRR S)
_Black Histic (A3)		Loamy Mucky Minera		-	Reduced Vertic (F18) (outside MLRA 150A, B
_Hydrogen Sulfide (A4)		Loamy Gleyed Matrix		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
_Stratified Layers (A5)		Depleted Matrix (F3)		-	Anomalous Bright Loamy Soils (F20)
_Organic Bodies (A6) (LRR P, T, I		Redox Dark Surface	• •		(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P	',T,U)	Depleted Dark Surfa	ce (F7)		Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)		Redox Depressions (	(F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (LRR P,T)		Marl (F10) (LRR U)		_	Other (Explain in Remarks)
	11)	Depleted Orchric (F1	11) (MLRA 151)		
Thick Dark Surface (A12)	,	Iron-Manganese Mas	sses (F12) (LRR (	D. P.T) 3	
Coast Prairie Redox (A16) (MLR	A 450A)	Umbric Surface (F13			Indicators of hydrophytic vegetation and wetland
_ , ,,	•				nydrology must be present, unless disturbed or problematic.
_Sandy Mucky Mineral (S1) (LRR	O, S)	Delta Orchric (F17) (		,	objethatic.
_Sandy Gleyed Matrix (S4)		Reduced Vertic (F18	, ,	•	
Sandy Redox (S5)		Piedmont Floodplain	. , .	,	
Stripped Matrix (S6)		Anomalous Bright Lo	amy Soils (F20) (	MLRA 149A, 153C,	153D)
_Dark Surface (S7) (LRR P, S, T,	U)				
strictive Layer (If observed):		<u> </u>			
Туре:	· · · · · · · · · · · · · · · · · · ·				
Depth (inches):			<u> </u> }	tydric Soil Present	t? Yes <u>√</u> No
marks:					
				•	
			•		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	_Sampling Date:	10/1/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	AQ
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 29 27S 18E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slop	e (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.107663	Long:82,5	19830	Datu	ım: <u>WGS84</u>
Soil Map Unit Name: Winder fine sands			_NWI classification:	Shrub Wetland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in R	emarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		No
			(If needed, explain	any answers in Rei	marks)
SUMMARY OF FINDINGS - Attach sit			•	•	,
Hydrophytic Vegetation Present?	Yes ✓ No		<u> </u>		
Hydric Soil Present?	YesNo	is the Sampled Area w	rithin a Wetland?	YesNo	
Wetland Hydrology Present?	YesNo				
Remarks:					
į					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two	required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	getated Concave Su	ırface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season \	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced Ire	on (C4)	Saturation Vi	sible on Aerial Imag	gery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	-			
Water Table Present?	Yes No	Depth (inches): 0	Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes <u> </u>	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			
Remarks:					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	AQ
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Taxodium distichum	50	yes	OBL	Number of Dominant Species	<i>γ</i> Ι
Quercus laurifolia	20	yes	FACW	That Are OBL, FACW, or FAC: $\frac{4}{}$	(A)
3. Nyssa sylvatica var. biflora	10	no	FAC	Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	(A (D)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	80	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
Schinus terebinthifolius	30	yes	FAC	FACW species x2=	
2.				FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	
5.				Column Totals: (A)	(B)
6.					`
7.				Prevalance Index = B/A =	
	30	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	•			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Expla	ain)
3.	· ——			, , , , , , , ,	·
4.				Indicators of hydric soil and wetland hydrology mu	ıst
5.			-	be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	$\neg$
7.				1	
	0	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7	7.6
Blechnum serrulatum	30	yes	<b>FACW</b>	cm) or larger in diameter at breast height (DBH).	
2. Thelypteris spp.	5	no	FACW	Sapling- Woody plants, excluding woody vines,	
3.				approximately 20 ft (6m) or more in height and less th	ıan 3
4.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.	· <del></del>			herbaceous vines, regardless of size. Includes wood	у
9.				plants, except woody vines, less than approximately 3	3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.					
	35	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	<u>.</u>
	0	= Total Cove	er		
Remarks: (If observed, list morph	ological adapta	itions below).			
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	

oth Matrix	o tne aeptn neeaea to	document the indicator of Redox Features	confirm the absence of i	ndicators.)
ches) Color (moist)	% Color (mois		Loc <sup>2</sup> Tex	xture Remarks
10 YR 3/1				very dark gray fine sand
0 10 YR 5/2		<del></del>		grayish brown fine sand
	10 YR 5/1; 10	<del></del>		grayion
	YR 6/4; 10 Y		common	, medium
14 10 YR 4/2	6/6	•	distinct n	
30 10 YR 6/1	<del></del>		. — —	gray sandy clay loam
e: C=Concentration, D=Deple	tion, RM=Reduced Ma	rix, CS=Covered or Coated	Sand Grains. <sup>2</sup> Location	on: PL=Pore Lining, M=Matrix.
ric Soil Indicators:				Indicators for Problematic Hydric Soils 3:
Histol (A1)			urface (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)		Thin Dark Surface		2 cm Muck (A10) (LRR S)
_Black Histic (A3)		Loamy Mucky Mine		Reduced Vertic (F18) (outside MLRA 150A, B
_Hydrogen Sulfide (A4)		Loamy Gleyed Mat		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Organic Bodies (A6) (LRR P,	, T, U)	Depleted Matrix (F: Redox Dark Surface		Anomalous Bright Loamy Soils (F20) (MLRA 153B)
5 cm Mucky Mineral (A7) (LR		Depleted Dark Surf		Red Parent Material (TF2)
Muck Presence (A8) (LRR U	l)	Redox Depressions	s (F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)		Marl (F10) (LRR U	)	Other (Explain in Remarks)
Depleted Below Dark Surface	e (A11)	Depleted Orchric (F	F11) (MLRA 151)	
Thick Dark Surface (A12)	<b>(</b> )	Iron-Manganese M	asses (F12) (LRR O, P,T)	3
Coast Prairie Redox (A16) (M	AI DA 160A)	Umbric Surface (F		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
-	•	Delta Orchric (F17)		hydrology must be present, unless disturbed or problematic.
_Sandy Mucky Mineral (S1) (Li Sandy Gleyed Matrix (S4)	KK 0, 3)		18) (MLRA 150A, 150B)	<b>F</b>
Sandy Redox (S5)			in Soils (F19) (MLRA 149A)	1
Stripped Matrix (S6)			oamy Soils (F20) (MLRA 1	
_Dark Surface (S7) (LRR P, S	: T III		, (, (	, , , , , , , , , , , , , , , , , , , ,
strictive Layer (If observed):				
Type:				
Depth (inches):			Hydric S	Soil Present? Yes No

Applicant/Owner:   Progress Energy Florida   Inc.   State   Fl.   Sampling Point:   AR
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): Subregion (LRR or MIRA) LRU Lat: 28.107835 Long: .92.519306 Datum: .WGS84  Soil Map Unit Name: Winder fine sands NWII classification: .Shrub Wetland New Classification: .Shrub Wetland NVII classification: .Shrub Wetland (If no, explain in Remarks)  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No (If no, explain in Remarks)  Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Ves No Sulface Soil Cracks (B6)  Yes No Sulface Water (A1) Surface Soil Cracks (B6)  Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dpy-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Diff Deposits (B3) Presence of Reduced fron (C4) Saturation (Nisible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Vest Valer Table (Passent? Yes No Depth (inches): OHydrology  Wetland Hydrology  Wetland Present? Yes No Depth (inches): OHydrology
Subregion (LRR or MLRA): LRR U Lat: 28.107835 Long: 42.519306 Datum: WGS48  Soil Map Unit Name: Winder fine sands Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no. explain in Remarks) Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any nawer's in Remarks) Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any nawer's in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present?
Are climate / hydrologic conditions on the site typical for this time of year? Yes _ No _ (If no, explain in Remarks)  Are Vegetation _ Soil _ or Hydrology _ significantly disturbed? Are circumstances normal? Yes _ No _ (If no, explain in Remarks)  Are Vegetation _ Soil _ or Hydrology _ naturally problemate? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?
Are climate / hydrologic conditions on the site typical for this time of year? Yes _ No _ (If no, explain in Remarks)  Are Vegetation _ Soil _ or Hydrology _ significantly disturbed? Are circumstances normal? Yes _ No _ (If no, explain in Remarks)  Are Vegetation _ Soil _ or Hydrology _ naturally problemate? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances norma? Yes No naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No No Servations: Sufficiently significantly disturbed? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Servations, transects, important features, etc.  Hydrology Present? Yes No Servations (If seatures, etc.)  Hydrology Present? Yes No Servations (If seatures, etc.)  Hydrology Present? Yes No Servations (If seatures, etc.)  Hydrology Present? Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Water (A1) Surface (B6) Sparsely Vegetated Concave Surface (B8)  Figh Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Saturation (A3) Ada Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)  Agal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  FAC Neutral Test (D5)  FAC Neutral Test (D5)  FAC Neutral Test (D5)  FAC Neutral Test (D5)  Wetand  Hydrology
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances norma? Yes No naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No No Servations: Sufficiently significantly disturbed? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No Servations, transects, important features, etc.  Hydrology Present? Yes No Servations (If seatures, etc.)  Hydrology Present? Yes No Servations (If seatures, etc.)  Hydrology Present? Yes No Servations (If seatures, etc.)  Hydrology Present? Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Water (A1) Surface (B6) Sparsely Vegetated Concave Surface (B8)  Figh Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Saturation (A3) Ada Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)  Agal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  FAC Neutral Test (D5)  FAC Neutral Test (D5)  FAC Neutral Test (D5)  FAC Neutral Test (D5)  Wetand  Hydrology
Are Vegetation Soll or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  No  Is the Sampled Area within a Wetland? Yes  No  Is the Sampled Area within a Wetl
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Yes _ No _
Hydriophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Sediment Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Agal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inon Deposits (B5)  Thin Muck Surface (C7)  Inon Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes _ No _ Depth (inches): _ 0
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Marf Deposits (B15) (LRR U)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required: check all that apply)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Mar Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced fron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Iron Deposits
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  ✓ High Water Table (A2)  ✓ Saturation (A3)  ✓ Saturation (A3)  ✓ Saturation (A3)  ✓ Sediment Deposits (B1)  Drift Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water (Present?  Yes ✓ No Depth (inches): 0 Hydrology  Wetland Hydrology  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  FAC Neutral Test (D5)  Wetland  Hydrology  Wetland  Hydrology
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ✓ No Depth (inches):
✓ Surface Water (A1)
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)         Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)         Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)         Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes✓No Depth (inches):0      Wetland Hydrology         Saturation Present?       Yes✓No Depth (inches):0      Wetland Hydrology
Water Marks (B1)
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?
Drift Deposits (B3)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes✓ NoDepth (inches):0_12  Water Table Present? Yes✓ NoDepth (inches):0Wetland  Saturation Present? Yes✓ NoDepth (inches):0Hydrology
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes / NoDepth (inches):0 Water Table Present? Yes / NoDepth (inches):0Horizontal Methods
Field Observations:           Surface Water Present?         Yes ✓ No Depth (inches):
Surface Water Present?         Yes ✓ No Depth (inches):
Water Table Present?         Yes ✓ No Depth (inches):0
Saturation Present? Yes✓_ No Depth (inches): 0 Hydrology
7.74.5.097
(includes capillary fringe) Present? Yes _ <no (stream="" aerial="" available:<="" data="" describe="" gauge,="" if="" inspections),="" monitoring="" photos,="" previous="" recorded="" td="" well,=""></no>
Describe Recorded Data (Stream gauge, monitoring well, aemai priotos, previous inspections), il available.
Remarks:

VEGETATION - Use scientific na	imes of plants			Sampling	g Point:	AR
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	· · · · · · · · · · · · · · · · · · ·	
Tree Stratum (Plot size:)	Cover	Species?	Status			
Taxodium distichum	50	yes	OBL	Number of Dominant Species	4	<b>/</b> ///
2. Quercus laurifolia	20	yes	FACW	That Are OBL, FACW, or FAC:	<u>4</u>	, (A)
3. Nyssa sylvatica var. biflora	10	no	FAC	Total Number of Dominant	4	(13)
4.				Species Across All Strata:	<u>4</u>	(B)
5.				Percent of Dominant Species		(4.40)
6.		***************************************	-	That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	80	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=		
Schinus terebinthifolius	30	yes	FAC	FACW species x2=		_
2. 3.				FAC species x3=		_
				FACU species x4=		_
4.				UPL species x5=		_
5.				Column Totals: (A)		(B)
6.				<del></del>		<b>—</b> ' ·
7.	-			Prevalance Index = B/A =		
	30	= Total Cove	er	Hydrophytic Vegetation Indicators	<b>5</b> :	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
1.	<del></del> ′			Prevalence Index is ≤3.0 <sup>1</sup>		
2.			-	Problematic Hydrophytic Veg	etation <sup>1</sup> (Ex	nlain)
3.				<u> </u>	· ,	J
4.				<sup>1</sup> Indicators of hydric soil and wetland	t hydrology r	must
5.	-			be present, unless disturbed or prob		Husi
6.	-			Definitions of Vegetation Strata:	ICITICATE.	
7.				1		
		= Total Cove	÷L	Tree- Woody plants, excluding woody	vines.	
Herb Stratum (Plot size:)			•	approximately 20 ft (6m) or more in hei		(7.6
Blechnum serrulatum	30	yes	FACW	cm) or larger in diameter at breast heig		<b>,</b> .
Thelypteris spp.	5	no	FACW	Sapling- Woody plants, excluding woo	•	
3.				approximately 20 ft (6m) or more in hei		than 3
4.	• ——			in. (7.6 cm) DBH.	3	••••
5.				Shrub- Woody plants, excluding wood	ly vines.	
6.				approximately 3 to 20 ft (1 to 6 m) in he		
7.				Herb- All herbaceous (non-woody)plan		
8.				herbaceous vines, regardless of size.		
9.	-			plants, except woody vines, less than a		
10.			-	m) in height.	,bb	, ,
11.	-			Woody vine- All woody vines, regardle	es of height.	
12.	-			,,	,00 01c.g	
12.	35	= Total Cove	ır	1		
Woody Vine Stratum (Plot size:	)	• • • • • • • • • • • • • • • • • • • •				
1.			!			
2.	:			1		
3.		• 1811				
4.		<del></del>		Hydrophytic		
5.				Vegetation Present? Yes✓	No	
J		= Total Cover	·	Vegetation Fresent: 100		
Remarks: (If observed, list morph			<u> </u>			
Percent cover estimates based or			roader cor	mmunity		

County/soil: Hillsborough- Winder SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches Color (moist) Color (moist) Loc Texture Remarks 10 YR 3/1 very dark gray fine sand 4-10 10 YR 5/2 grayish brown fine sand 10 YR 5/1; 10 YR 6/4; 10 YR common, medium 10 YR 4/2 dark grayish brown sandy loam 10-14 6/6 distinct mottles 10 YR 6/1 14-30 gray sandy clay loam Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup>:
\_\_\_1 cm Muck (a9) (LRR O) Hydric Soil Indicators: \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Thin Dark Surface (S9) (LRR S, T, U) Histic Epidon (A2) 2 cm Muck (A10) (LRR S) \_Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Loamy Gleyed Matrix (F2)
Depleted Matrix (F3) \_Hydrogen Sulfide (A4) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5)
Organic Bodies (A6) (LRR P, T, U) Anomalous Bright Loamy Soils (F20) Redox Dark Surface (F6) (MLRA 153B) Depleted Dark Surface (F7) Red Parent Material (TF2) 5 cm Mucky Mineral (A7) (LRR P.T.U) \_Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) Redox Depressions (F8) Marl (F10) (LRR U) Other (Explain in Remarks) \_1 cm Muck (A9) (LRR P,T) Depleted Orchric (F11) (MLRA 151) Depleted Below Dark Surface (A11) \_Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P,T) <sup>3</sup>Indicators of hydrophytic vegetation and wetland Umbric Surface (F13) (LRR P, T, U) \_Coast Prairie Redox (A16) (MLRA 150A) hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) \_Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Depth (inches): Hydric Soil Present? Yes No Remarks:

Project/Site: Levy Nuclear Plant - Transmission L	ines		City/County: Hillsbo	rough	_Sampling Date:10/1/09
Applicant/Owner: Progress Energy Florida, Inc.			State:	FL	Sampling Point: AS
Investigator(s): Justin Styer, Amy Piko			Section, Township, Rai		
Landform (hillstope, terrace, etc.):N/A			Local relief (concave, c	onvex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	L	at: <u>28.107872</u>	Long: <u>-8</u>	2.519958	Datum: WGS84
Soil Map Unit Name: Winder fine sands					: Shrub Wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of	of year?	Yes <u></u> ✓	No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology		significantly disturbed?	Are circumstances	s normal? YesNo
Are Vegetation, Soil,	or Hydrology		naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map show	ing samplin	g point locations	, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes✓N	lo			
Hydric Soil Present?	Yes✓N	10	Is the Sampled Are	a within a Wetland?	YesNo
Wetland Hydrology Present?	Yes✓N	lo			
Remarks:					·
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; of	heck all that appl	ly)		Surface Soil	Cracks (B6)
Surface Water (A1)		ained Leaves (B	9)		getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fa	auna (B13)		Drainage Pa	tterns (B10)
Saturation (A3)		osits (B15) <b>(LRF</b>	-	Moss Trim Li	
Water Marks (B1)		Sulfide Odor (0	•		Water Table (C2)
Sediment Deposits (B2)			n Living Roots (C3)	Crayfish Buri	
Drift Deposits (B3)		of Reduced Iro			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Tilled Soils (C6)		Position (D2)
Iron Deposits (B5)		k Surface (C7)		Shallow Aqui	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Ex	plain in Remark	s)	FAC Neutral	Test (D5)
Field Observations:	V (				
Surface Water Present?			Depth (inches): 0-24		
Water Table Present?	Yes_ ✓ N			— Wetland	
Saturation Present?	Yes ✓ N	10	Depth (inches): 0	Hydrology	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na well serial nh	notos previous i	nenections) if available	Present?	Yes No
beschibe Necorded Bata (stream gauge, monitori	ng wen, acriai pri	iolos, pievious i	nspections), ii available	•	
		·			
Remarks:					
					•

<b>VEGETATION</b> - Use scientific na	mes of plants			Sampling Point:	<u>AS</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Taxodium distichum	50	yes	OBL	Number of Dominant Species	
2. Quercus laurifolia	20	ves	FACW	That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.	·	<del></del>		That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
1.	70	= Total Cove		1	
Sapling Stratum (Plot size:	10	- Total Cove	;1	Total % Cover of: Multiply by:  OBL species x1=	
Schinus terebinthifolius	<del>·     ′</del>	yes	FAC	FACW species x2=	
Acer rubrum	5		OBL	FAC species x3=	_
3.		no	OBL	•	_
	·			FACU speciesx4=	_
4.	·			UPL speciesx5=	<b>–</b> ,_,
5.				Column Totals:(A)	(B)
6.					
7.				Prevalance Index = B/A =	
	35	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
Sambucus canadensis	20	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
2. 3. 4.					
4.				Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.	·			1	
	20	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)			•	approximately 20 ft (6m) or more in height and 3 in	. (7.6
Blechnum serrulatum	10	yes	FACW	cm) or larger in diameter at breast height (DBH).	`
Thelypteris spp.	5	yes	FACW	Sapling- Woody plants, excluding woody vines,	
	· ——		171011	approximately 20 ft (6m) or more in height and less	than 3
3. 4.				in. (7.6 cm) DBH.	,
5.			<del></del>	Shrub- Woody plants, excluding woody vines,	
o.				approximately 3 to 20 ft (1 to 6 m) in height.	
6. 7.				<b>1</b>	
7.				Herb- All herbaceous (non-woody)plants, including	
8. 9.				herbaceous vines, regardless of size. Includes wo	-
				plants, except woody vines, less than approximatel m) in height.	y 3 it (1
10.					
11.				Woody vine- All woody vines, regardless of height	.•
12.					
	15	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
Rubus spp.	70	yes	FACU	·	
2.					
3.					
4.			_	Hydrophytic	
5.				Vegetation Present? Yes✓No	
	70	= Total Cove	er	1	
Remarks: (If observed, list morph				<del></del>	
Percent cover estimates based or	-	-	roader cor	mmunity.	
1	<b>J</b> -			-	

SOIL	i-ti (Dib-	4_ 4L_ J_			- !			Sampling Point:
Profile De Depth	escription: (Describe Matrix	to the de	ptn needed to do		Features	r confirm the at	sence of indicators	-)
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
incrico			Odior (moist)		1,700		Texture	Nemarks
)-4	10 YR 3/1							very dark gray fine sand
1-10	10 YR 5/2							grayish brown fine sand
			10 YR 5/1; 10					
			YR 6/4; 10 YR				common, medium	
10-14	10 YR 4/2		6/6				distinct mottles	dark grayish brown sandy loam
4-30	10 YR 6/1							gray sandy clay loam
				- —				
				-	*****		<del></del>	
	Concentration, D=Dep	letion, RM	=Reduced Matrix,	CS=Cove	red or Coated	Sand Grains.	<sup>2</sup> Location: PL=Poi	re Lining, M=Matrix.
ydric Sc	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	, ,					urface (S8) (LRF		1 cm Muck (a9) (LRR O)
_	Epidon (A2)			_		(S9) (LRR S, T,	•	2 cm Muck (A10) (LRR S)
_	Histic (A3)					eral (F1) (LRR O	}	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4) îed Layers (A5)				ny Gleyed Mai eted Matrix (F			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	nic Bodies (A6) (LRR F	P. T. U)			ox Dark Surfac			Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	Mucky Mineral (A7) (L		1	Depl	eted Dark Sur	face (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR		,		x Depression			Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	-,		—— Marl	(F10) (LRR U	)		Other (Explain in Remarks)
	ted Below Dark Surface	o (A11)				, F11) (MLRA 151	1	,
	Dark Surface (A12)	æ (ATT)				lasses (F12) (LR	•	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
	, ,		0.43		-	13) (LRR P, T, U		
	Prairie Redox (A16) (						')	hydrology must be present, unless disturbed or problematic.
	Mucky Mineral (S1) (	LRR O, S	)		•	) (MLRA 151)		problematic.
	Gleyed Matrix (S4)					18) (MLRA 150A		
	Redox (S5)					in Soils (F19) (M	ILRA 149A) D) (MLRA 149A, 1530	1520)
	ed Matrix (S6)				naious brigin	LUBITIY SUIS (F2	J) (MERA 149A, 1530	5, 1830)
_	Surface (S7) (LRR P, : e Layer (if observed)							
restrictiv	Type:	•					Į.	
	Depth (inches):						Hydric Soil Presei	nt? Yes ✓ No .
Remarks:	Bopan (monos).		·····				1,	
torrianto.								
								•
				•				

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıah	Sampling Date:	10/1/09
•					
Applicant/Owner: Progress Energy Florida, Inc. Investigator(s): Justin Styer, Amy Piko			. 00 076 405/00 07		AI-1/AI-2
• ,,		Section, Township, Range	`	-	
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-		•	
Subregion (LRR or MLRA): LRR U	Lat: 28.10/848	5 Long: <u>-82.5</u>		<del></del>	um: <u>WGS84</u>
Soil Map Unit Name: Myakka fine sands	<del></del>		_NWI classification:		
Are climatic / hydrologic conditions on the site typ	•		_ No		
	or Hydrology		Are circumstances	normal? Yes	sNo
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Re	marks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampl	ing point locations, t	ransects, impo	rtant features,	, etc.
Hydrophytic Vegetation Present?	Yes No	4			
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	YesNo	
Wetland Hydrology Present?	Yes No				
HADDOLOGA					
HYDROLOGY	· · · · · · · · · · · · · · · · · · ·		Consider Indicat	(	
Wetland Hydrology Indicators:				ors (minimum of two	o requirea)
Primary Indicators (minimum of one is required; o		(50)	Surface Soil		f (D0)
Surface Water (A1)	Water-Stained Leaves	(B9)		getated Concave S	ипасе (В8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa		
Saturation (A3)	Mart Deposits (B15) (LI	•	Moss Trim L	` ,	
Water Marks (B1)	Hydrogen Sulfide Odor	•	·	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced I	ron (C4)	Saturation V	isible on Aerial Ima	gery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	)	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	ırks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		4		
Water Table Present?	Yes No	_ Depth (inches):0	lar-di		
Saturation Present?	Yes No	_ Depth (inches):0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:			
Remarks:					

VEGETATION - Use scientific nan	nes of plants			Sampling Point: AT-1/AT-
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:
Tree Stratum (Plot size:)	Cover	Species?	Status	
Quercus laurifolia	40	yes	FACW	Number of Dominant Species
2. Schinus terebinthifolius	30	yes	FAC	That Are OBL, FACW, or FAC: $\frac{5}{}$ (A)
3.				Total Number of Dominant
4.			-	Species Across All Strata: 7 (B)
5.				Percent of Dominant Species 71.42 (A/I
6.				That Are OBL, FACW, or FAC:
7.				Prevalance Index worksheet:
	70	= Total Cove	er	Total % Cover of: Multiply by:
Sapling Stratum (Plot size:	)			OBL species x1=
Schinus terebinthifolius	10	yes	FAC	FACW species x2=
Acer rubrum	5	yes	OBL	FAC species x3=
3.				FACU species x4=
4.				UPL species x5=
5.				Column Totals: (A) (B)
6.	_			
7.				Prevalance Index = B/A =
	15	= Total Cove	er	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%
1.				Prevalence Index is ≤3.0 <sup>1</sup>
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7.				
	0	= Total Cove	er	Tree- Woody plants, excluding woody vines,
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7.6
Urena lobata	15	yes	FACU	cm) or larger in diameter at breast height (DBH).
Ludwigia peruviana	15	yes	OBL	Sapling- Woody plants, excluding woody vines,
3. Panicum hemitomon	10	no	OBL	approximately 20 ft (6m) or more in height and less than
Blechnum serrulatum	10	no	FACW	in. (7.6 cm) DBH.
5. Osmunda cinnamomea	5	no	FACW	Shrub- Woody plants, excluding woody vines,
6. Panicum repens	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.
7. Ludwigia repens	2	no	OBL	Herb- All herbaceous (non-woody)plants, including
Pontederia cordata	11	no	OBL	herbaceous vines, regardless of size. Includes woody
9.				plants, except woody vines, less than approximately 3 ft (
10.				m) in height.
11.				Woody vine- All woody vines, regardless of height.
12.				
	60	= Total Cove	er	
Woody Vine Stratum (Plot size:	)			
Rubus spp.	15	yes	FACU	
2.				
3.				
4.				Hydrophytic
5.				Vegetation Present? YesNoNo
	15	= Total Cove	er	
Remarks: (If observed, list morpho	_	-		
Percent cover estimates based on	meandering s	urvey of the b	roader cor	mmunity.

SOIL						Sampling Point: AT-1/AT
	scription: (Describe to the dep	th needed to docu		onfirm the ab	sence of indicators.)	
Depth	Matrix		Redox Features			
inches)	Color (moist) %	Color (moist)	% Type	Loc <sup>2</sup>	Texture	Remarks
	40.70.04					dad. ara. Era anad
-5	10 YR 3/1					very dark gray fine sand gray fine sand
20	10 YR 6/1 N 2/0					black fine sand
20-25	5 YR 3/3					dark reddish brown fine sand
25-30	<u> </u>					dark reddish brown line sand
						<del></del>
Time: Car	Concentration, D=Depletion, RM=	Bodusad Matrix C	C=Covered or Costed C	and Grains	<sup>2</sup> Location: PL=Pore	Lining M-Matrix
	oil Indicators:	Reduced Iviality, C	3-Covered or Coated S	and Grants.		ndicators for Problematic Hydric Soils 3:
Histol			Polyvalue Below Sur	ace (SR) (I PR		1 cm Muck (a9) (LRR O)
	Epidon (A2)	-	Thin Dark Surface (S			2 cm Muck (A10) (LRR S)
	Histic (A3)	-	Loamy Mucky Minera		-	Reduced Vertic (F18) (outside MLRA 150A, B)
	egen Sulfide (A4)	-	Loamy Gleyed Matrix		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
		-	Depleted Matrix (F3)	(FZ)	-	<del></del>
	fied Layers (A5) nic Bodies (A6) (LRR P, T, U)	-	Depleted Matrix (F3) Redox Dark Surface	(F6)	-	Anomalous Bright Loamy Soils (F20)
		-				(MLRA 153B)
	Mucky Mineral (A7) (LRR P,T,U)	-	Depleted Dark Surfa	` '	-	Red Parent Material (TF2)
<u>✓</u> Muck	Presence (A8) (LRR U)	-	Redox Depressions	(F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)	_	Marl (F10) (LRR U)		_	Other (Explain in Remarks)
— Denle	ted Below Dark Surface (A11)		Depleted Orchric (F1	1) (MLRA 151)	1	
	Dark Surface (A12)	-	Iron-Manganese Mas		DO DTI	
	, ,	-	_			Indicators of hydrophytic vegetation and wetland
Coast	t Prairie Redox (A16) (MLRA 150	A) _	Umbric Surface (F13	) (LKK P, 1, U)	•	nydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (LRR O, S)		Delta Orchric (F17) (	MLRA 151)	p	problematic.
Sand	Gleyed Matrix (S4)		Reduced Vertic (F18	) (MLRA 150A,	150B)	
	Redox (S5)	-	Piedmont Floodplain			
	ped Matrix (S6)	-			) (MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P, S, T, U)	•	_		, , , , , , ,	·
	e Layer (If observed):				т	
	• •					
	Type:				Hydric Soil Present	? Yes ✓ No .
Remarks:	Depth (inches):				Invaric Soil Present	r res v No .
vemarks.						

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date: 10/1/09
Applicant/Owner: Progress Energy Florida, Inc.	•	State:FL		Sampling Point: AU
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.109514	Long:82.5	19008	Datum: WGS84
Soil Map Unit Name: Smyrna fine sands			_NWI classification:	NA
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances	
	or Hydrology		(If needed, explain	any answers in Remarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Yes/ No	Is the Sampled Area w	vithin a Wetland?	YesNo
Wetland Hydrology Present?	YesNo			
Remarks:				
HYDROLOGY				
			Casandan Indianta	
Wetland Hydrology Indicators:	hoek all that apply)			ers (minimum of two required)
Primary Indicators (minimum of one is required; c		D0)	Surface Soil (	etated Concave Surface (B8)
✓ Surface Water (A1)	Water-Stained Leaves (I			` ′
High Water Table (A2)  ✓ Saturation (A3)		D III	Drainage Patt  Moss Trim Lir	· · ·
	Marl Deposits (B15) (LR	•		Vater Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (	,		` ′
Sediment Deposits (B2)	Oxidized Rhizospheres of Presence of Reduced Iro		Crayfish Burre	` ´
Drift Deposits (B3) Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic F	sible on Aerial Imagery (C9)
Iron Deposits (B5)	Thin Muck Surface (C7)	` '	Shallow Aquit	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral	` '
Field Observations:	Other (Explain in Nemai	KS)	FAC Neutral	rest (D3)
Surface Water Present?	Yes No	Denth (inches): 0-36		
Water Table Present?	Yes✓ No		1	
Saturation Present?			Wetland	
(includes capillary fringe)	100	Deptil (iliches)	Hydrology Present?	Yes ✓ No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	r resent:	163110
, , , , , ,				
Remarks:				
remarks.				
•				

VEGETATION - Use scientific name	nes of plants			Sampling Point: Al
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:
Tree Stratum (Plot size:)	Cover	Species?	Status	
1.				Number of Dominant Species
2.				That Are OBL, FACW, or FAC: $\frac{4}{}$ (A)
3.				Total Number of Dominant
4.				Species Across All Strata: 4 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC:
7.				Prevalance Index worksheet:
	0	= Total Cove		Total % Cover of: Multiply by:
Sapling Stratum (Plot size:	)	rotal cove	•	OBL species x1=
Schinus terebinthifolius	 15	yes	FAC	FACW species x2=
Quercus laurifolia	5	ves	FACW	FAC species x3=
3.				FACU species x4=
4.				UPL species x5=
4. 5.				Column Totals: (A) (B)
6.		<del> </del>		(7)
7.	<del></del>	<del></del>		Prevalance Index = B/A =
··	20	= Total Cove		Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:	)	10101 0010	•	✓ Dominance Test is 50%
Sambucus canadensis	<i>/</i> 35	V00	FACW	Prevalence Index is ≤3.0¹
2.		yes	FACVV	<del></del>
3.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
4.				<b>1</b> , , , , , ,
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6.				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:
7.				Definitions of vegetation Strata:
7.		- T-4-1 O		<u>.                                    </u>
Harb Strature (Blat aire)	35	= Total Cove	er	Tree- Woody plants, excluding woody vines,
Herb Stratum (Plot size:)			0.01	approximately 20 ft (6m) or more in height and 3 in. (7.6
Ludwigia peruviana	10	yes	OBL	cm) or larger in diameter at breast height (DBH).
2.				Sapling- Woody plants, excluding woody vines,
3.				approximately 20 ft (6m) or more in height and less than
4.				in. (7.6 cm) DBH.
5				Shrub- Woody plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7.				Herb- All herbaceous (non-woody)plants, including
8.				herbaceous vines, regardless of size. Includes woody
9.				plants, except woody vines, less than approximately 3 ft (
10.				m) in height.
11.				Woody vine- All woody vines, regardless of height.
12.				
	10	= Total Cove	er .	
Woody Vine Stratum (Plot size:	)			
1.				
2.			_	
3.				
4.				Hydrophytic
5.	<del></del>			Vegetation Present? Yes <u>√</u> NoNo
	0	= Total Cove	 er	1 •
Remarks: (If observed, list morpho	ological adapta			
Percent cover estimates based on	_	-	roader cor	mmunity.

Depth (inches) Colo  0-4 10 YR 3  4-12 10 YR 6  12-15 7.5 YR  15-20 10 YR 3	Matrix r (moist)  //1  //1  //1  //2	6 Color (moist)  Color (moist)	Redox Features % Type¹	Loc <sup>2</sup>	Texture	Remarks  very dark gray fine sand gray fine sand dark brown fine sand very dark grayish brown fine sand
(inches) Colo  0-4 10 YR 3  4-12 10 YR 3  1-15-20 10 YR 3  Type: C=Concentra  Hydric Soil Indicate  Histol (A1)  Histic Epidon (A  Black Histic (A3  Hydrogen Sulfid	r (moist) 5  //1  //1  //2  tion, D=Depletion prs:		% Type'	Loc²	Texture	very dark gray fine sand gray fine sand dark brown fine sand
0-4 10 YR 3 4-12 10 YR 6 12-15 7.5 YR 1 15-20 10 YR 3  'Type: C=Concentra Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	/1 /1 /2 /2 tion, D=Depletion prs:				rexture	very dark gray fine sand gray fine sand dark brown fine sand
4-12 10 YR 6 12-15 7.5 YR 1 15-20 10 YR 3  Type: C=Concentra Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	/1 3/2 /2 tion, D=Depletion ors:	, RM=Reduced Matrix,	CS=Covered or Coal			gray fine sand dark brown fine sand
4-12 10 YR 6 12-15 7.5 YR 3 15-20 10 YR 3  Type: C=Concentra Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	/1 3/2 /2 tion, D=Depletion ors:	, RM=Reduced Matrix, (	CS=Covered or Coal			gray fine sand dark brown fine sand
'Type: C=Concentra Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	tion, D=Depletion prs: 2)	, RM=Reduced Matrix,	CS=Covered or Coal			
Type: C=Concentra Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	tion, D=Depletion ors: 2)	, RM=Reduced Matrix,	CS=Covered or Cost			very dark grayish brown fine sand
Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	ors: 2)	, RM=Reduced Matrix,	CS=Covered or Coat			
Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	ors: 2)	, RM=Reduced Matrix,	CS=Covered or Coat			
Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	ors: 2)	, RM=Reduced Matrix,	CS=Covered or Coat			
Hydric Soil Indicate Histol (A1) Histic Epidon (A Black Histic (A3 Hydrogen Sulfid	ors: 2)	, RM=Reduced Matrix,	CS=Covered or Coat			
Histol (A1)Histic Epidon (ABlack Histic (A3Hydrogen Sulfid	2)		00-0040104 01 0041	led Sand Grains.	<sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
Histic Epidon (A Black Histic (A3 Hydrogen Sulfid						Indicators for Problematic Hydric Soils 3:
Black Histic (A3 Hydrogen Sulfid			Polyvalue Belov	v Surface (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Hydrogen Sulfid			Thin Dark Surfa	ice (S9) (LRR S, T, U	J)	2 cm Muck (A10) (LRR S)
	)		Loamy Mucky M	Mineral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Stratified Layers	e (A4)		Loamy Gleyed N	Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
			Depleted Matrix			Anomalous Bright Loamy Soils (F20)
Organic Bodies	(A6) (LRR P, T, I	J)	Redox Dark Sur	face (F6)		(MLRA 153B)
5 cm Mucky Mir	eral (A7) (LRR P	,T,U)	Depleted Dark S	Surface (F7)		Red Parent Material (TF2)
✓ Muck Presence	(A8) (LRR U)		Redox Depress	ions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9)			Marl (F10) (LRF	₹ U)		Other (Explain in Remarks)
Depleted Below	Dark Surface (A	l <b>1</b> )	Depleted Orchri	ic (F11) (MLRA 151)		
Thick Dark Surface (A12)Iron-Manganese		e Masses (F12) (LRR	₹ O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
Coast Prairie Re	edox (A16) (MLR	A 150A)	Umbric Surface	(F13) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy Mucky M	ineral (S1) (LRR	O, S)	Delta Orchric (F	17) (MLRA 151)		problematic.
Sandy Gleyed N	fatrix (S4)		Reduced Vertic	(F18) (MLRA 150A,	150B)	
Sandy Redox (S	S5)			lplain Soils (F19) (ML	•	
Stripped Matrix	(S6)		Anomalous Brig	ht Loamy Soils (F20)	) (MLRA 149A, 153)	C, 153D)
Dark Surface (S	7) (LRR P, S, T,	U)				
Restrictive Layer (	f observed):					
Туре:						
Depth (in Remarks:	ches):	Wallet			Hydric Soil Prese	ent? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date:	10/1/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL_		Sampling Point:	AV
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	28 27S 18E		
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	SI	lope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.111481	Long: <u>-82.5</u>	08374	D:	atum: WGS84
Soil Map Unit Name: Myakka fine sands			NWI classification:		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances	normal? Ye	esNo
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in F	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant feature	s, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes✓N	o
Wetland Hydrology Present?	Yes/No				
Remarks:					
LIVEROL COV					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate		wo required)
Primary Indicators (minimum of one is required; c			Surface Soil	• •	
✓ Surface Water (A1)	Water-Stained Leaves (E	B9)		getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	` '	
Saturation (A3)	Marl Deposits (B15) (LRI	·	Moss Trim Li		
Water Marks (B1)	Hydrogen Sulfide Odor (	•	— <i>'</i>	Water Table (C2)	I
Sediment Deposits (B2)	Oxidized Rhizospheres of		Crayfish Burn		
Drift Deposits (B3)	Presence of Reduced Iro	` '		isible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	` '	Geomorphic		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No	Depth (inches): 0	Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes <u> </u>	o
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			
Remarks:					
	•				
·					*
	,				

VEGETATION - Use scientific n	ames of plants				pling Point:	AV
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	_ Cover	Species?	Status	†		
1.				Number of Dominant Species	<u>3</u>	(A)
2.				That Are OBL, FACW, or FAC:	⊻	( ,
3.				Total Number of Dominant	3	(B)
4.				Species Across All Strata:	2	(5)
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	100.00	(700)
7.				Prevalance Index worksheet:	<u></u>	
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.	_			FACW species	x2=	
2.					x3=	_
3.						_
4.				• · —	x5=	
5.					(A)	- (В)
6.					( )	_(_)
7.				Prevalance Index = B/A =		
		= Total Cove		Hydrophytic Vegetation Indica	tors:	
Shrub Stratum (Plot size:	)	10.01000	•	✓ Dominance Test is 50%		
1.	/			Prevalence Index is ≤3.0	1	
2.				Problematic Hydrophytic		dain)
3.				Froblematic Hydrophytic	vegetation (Exp	лапт)
4.				11		4
5.				Indicators of hydric soil and wet be present, unless disturbed or present.		nust
5. 6.			<del></del>	Definitions of Vegetation Strat		
7.				Definitions of vegetation strat	a.	
1.				<del>_</del>		
Harb Chrotine (Diet sies)	0	= Total Cove	Γ	Tree- Woody plants, excluding wo		(7.C
Herb Stratum (Plot size:)			0.01	approximately 20 ft (6m) or more in		(7.6
Bacopa monnieri	3	yes	OBL	cm) or larger in diameter at breast		
Ludwigia repens	3	yes	OBL	Sapling- Woody plants, excluding	•	
Cyperus spp.	2	yes	FACW	approximately 20 ft (6m) or more in	n height and less	than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding w	•	
6.				approximately 3 to 20 ft (1 to 6 m)	in height.	
7.				Herb- All herbaceous (non-woody)		
8.				herbaceous vines, regardless of s		
9.				plants, except woody vines, less th	ian approximately	/ 3 ft (1
10.				m) in height.		
11.	_\			Woody vine- All woody vines, reg	ardless of height.	
12.						
	8	= Total Cove	r			
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.				Hydrophytic		
5.				4 * * * *	√ No	
		= Total Cove	 r	1 3		<del></del>
Remarks: (If observed, list morp				<del>.</del>		

Percent cover estimates based on meandering survey of the broader community.

								Sampling Point:
		o the dep	th needed to doc			confirm the abs	ence of indicators.)	
	Matrix				Features			
s)	Color (moist)	<u>%</u>	Color (moist)	<u> </u>	Type <sup>1</sup>	Loc2	Texture	Remarks
4	0 YR 3/1							very dark gray fine sand
	0 YR 6/1						•	gray fine sand
	2/0							black fine sand
	YR 3/3							dark reddish brown fine sand
<del>-</del>	11 3/3							dark reddish brown line sand
		—						
							•	
: C=Con	centration, D=Deple	etion, RM=	Reduced Matrix, (	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix.
c Soil Ir	ndicators:		· · · · · · · · · · · · · · · · · · ·					Indicators for Problematic Hydric Soils 3:
listol (A1				Polyv	value Below Su	face (S8) (LRR		1 cm Muck (a9) (LRR O)
listic Èpi	idon (A2)		•			59) (LRR S, T, U		2 cm Muck (A10) (LRR S)
lack His	` '					al (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, I
	Sulfide (A4)		•		ny Gleyed Matri		•	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)				eted Matrix (F3		•	
	Bodies (A6) (LRR P.	T 10			ox Dark Surface			Anomalous Bright Loamy Soils (F20)
-								(MLRA 153B)
	cky Mineral (A7) (LF				eted Dark Surfa			Red Parent Material (TF2)
Nuck Pre	esence (A8) (LRR L	I)			x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
cm Muc	k (A9) (LRR P,T)			Mart	(F10) (LRR U)		-	Other (Explain in Remarks)
epleted	Below Dark Surface	e (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
hick Dar	k Surface (A12)			Iron-l	Manganese Ma	sses (F12) (LRR	(O, P,T)	Stadiostors of hydrophydia constation and costand
oast Pra	airie Redox (A16) (N	/LRA 150	A)	Umb	ric Surface (F1	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	, ,,		•		Orchric (F17)			problematic.
-	ucky Mineral (S1) (L	KK U, 3)				B) (MLRA 150A,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	eyed Matrix (S4)				•	, ,	•	
	edox (S5)					Soils (F19) (ML		4500)
	Matrix (S6)			Anon	naious Bright Li	oamy Solis (F20)	(MLRA 149A, 153C	, 1530)
	face (S7) (LRR P, S							
	ayer (If observed):							
	pth (inches):						Hydric Soil Presen	t? Yes <u>√</u> No
Тур							Hydric Soil Presen	t? Yes <u>√</u> No

Applicant/Owner:   Progress Energy Florida, Inc.   Investigator(s):  Justin Stert, Amy Piko	Investigator(s):	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date:_	10/1/09
Local relief (concave, convex, none): none   Slope (%): Subregion (LRR or MLRA): LR U	Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Slope (%): Subregion (LRR or MLRA): LR U Lat: 28.111941 Long: -82.507198 Datum: WGS84 Soll Map Unit Name: Myakka fine sands Are climatic / hydrologic conditions on the site typical for this time of year? Yes _ No (if no, explain in Remarks) Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes _ No (if no, explain in Remarks) Are Vegetation Soil or Hydrology naturally problematic? (if needed, explain any answers in Remarks) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes _ No ts the Sampled Area within a Wetland? Yes _ No Sparsely Vegetated Concave Surface (B8) Hydrology Present? Yes _ No surface Soil Cracks (B6) — High Water Ada (A2) Aquatic Fauna (B13) Drainage Patterns (B10) — Saturation (A3) Adquatic Fauna (B13) Drainage Patterns (B10) — Saturation (A3) Adquatic Fauna (B13)	Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	AW
Subregion (LRR or MLRA): LRR U Lat: 28.111941 Long: 42.507196 Datum: WGS84  Soil Map Unit Name: Myakke fine sands Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are recircumstances normal? Yes No	Subregion (LRR or MLRA): LRR U Lat: 28.111941 Long: _82.507196 Datum: WGS84  Soll Map Unit Name: Myskika fine sands NWII classification: _MA Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	Investigator(s): Justin Styer, Amy Piko					
Are climatic / hydrologic conditions on the site typical for this time of year? Yes _ No _ (If no, explain in Remarks)  Are Vegetation _ Soil _ or Hydrology _ significantly disturbed? Are circumstances normal? Yes _ No _ Are Vegetation _ Soil _ or Hydrology _ naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?	Are climatic / hydrologic conditions on the site typical for this time of year?  Are logetation	Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	rex, none): none	Slc	ppe (%):
Are climatic / hydrologic conditions on the site typical for this time of year? Yes _ No _ (If no, explain in Remarks)  Are Vegetation _ Soil _ or Hydrology _ significantly disturbed? Are circumstances normal? Yes _ No _ Are Vegetation _ Soil _ or Hydrology _ naturally polisturbed? Are circumstances normal? Yes _ No _ If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?	Soil Map Unit Name: Myakka fine sands Are climatic / hydrologic conditions on the site typical for this time of year? Are Vegetation Soil or Hydrology naturally problematic? Are Vegetation Soil or Hydrology naturally problematic? Are vegetation Soil or Hydrology naturally problematic? Are vegetation Soil or Hydrology naturally problematic? Are vegetation Soil or Hydrology If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophyfic Vegetation Present? Yes No Hydrospir Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Surface Water (A1) Water Table (A2) Aquatic Fauna (813) Saturation (A3) Mart Deposits (B15) (LRR U) Water Marks (B1) Hydroger Sulfde Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Diff Deposits (B3) Presence of Reduced Iron (C4) Saturation (X8) FAC Neutral Test (D5) Fried Observations: Surface Water (Present? Ves No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) FRIed Observations: Surface Water Present? Ves No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Ves No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Yes No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Yes No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Yes No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Yes No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Yes No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Yes No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Yes No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5) Fresent? Yes No Depth (inches): Other (Explain in Remarks) FAC Neutral Test (D5)	Subregion (LRR or MLRA): LRR U	Lat: 28.111941	Long: <u>-82.5</u>	07196	Da	tum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No networks (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrolypic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No No Netland Hydrology Present?  Wetland Hydrology Present? Yes No No No No No No No No No No No No No	Are VegetationSoil or Hydrologysignificantly disturbed? Are circumstances normal? YesNo						
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes / No	Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present? Yes  No   Is the Sampled Area within a Wetland? Yes  No   Is the Sampled Area within a Wetland? Yes  No   Is the Sampled Area within a Wetland? Yes  No   Is the Sampled Area within a Wetland? Yes  No   No   Is the Sampled Area within a Wetland? Yes  No   No   Is the Sampled Area within a Wetland? Yes  No   No   Is the Sampled Area within a Wetland? Yes  No   No   Is the Sampled Area within a Wetland? Yes  No   No   No   No   No   No   No   No	Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_No	(If no, explain in I	Remarks)
Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Hydrophytic Vegetation Present? Yes No	SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydroc Soil Present?  Yes	Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Ye	sNo
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Wetland Hydrology Present?  Wetland Hydrology Indicators: Primary Indicators (minimum of two required) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Saturation (A3) Marl Deposits (B15) (LRR U) Moss Tim Lines (B16) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Surface Water Pesent? Yes _ No _ Depth (inches): _ O Wetland Hydrology Present? Yes _ No _ Depth (inches): _ O Wetland Hydrology Present? Yes _ No _ Depth (inches): _ O Wetland Hydrology Present? Yes _ No _ Depth (inches): _ O Wetland Hydrology Present? Yes _ No _ Depth (inches): _ O Wetland Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present? Yes _ No _ Depth (inches): _ O Hydrology Present?	Hydrophytic Vegetation Present? Hydric Soil Present? Yes No	Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:    Secondary Indicators (minimum of two required)	Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Stairadio (A3)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Titled Soils (C6)  Iron Deposits (B5)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  FAC Neutral Test (D5)  FIeld Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present? Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				ransects, impo	rtant features	, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  — Aquatic Fauna (B13)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — John Deposits (B5)  — In Muck Surface (C7)  — Shallow Aquitard (D3)  — In Muck Surface (C7)  — Shallow Aquitard (D3)  — In Muck Surface (C7)  — Shallow Aquitard (D3)  — Fac Neutral Test (D5)  Field Observations:  Surface Water Present?  — Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 0  Wetland  Hydrology  Present? Yes ✓ No — Depth (inches): — 1	Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Harks (B1)  Water Marks (B1)  Water Marks (B1)  Aydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Seturation (D2)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?						
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Soil Cracks (B6)  ✓ Surface Water (A1)	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Marl Deposits (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Thin Muck Surface (C7)  Soluration (A3)  Depth (inches):  Depth (inches):  Wetland  Hydrology  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  Owner  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Hydric Soil Present?	Yes/ No	Is the Sampled Area w	ithin a Wetland?	Yes <u></u> ✓ No	
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Shallow Aquitard (D3)  — FAC Neutral Test (D5)  Field Observations:  Surface Soil Cracks (B6)  — Sparsely Vegetated Concave Surface (B8)  — Drainage Patterns (B10)  — Moss Trim Lines (B16)  — Dry-Season Water Table (C2)  — Crayfish Burrows (C8)  — Saturation Visible on Aerial Imagery (C9)  — Saturation Visible on Aerial Imagery (C9)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  — FAC Neutral Test (D5)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inches): 0  Hydrology  Present? Yes ✓ No — Depth (inche	HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  High Water Table (A2)  ✓ Saturation (A3)  Water Deposits (B15) (LRR U)  Water Marks (B1)  — Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  — Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C5)  — Inundation Visible on Aerial Imagery (B7)  Saturation (Pasent??  Yes ✓ No Depth (inches): 0  Wetland Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetlan	Wetland Hydrology Present?	Yes ✓ No				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Wet Table Present?  Yes ✓ No Depth (inches): 0  Saturation Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Depth (inches): 0  Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Remarks:				· · · · · · · · · · · · · · · · · · ·	
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Wet Table Present?  Yes ✓ No Depth (inches): 0  Saturation Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Depth (inches): 0  Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Wet Table Present?  Yes ✓ No Depth (inches): 0  Saturation Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Depth (inches): 0  Present? Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Wet Table Present?  Yes ✓ No Depth (inches): 0  Saturation Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Wet Table Present?  Yes ✓ No Depth (inches): 0  Saturation Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced Iron (C4)  — Algal Mat or Crust (B4)  — Iron Deposits (B5)  — Thin Muck Surface (C7)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  Wet Table Present?  Yes ✓ No Depth (inches): 0  Saturation Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Depth (inches): 0  Wetland Hydrology Present?  Yes ✓ No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	HYDROLOGY					
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes  No  Depth (inches):  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes  No  Depth (inches):  O  Wetland  Hydrology  Present?  Yes  No  No  Depth (inches):  O  Present?  Yes  No  No  Depth (inches):  O  Present?  Yes  No  No  Depth (inches):  O  Present?  Yes  No  No  Depth (inches):  O  Present?  Yes  No  No  Depth (inches):  O  Present?  Yes  No  No  Depth (inches):  O  Present?  Yes  No  No  No  No  No  No  No  No  No  No	Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iton Deposits (B5)  Thin Muck Surface (C7)  Iton Deposits (B5)  Thin Muck Surface (C7)  Iton Deposits (B5)  Field Observations:  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches): 0  Depth (inches): 0  Wetland Hydrology  Present? Yes No Depth (inches): 0  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				Secondary Indicate	ors (minimum of tw	o required)
✓ Surface Water (A1)	✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:       Ves ✓ No Depth (inches): 0       Wetland         Water Table Present?       Yes ✓ No Depth (inches): 0       Wetland         Water Table Present?       Yes ✓ No Depth (inches): 0       Wetland         Present Present?       Yes ✓ No Depth (inches): 0       Wetland         Present Present?       Yes ✓ No Depth (inches): 0       Wetland         Present Present?       Yes ✓ No Depth (inches): 0       Wetland         Present Pre	·	heck all that apply)				
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)	High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)			39)		, ,	Surface (B8)
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Valuation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes✓No Depth (inches):O         Wetland Hydrology         Wetland Hydrology         Fresent? Yes✓No         Includes capillary fringe)	Marl Deposits (B15) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Water Table Present?  Yes ✓ No Depth (inches): 0  Saturation Visible on Aerial Imagery (Findules Capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Moss Trim Lines (B16)  — Moss Trim Lines (B16)  — Dry-Season Water Table (C2)  — Crayfish Burrows (C8)  — Crayfish Burrows (C8)  — Saturation Visible on Aerial Imagery (C9)  — Saturation Visible on Aerial Imagery (C9)  — Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  Yes ✓ No Describes Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	<del> </del>		,			` '
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	<b>├</b>		R U)			
Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Water Table Present?  Yes No Depth (inches): 0  Wetland  Hydrology  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes No Depth (inches): 0  Hydrology  Present?  Yes No Depth?  Yes No Depth?  Yes No Depth?  Yes No Depth?  Yes No Depth (inches): 0  Wetland  Hydrology  Present?  Yes No Depth?	Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)	- ' ' ' ' '		•			
Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduction in Tilled Soils (C6) Proposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7)  Thin Muck Surface (C7) Shallow Aquitard (D3) FAC Neutral Test (D5)  Field Observations: Surface Water Present?  Water Table Present?  Yes ✓ No Depth (inches): 0 Wetland Hydrology Present?  Yes ✓ No Present?  Wes ✓ No Pepth (inches): 0 Wetland Hydrology Present?  Yes ✓ No Pepth (inches): 0 Wetland Present?  Wes ✓ No Pepth (inches): 0 Wetland Present?  Yes ✓ No Pepth (inches): 0 Wetland Present?  Yes ✓ No Pepth (inches): 0 Present?  Yes ✓ No Pepth (inches): 0 Present?  Yes ✓ No Pepth (inches): 0 Present?  Yes ✓ No Pepth (inches): 0 Present?  Yes ✓ No Pepth (inches): 0 Present?  Yes ✓ No Pepth (inches): 0 Present?  Yes ✓ No Pepth (inches): 0 Present?  Yes ✓ No Pepth (inches): 0 Present?  Yes ✓ No Pepth (inches): 0 Present?	Drift Deposits (B3)	· '		•	<del></del>		
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)Shallow Aquita	Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Shallow Aquitard (D3)	· · · ·					agery (C9)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Other (Explain in Remarks) FAC Neutral Test (D5) Shallow Aquitard (D3) Other (Explain in Remarks) FAC Neutral Test (D5) Startantion Present? Yes No Depth (inches): O Wetland Hydrology (includes capillary fringe)	Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)	<del></del>					.90.7 (00)
✓ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC Neutral Test (D5)   Field Observations: Surface Water Present? Yes ✓ No Depth (inches):	Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes / No Depth (inches):0	<del></del>		, r.m. a como (co)			
Field Observations:         Surface Water Present?       Yes ✓ No Depth (inches):	Field Observations:  Surface Water Present?  Yes _ ✓ No Depth (inches):0			ks)		, ,	
Surface Water Present?       Yes ✓ No	Surface Water Present?  Yes _ ✓ No Depth (inches):0  Water Table Present?  Yes _ ✓ No Depth (inches):0  Saturation Present?  Yes _ ✓ No Depth (inches):0  Hydrology Present?  Yes _ ✓ No Depth (inches):0  Wetland Hydrology Present?  Yes _ ✓ No Depth (inches):0  Hydrology Present?  Yes _ ✓ No Depth (inches):0  Yes _ ✓ No		Other (Explain III ) terrain	,	17.01104.141	7 001 (20)	
Water Table Present?  Yes _	Water Table Present?  Yes _ ✓ No Depth (inches): _ 0 Wetland Hydrology Present?  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Yes ✓ No	Depth (inches): 0-12			
Saturation Present?  Yes	Saturation Present?  Yes✓ No Depth (inches):0				1		
(includes capillary fringe) Present? Yes <a href="#">Yes</a> <a href="#">Yo</a> <a href="#">No</a> <a href="#"></a>	(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			. , , ,	I .		
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		140140	Bopan (moneo)		Voc. / No	
			ing well periol photos, previous	inenections) if available:	Present	Tes v No	
	Remarks:						
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Remarks:  .							

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	AW
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1. Salix spp.	15	yes	FACW	Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	(B)
5.	·			Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
7.	15	= Total Cove		4	
Sapling Stratum (Plot size:	۱۵	- Total Cove	:1	Total % Cover of: Multiply by: OBL species x1=	
	/				_
1. 2.	·			FACW species x2=	_
				FAC species x3=	_
3.				FACU species x4=	<del></del>
4.	·			UPL speciesx5=	<b>—</b>
5.				Column Totals:(A)	_(B)
6.					
7.				Prevalance Index = B/A =	
	0	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	plain)
3.					
4.				Indicators of hydric soil and wetland hydrology r	nust
5.	·			be present, unless disturbed or problematic.	į
6.				Definitions of Vegetation Strata:	
7.				1	
	0	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in.	. (7.6
Bacopa monnieri	20	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Panicum repens	20	yes	FACW	Sapling- Woody plants, excluding woody vines,	
Alternanthera philoxeroides	20	yes	OBL	approximately 20 ft (6m) or more in height and less	than 3
Ludwigia peruviana	15	yes	OBL	in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.					
8.	·			Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woo	
9.	· <del></del>			plants, except woody vines, less than approximately	
10.	· <del></del>	<del></del>		m) in height.	, • (.
11.			· - · · · · · · · · · · · · · · · · · ·	Woody vine- All woody vines, regardless of height.	
				woody vines All woody vines, regardless of height.	<i>'</i>
12.		- Total Cour		1	
	75	= Total Cove	er E		
Woody Vine Stratum (Plot size:					
1.				-	
2.					
3.				1	
4.				Hydrophytic	
5.				Vegetation Present? YesNo	<del></del>
	0	= Total Cove	er		
Remarks: (If observed, list morph	-				
Percent cover estimates based or	n meandering s	urvey of the b	roader co	mmunity.	1

County/soil: Hillsborough- Myakka
SOIL

Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks  10 YR 3/1 0 10 YR 6/1 0 10 YR 6/1 30 5 YR 3/3 30 5 YR	ofile Description: (Describe to the depth nee pth Matrix	Redox Features	Jilli ille absence of mulcacc	ns.,
10 YR 6/1 25 N 2/0 30 5 YR 3/3  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Dec. Depletion Cancel (F1) (LRR O)  Dec. Depletion Dec. Cancel Matrix, CS=Covered or Coated Sand Grains.  Dec. Depletion Dec. Cancel Matrix, CS=Covered or Coated Sand Grains.  Dec. Depletion Dec. Cancel Matrix, CS=Covered or Coated Sand Grains.  Dec. Depletion Dec. Cancel Matrix, CS=Covered or Coated Sand Grains.  Dec. Depletion Dec. Cancel Matrix, CS=Covered or Coated Sand Grains.  Dec. Dec. Dec. Dec. Cancel Matrix, CS=Covered or Coated Sand Grains.  Dec. Dec. Dec. Dec. Dec. Dec. Dec. Dec.			Loc <sup>2</sup> Texture	Remarks
Diack fine sand   Diack fine	5 10 YR 3/1			very dark gray fine sand
## Section Per Per Lining, M=Matrix.  ## Soil Indicators:  ## Histol (A1)  ## Polyvalue Below Surface (S8) (LRR S, T, U)  ## Histol (A2)  ## Polyvalue Below Surface (S8) (LRR S, T, U)  ## Polyvalue Below Surface (S8) (LRR S, T, U)  ## Indicators for Problematic Hydric Soils *:  ## Indicators of Hydrophytic Vegetation and wetland Hydrology must be present, unless disturbed or problematic.  ## Indicators of Hydrophytic Vegetation and wetland Hydrology must be present, unless disturbed or problematic.  ## Indicators of Hydrophytic Vegetation and wetland Hydrology must be present, unless disturbed or problematic.  ## Indicators of Hydrophytic Vegetation and wetland Hydrology must be present, unless disturbed or problematic.  ## Indicators of Hydrophytic Vegetation and Wetland Hydrology must be present, unless disturbed or problematic.  ## Indicators of Hydrophytic Vegetation and Wetland Hydrology must be pre	20 10 YR 6/1			gray fine sand
pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  #Indicators:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 4:   Indicators for Problematic Hydric Soils 4:   Indicators for Problematic Hydric Soils Present?   Indicators for Problematic Hydric Soils Present?   Indicators for Problematic Hydric Soils Present?   Indicators for Problematic Hydric Soils Present?   Indicators for Problematic Hydric Soils Present?   Indicators for Problematic Hydric Soils Present?   Indicators for Problematic Hydric Soil Present?   Indicators for Problematic Hydric Soils Present?   Indicators for Problematic Hydric Soil Present?   Indicators for Problematic Hydric Soil Present?   Indicators for Problematic Hydric Soil Present?   Indicators for Problematic Hydric Soil Present?   Indicators for Problematic Hydric Soil Present?   Indicators for Problematic Hydric Soil Present?   Indicators for Proble	-25 N 2/0			black fine sand
### Depleted Below Dark Surface (A11)    Depleted Below Dark Surface (A11)   Comay Muck (A9) (LRR P, T, U)   Coast Prairie Redox (A16) (MLRA 150A)   Depleted Below Dark Surface (A12)   Coast Prairie Redox (A16) (MLRA 150A)   Sandy Mucky Mineral (S1) (LRR O, S)   Sandy Mucky Mineral (S1) (LRR O, S)   Sandy Redox (S5)   Depleted Matrix (F3)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150B)   Depleted Matrix (S6)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150B)   Depleted Matrix (S6)   Depleted Or Chric (F17) (MLRA 149A)   Sandy Redox (S5)   Depleted Or Chric (F18) (MLRA 149A)   Sandy Redox (S1) (LRR P, S, T, U)   Strictive Layer (If observed):   Type: Depth (inches): Hydric Soil Present? Yes No	30 5 YR 3/3			dark reddish brown fine sand
### Depleted Below Dark Surface (A11)    Depleted Below Dark Surface (A11)   Comay Muck (A9) (LRR P, T, U)   Coast Prairie Redox (A16) (MLRA 150A)   Depleted Below Dark Surface (A12)   Coast Prairie Redox (A16) (MLRA 150A)   Sandy Mucky Mineral (S1) (LRR O, S)   Sandy Mucky Mineral (S1) (LRR O, S)   Sandy Redox (S5)   Depleted Matrix (F3)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150B)   Depleted Matrix (S6)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150B)   Depleted Matrix (S6)   Depleted Or Chric (F17) (MLRA 149A)   Sandy Redox (S5)   Depleted Or Chric (F18) (MLRA 149A)   Sandy Redox (S1) (LRR P, S, T, U)   Strictive Layer (If observed):   Type: Depth (inches): Hydric Soil Present? Yes No			<del></del>	
### Depleted Below Dark Surface (A11)    Depleted Below Dark Surface (A11)   Comay Muck (A9) (LRR P, T, U)   Coast Prairie Redox (A16) (MLRA 150A)   Depleted Below Dark Surface (A12)   Coast Prairie Redox (A16) (MLRA 150A)   Sandy Mucky Mineral (S1) (LRR O, S)   Sandy Mucky Mineral (S1) (LRR O, S)   Sandy Redox (S5)   Depleted Matrix (F3)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150B)   Depleted Matrix (S6)   Depleted Or Chric (F11) (MLRA 150A)   Depleted Or Chric (F11) (MLRA 150B)   Depleted Matrix (S6)   Depleted Or Chric (F17) (MLRA 149A)   Sandy Redox (S5)   Depleted Or Chric (F18) (MLRA 149A)   Sandy Redox (S1) (LRR P, S, T, U)   Strictive Layer (If observed):   Type: Depth (inches): Hydric Soil Present? Yes No	C-C		and Carriers 21 anations DI -1	Dara Laine, M. Makin
Histot (A1)		ed Matrix, CS=Covered of Coaled Sal	nu Grains. Location. PL-1	
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Pedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F2) Depleted Matrix (F3) Depleted Matrix (F3) Sem Mucky Mineral (A7) (LRR P, T, U) Pedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Sem Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Mard (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Dark Surface (F10) (LRR U) Depleted Orchric (F11) (MLRA 151) Depleted Below Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Dealte Orchric (F17) (MLRA 151) Depleted Orchric (F18) (MLRA 150A) Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 149A) Strictive Layer (If Observed): Type: Depth (inches): Hydric Soil Present? Yes ✓ No		Pohovatue Relow Surfa	nce (SR) (LPR S. T. II)	
	_ , ,			
	_ , , ,			
	_ ` ' '			. , ,
Organic Bodies (A6) (LRR P, T, U)  Seedox Dark Surface (F6)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Communic (A9) (LRR P, T)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Liron-Manganese Masses (F12) (LRR O, P,T)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F13) (MLRA 150A)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No			(12)	
			F6)	
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Derk Surface (S7) (LRR P, S, T, U)  Strictic Layer (If observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depressions (F8)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Liron-Manganese Masses (F12) (LRR O, P,T)  Ilndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Pelta Orchric (F13) (MLRA 151)  Pelta Orchric (F17) (MLRA 150)  MLRA 150A, 150B)  MLRA 149A)  Marl (F10) (LRR T, U)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Marl (F10) (LRR P, T, U)  Hydric Soil Present?  Very Shallow Dark Surface (TF12) (LRR T, U)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Marl (F10) (LRR D, P, T)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Marl (F10) (LRR D, P, T)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Marl (F10) (LRR D, P, T)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Marl (F10) (LRR D, S)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Marl (F10) (LRR D, S)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Marl (F10) (LRR D, S)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of hydrology	5 cm Mucky Mineral (A7) (LRR P.T.II)	Depleted Dark Surface	e (F7)	
		<del></del>	• •	Very Shallow Dark Surface (TF12) (LRR T, U)
Thick Dark Surface (A12)  Loost Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):  Type:  Depth (inches):  Iron-Manganese Masses (F12) (LRR O, P, T)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  problematic.  Peduced Vertic (F18) (MLRA 150A, 150B)  Serious (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No				
Iron-Manganese Masses (F12) (LRR O, P,T)Coast Prairie Redox (A16) (MLRA 150A)Coast Prairie Redox (A16) (MLRA 150A)Delta Orchric (F13) (LRR P, T, U)Sandy Mucky Mineral (S1) (LRR O, S)Sandy Redox (S5)Sandy Redox (S5)Delta Orchric (F18) (MLRA 150A, 150B)Sandy Redox (S5)Delta Orchric (F18) (MLRA 150A, 150B)Sandy Redox (S5)Delta Orchric (F18) (MLRA 150A, 150B)Sandy Redox (S5)Delta Orchric (F18) (MLRA 150A, 150B)Reduced Vertic (F18) (MLRA 149A)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)Dark Surface (S7) (LRR P, S, T, U)  strictive Layer (If observed):Type:Depth (inches):	Depleted Below Dark Surface (A11)	Depleted Orchric (F11	) (MLRA 151)	
Coast Prairie Redox (A16) (MLRA 150A)		Iron-Manganese Mass	ses (F12) (LRR O, P,T)	3 adjectors of hydrophytic constation and cotland
Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17) (MLRA 151) problematicSandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B)Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed):	Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13)	(LRR P, T, U)	
Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B)Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed):	Sandy Mucky Mineral (S1) (LRR O. S)	Delta Orchric (F17) (N	ILRA 151)	
		Reduced Vertic (F18)	(MLRA 150A, 150B)	
	_Sandy Redox (S5)	Piedmont Floodplain S	Soils (F19) (MLRA 149A)	
Strictive Layer (If observed):         Type:           Depth (inches):         Hydric Soil Present?         Yes _ ✓ No	_Stripped Matrix (S6)	Anomalous Bright Loa	my Soils (F20) (MLRA 149A, 15	53C, 153D)
Type:            Depth (inches):            Hydric Soil Present? Yes	_Dark Surface (S7) (LRR P, S, T, U)			
Depth (inches): Hydric Soil Present? Yes, No,	strictive Layer (If observed):			
		<u></u>		
marks:		<u> </u>	Hydric Soil Pre	sent? Yes <u>√</u> No
	THE RES			
				•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	_Sampling Date	10/5/09		
Applicant/Owner: Progress Energy Florida, Inc.	State:FL	Sampling Point	::AX			
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range: 28 27S 18E				
Landform (hillslope, terrace, etc.): N/A	<u>,                                    </u>	Local relief (concave, conv	vex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.113101</u>	Long:82,5	03740		Datum: WGS84	
Soil Map Unit Name: Basinger fine sands			_NWI classification		mergetn Wetland	
Are climatic / hydrologic conditions on the site typ	vical for this time of year?	Yes <u>✓</u>	No	(If no, explain in	n Remarks)	
	•		Are circumstances		′esNo	
	or Hydrology		(If needed, explain	any answers in	Remarks)	
SUMMARY OF FINDINGS - Attach sit			•	•	·	
Hydrophytic Vegetation Present?	YesNo	]	· · · ·			
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	vithin a Wetland?	Yes/	10	
Wetland Hydrology Present?	Yes No	]				
Remarks:		2				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of	two required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Ve	y Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	,	Drainage Patterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LR	(R U)	Moss Trim L			
Water Marks (B1)	Hydrogen Sulfide Odor (	•		Water Table (C2	n	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	· <b>'</b>		
					~~~~~ (CQ)	
Drift Deposits (B3)	Presence of Reduced Iron				magery (C5)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	· · · · · · · · · · · · · · · · · · ·				
Iron Deposits (B5)	Thin Muck Surface (C7)	, , , ,				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)		
Field Observations:	V-5 / No	Death (inchas): 0.34				
Surface Water Present?	Yes No		-{			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology			
(includes capillary fringe)			Present?	Yes 🗸N	lo	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				
1						
Remarks:						
	•					

VEGETATION - Use scientific na	mes of plants				Sampling Point:	AX
	Absolute %	Dominant	Indicator	Dominance Test Workshee	et:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1. Salix spp.	15	yes	FACW	Number of Dominant Specie That Are OBL, FACW, or FA	2	(A)
2.	·			4	iC.	
3. 4.	-			Total Number of Dominant Species Across All Strata:	<u>3</u>	(B)
5.		<del></del>		Percent of Dominant Specie		
6.				That Are OBL, FACW, or FA		(A/B)
7.	-			Prevalance Index workshe		
	15	= Total Cove	 r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	7010.		OBL species	x1=	
1.	<del></del> /			FACW species	x2=	_
2.				FAC species	x3=	_
3.	•			FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	— (B)
6.	<del></del>				( , ,	_ (-,
7.				Prevalance Index = B/A	=	
	0	= Total Cove	<del></del>	Hydrophytic Vegetation Inc		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50	)%	
1.	•			Prevalence Index is ≤	:3.0 <sup>1</sup>	
2.				Problematic Hydroph	ytic Vegetation <sup>1</sup> (Ex	plain)
3.						
4.				Indicators of hydric soil and	wetland hydrology r	nust
5.				be present, unless disturbed		
6.				Definitions of Vegetation S	itrata:	
7.						
	0	= Total Cove	r	Tree- Woody plants, excluding		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or mo	_	. (7.6
Panicum hemitomon	60	yes	OBL	cm) or larger in diameter at bro	east height (DBH).	
Andropogon virginicus	30	yes	FAC	Sapling- Woody plants, exclu		
Andropogon glomeratus	10	no	FACW	approximately 20 ft (6m) or mo	ore in height and less	than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excludi		
6.				approximately 3 to 20 ft (1 to 6	m) in height.	
7.				Herb- All herbaceous (non-wo		_
8.				herbaceous vines, regardless		•
9.				plants, except woody vines, le	ss than approximater	y 3 π (1
10.				4 ′ °		
11.		<del></del>		Woody vine- All woody vines,	regardless of height.	
12.				1		
Manda Vina Objetuja (Distrina	100	= Total Cove	r			
Woody Vine Stratum (Plot size:	)			i		
1.				-		
2.						
3.	•			 		
<u>4.</u> 5.				Hydrophytic	los / No	
J.		= Total Cove		Vegetation Present?	es <u> </u>	
	U	- rotal Cove	l	I .		

Percent cover estimates based on meandering survey of the broader community.

Remarks: (If observed, list morphological adaptations below).

Redox Features  Color (moist) % Type  Reduced Matrix, CS=Covered or Co Polyvalue Bela	e¹ Loc² Texture  Texture	·
Color (moist) % Type  Reduced Matrix, CS=Covered or Co Polyvalue Beld	e¹ Loc² Texture  Texture	black fine sand gray fine sand brown and grayish brown fine sand
Reduced Matrix, CS=Covered or Co	ated Sand Grains. <sup>2</sup> Location: P	black fine sand gray fine sand brown and grayish brown fine sand
Polyvalue Beto		gray fine sand brown and grayish brown fine sand
Polyvalue Beto		gray fine sand brown and grayish brown fine sand
Polyvalue Beto		brown and grayish brown fine sand
Polyvalue Beto		
Polyvalue Beto		
Polyvalue Beto		light brownish gray fine sand
Polyvalue Beto		
Polyvalue Beto		
Polyvalue Beto		
		L=Pore Lining, M=Matrix.
		Indicators for Problematic Hydric Soils 3:
Thin Dark Sun	ow Surface (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
	face (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
I namy Mucky	Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B
Loamy Gleyed		Piedmont Floodplain Soils (F19) (LRR P, S, T)
		Anomalous Bright Loamy Soils (F20)
	, ,	(MLRA 153B)
<b>—</b> '	, ,	Red Parent Material (TF2)
Redox Depres	ssions (F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
Mart (F10) (LF	RR U)	Other (Explain in Remarks)
Depleted Orch	nric (F11) (MLRA 151)	
Iron-Mangane	se Masses (F12) (LRR O, P,T)	31. 45. 4
<del></del>		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
, <u> </u>		hydrology must be present, unless disturbed or
Delta Orchric	(F17) (MLRA 151)	problematic.
Reduced Vert	ic (F18) (MLRA 150A, 150B)	
Piedmont Floo	odplain Soils (F19) (MLRA 149A)	
Anomalous Br	right Loarny Soils (F20) (MLRA 149A	, 153C, 153D)
	Unidade Call 6	Procent? Yes ✓ No
	Hydric Soil F	Present? Yes <u>√</u> No
	Redox Dark S Depleted Dark Redox Depres Mart (F10) (Li Depleted Orci Iron-Mangane Umbric Surfac Delta Orchric Reduced Vert	Depleted Matrix (F3)Redox Dark Surface (F6)Depleted Dark Surface (F7)Redox Depressions (F8)Mart (F10) (LRR U)Depleted Orchric (F11) (MLRA 151)Iron-Manganese Masses (F12) (LRR O, P,T)Delta Orchric (F13) (LRR P, T, U)Delta Orchric (F17) (MLRA 151)Reduced Vertic (F18) (MLRA 150A, 150B)Piedmont Floodplain Soils (F19) (MLRA 149A)Anomalous Bright Loamy Soils (F20) (MLRA 149A)Hydric Soil F

Project/Site: Levy Nuclear Plant - Transmission	Lines	City/County: Hillsboro	Sampling Date: 10/5/09		
Applicant/Owner: Progress Energy Florida, In	State:FL	Sampling Point: AY			
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range: 28 27S 18E			
Landform (hillslope, terrace, etc.):	I/A	Local relief (concave, con	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.113101</u>	Long: <u>-82.</u>	503740	Datum: WGS84	
Soil Map Unit Name: Basinger fine sands			_NWI classification	Freshwater Emergent Wetland	
Are climatic / hydrologic conditions on the site	ypical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstances		
Are Vegetation, Soil	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)	
<b>SUMMARY OF FINDINGS - Attach s</b>			transects, impo	ortant features, etc.	
Hydrophytic Vegetation Present?	Yes No			-	
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	YesNo	
Wetland Hydrology Present?	Yes No	]			
Remarks:					
				•	
	a a a rational is				
HYDROLOGY					
Wetland Hydrology Indicators:				ors (minimum of two required)	
Primary Indicators (minimum of one is required	<del>, ,</del>		Surface Soil	• •	
Surface Water (A1)	Water-Stained Leaves (	B9)		getated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)		
Saturation (A3)	Marl Deposits (B15) (LF		Moss Trim L	` ,	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	rows (C8)		
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	Saturation V	isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	•	Shallow Aquitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7	7)Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No	Depth (inches): 0	Wetland		
Saturation Present?	Yes✓ No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes No	
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous	inspections), if available:			
Remarks:					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	<u> </u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1. Salix spp.	- 15	yes	FACW	Number of Dominant Species	(4)
2.			-	That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	ر حر
4.	,			Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	$\overline{}$
	15	= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	- 10101 00.0		OBL species x1=	
1.	/			FACW species x2=	-
2.				FAC species x3=	-
3.				FACU species x4=	-
<u>4.</u>	. ——			UPL species x5=	-
5.					- <sub>/B\</sub>
5. 6.				Column Totals:(A)	_ <sup>(B)</sup>
7.	. ——			- Branchage Indones B/A -	
7.		= Total Cove		Prevalance Index = B/A = Hydrophytic Vegetation Indicators:	
Charle Stratum /Blot size:	٠	= Total Cove	ŧr	1	
Shrub Stratum (Plot size:	<del>)</del>			Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	lain)
3.				_	ļ
4.				Indicators of hydric soil and wetland hydrology m	nust
5.				be present, unless disturbed or problematic.	
6.		-		Definitions of Vegetation Strata:	
7.				]	
	0	= Total Cove	÷r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in.	(7.6
Cyperus haspan	35	yes	OBL	cm) or larger in diameter at breast height (DBH).	
2. Phyla nodiflora	35	yes	FACW	Sapling- Woody plants, excluding woody vines,	
Paspalum notatum	30	yes	FACU	approximately 20 ft (6m) or more in height and less	than 3
4.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	ļ
7.	,			Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	dv
9.				plants, except woody vines, less than approximately	
10.				m) in height.	` '
11.				Woody vine- All woody vines, regardless of height.	
12.				Troody time 7 in moody times, regulations of marginal	
12.	100	= Total Cove		1	
   Woody Vine Stratum (Plot size:	\	- 10(8) 00+0	Я		
	·				
1.				-	
2. 3.					
				4	
4.				Hydrophytic	
5.			**	Vegetation Present? Yes <u>√</u> No	<del></del>
	0	= Total Cove	r		
Remarks: (If observed, list morph					
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	

SOIL								Sampling Point: AY
	escription: (Describe t	o the dep	oth needed to doc			r confirm the ab	sence of indicators.	
Depth	Matrix				Features			
(inches)	Color (moist)	%	Color (moist)	%_	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							
28-42	5/2							brown and grayish brown fine sand
42-80	10 YR 6/2							light brownish gray fine sand
	-							
- , ,	Concentration, D=Depl	etion, RM	=Reduced Matrix,	CS=Cove	red or Coated	Sand Grains.	<sup>2</sup> Location: PL=Por	
	oil Indicators:			Daha	ualisa Dalassi C	urface (S8) (LRR		Indicators for Problematic Hydric Soils <sup>3</sup> : 1 cm Muck (a9) (LRR O)
	l (A1) : Epidon (A2)			_ ′		ипасе (S8) (LRN (S9) (LRR <b>S</b> , T,		2 cm Muck (A10) (LRR S)
_	: Epidon (A2) : Histic (A3)					(39) (LRR 3, 1, eral (F1) (LRR 0)		Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				ny Gleyed Mai		,	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				leted Matrix (F			Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR P	, T, U)			ox Dark Surfac			(MLRA 153B)
5 cm	Mucky Mineral (A7) (LF	RR P.T.U)	ı	Depl	leted Dark Sur	face (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR U			Red	ox Depression	s (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U	<b>)</b> )	,	Other (Explain in Remarks)
Deple	eted Below Dark Surfac	e (A11)		Dep	leted Orchric (	F11) (MLRA 151	)	
Thick	Dark Surface (A12)			Iron-	-Manganese M	lasses (F12) (LR	R O, P,T)	Indicators of hydrophytic vegetation and wetland
Coas	t Prairie Redox (A16) (I	VILRA 150	DA)	Umb	oric Surface (F	13) (LRR P, T, U		hydrology must be present, unless disturbed or
Sand	y Mucky Mineral (S1) (L	RR O, S)	+	Delta	a Orchric (F17	) (MLRA 151)		problematic.
Sand	y Gleyed Matrix (S4)				•	18) (MLRA 150A		
Sand	y Redox (S5)					in Soils (F19) (M	•	
Stripp	oed Matrix (S6)			Anoi	malous Bright	Loamy Soils (F20	)) (MLRA 149A, 153C	, 153D)
	Surface (S7) (LRR P, S		•••					
Restrictiv	ve Layer (If observed): Type:	;						
	Depth (inches):		<del></del>				Hydric Soil Presen	t? Yes ✓ No .
Remarks:			<del></del>					
l								
								•
i .								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/5/0			
Applicant/Owner: Progress Energy Florida, Inc.	State: Sampling Point:			AZ	
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range	e: <u>22 27S 18E</u>		
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, con	vex, none): none	SI	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.11464</u> 0	D Long:82.4	498429	Da	atum: WGS84
Soil Map Unit Name: Basinger fine sands			NWI classification	n: Shrub Wetland	1
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	No	_ (If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstance		esNo
	or Hydrology		(If needed, explain	n any answers in F	Remarks)
SUMMARY OF FINDINGS - Attach sit			transects, impo	ortant feature	s, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area v	within a Wetland?	Yes/_N	0
Wetland Hydrology Present?	Yes No	]			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:				tors (minimum of t	wo required)
Primary Indicators (minimum of one is required; of			Surface Soil		
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	egetated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	J	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bui		
Drift Deposits (B3)	Presence of Reduced In	ron (C4)Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	in Tilled Soils (C6)		Position (D2)	• • •
Iron Deposits (B5)	Thin Muck Surface (C7)	——————————————————————————————————————			
✓ Inundation Visible on Aerial Imagery (B7)					
Field Observations:		,	1	, , ,	
Surface Water Present?	Yes No	Deoth (inches):			
Water Table Present?	Yes No		-		
Saturation Present?	Yes No				
	169140	_ Deptii (iliciles)	Hydrology	Y / N	-
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ring well serial photos previous	s inspections) if available:	Present?	Yes <u>✓ N</u>	<u> </u>
Describe Recorded Data (stream gauge, monitor	ing well, aeriar priotos, previous	3 Inspections), ii avaliabie.			
Remarks:					
	•				

Δ	7

VEGETATION - Use scientific ha	mes of plants				Sampling Follit	AZ
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksh	eet:	
1.		-	•	Number of Dominant Spec That Are OBL, FACW, or	u	(A)
3. 4.				Total Number of Dominan Species Across All Strata:	11	(B)
5.				Percent of Dominant Spec	cies 81.82	(A/B)
6. 7.				That Are OBL, FACW, or Prevalance Index works		
1.		= Total Cov		4		
Sapling Stratum (Plot size:	)	= Total Cov	er	Total % Cover of: OBL species	<u>Multiply by:</u> x1=	
Schinus terebinthifolius	25	yes	FAC	FACW species	x2=	
Quercus laurifolia	10	yes	FACW	FAC species	x3=	
3. Salix spp.	10	yes	FACW	FACU species	x4=	
Sapium sebiferum	5	no	FAC	UPL species	x5=	_
5.	_			Column Totals:	(A)	(B)
6.				,		
7.				Prevalance Index = E		
<u> </u>	50	= Total Cov	er	Hydrophytic Vegetation		
Shrub Stratum (Plot size:	<del>_</del> )			✓ Dominance Test is		
Cephalanthus occidentalis	2	yes	OBL	Prevalence Index is		
2.				Problematic Hydro	phytic Vegetation <sup>1</sup> (Ex	:plain)
3.	- ——			1		
4.				Indicators of hydric soil a		must
5.				be present, unless disturb	• • • • • • • • • • • • • • • • • • • •	
6.				Definitions of Vegetation	ı Strata:	
7.		T-4-1-0		<u> </u>		
Herb Stratum (Plot size:)	2	= Total Cov	er	Tree- Woody plants, exclude approximately 20 ft (6m) or		(7.6
Blechnum serrulatum	15	yes	FACW	cm) or larger in diameter at		. (1.0
Ludwigia peruviana	15	yes	OBL	Sapling- Woody plants, exc		
Ludwigia octovalvis	10	yes	OBL	approximately 20 ft (6m) or		s than 3
Urena lobata	10	yes	FACU	in. (7.6 cm) DBH.	<b>.</b>	
5. Thelypteris spp.	10	yes	FACW	Shrub- Woody plants, exclu	ıdina woody vines.	
Colocasia esculenta	5	no	FACW	approximately 3 to 20 ft (1 to		
7. Juncus marginatus	2	no	FACW	Herb- All herbaceous (non-	woody)plants_including	1
8.			-	herbaceous vines, regardle		
9.				plants, except woody vines,		
10.				m) in height.		
11.			-	Woody vine- All woody vine	es, regardless of height	l.
12.	-			1		
	67	= Total Cov	er	1		
Woody Vine Stratum (Plot size:_	)					
Vitus rotundifolia	35	yes	FAC			
2. Rubus spp.	10	yes	FACU			
3.						
4.				Hydrophytic		
5.				Vegetation Present?	YesNo	
	45	= Total Cov				
Remarks: (If observed, list morph	nological adapta	ations below).			· .	
Percent cover estimates based of	n meandering s	survey of the	broader coi	mmunity.		

ounty/soil: Hillsborough- Basinger OIL			Compling Doint
	d A. d AAb. in discharge a see Since	Aba abaaaa a findiadaa a	Sampling Point:
ofile Description: (Describe to the depth neede		the absence of indicators.)	
oth Matrix	Redox Features		
ches) Color (moist) % Color (	moist) % Type' Lo	Texture	Remarks
10 YR 2/1			black fine sand
8 10 YR 6/1			gray fine sand
10 YR 5/3; 10 YR		<del></del>	gray fine sand
42 5/2			brown and grayish brown fine sand
80 10 YR 6/2		<del></del>	light brownish gray fine sand
10 110 0/2			iight brownsh gray fine sand
<del></del>	<del></del>		
pe: C=Concentration, D=Depletion, RM=Reduced	Matrix, CS=Covered or Coated Sand Gra		
Iric Soil Indicators:			ndicators for Problematic Hydric Soils 3:
_Histol (A1)	Polyvalue Below Surface (S8	3) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)	Thin Dark Surface (S9) (LRF	₹ S, T, U) _	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (I	LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (F2)	·	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	-	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	-	(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)	Redox Depressions (F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
	Marl (F10) (LRR U)	-	Other (Explain in Remarks)
_1 cm Muck (A9) (LRR P,T)		-	Other (Explain in Remarks)
_Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLF	•	
_Thick Dark Surface (A12)	Iron-Manganese Masses (F1		Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR		hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 1	151) F	problematic.
_Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLR/	, ,	
_Sandy Redox (S5)	Piedmont Floodplain Soils (F	19) (MLRA 149A)	
_Stripped Matrix (S6)	Anomalous Bright Loamy So	oils (F20) (MLRA 149A, 153C,	153D)
_Dark Surface (S7) (LRR P, S, T, U)			
strictive Layer (If observed):			
Туре:	_		
Depth (inches):		Hydric Soil Present	? Yes <u>√</u> No
marks:			

Project/Site: Levy Nuclear Plant - Transmission Li	City/County: Hillsborou	gh	Sampling Date: 10/5/09			
Applicant/Owner: Progress Energy Florida, Inc.	State: FL		Sampling Point: BA			
Investigator(s): Justin Styer, Karl Bullock	Section, Township, Range: 22 27S 18E					
Landform (hillslope, terrace, etc.): N/A	Local relief (concave, conv	Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: <u>28.114771</u>	Long:82.4	98069	Datum: WGS84		
Soil Map Unit Name: Basinger fine sands			_NWI classification:	Shrub Wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)		
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances			
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain a	any answers in Remarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing samplir	ng point locations, t	ransects, impor	tant features, etc.		
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	is the Sampled Area w	within a Wetland? YesNo			
Wetland Hydrology Present?	Yes No					
Remarks:						
:						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicator	rs (minimum of two required)		
Primary Indicators (minimum of one is required; c		Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)				
Surface Water (A1)				Surface Soil Cracks (B6)Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	,,	Drainage Patterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LRI	P III	Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor (0	•	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres o	·	Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced Iro		Craylish Burlows (C6)Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Timed cons (co)	Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	(e)	FAC Neutral Test (D5)			
Field Observations:			1			
Surface Water Present?	Yes No	Depth (inches):				
Water Table Present?	Yes No					
Saturation Present?	Yes No	· · · · · · · · · · · · · · · · · · ·	Wetland			
(includes capillary fringe)		,	Hydrology Present?	Yes <u>√</u> No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	1			
				•		
Remarks:						
·						

VEGETATION - Use scientific names of plants Sampling Point:						
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	T		
1.		-,		Number of Dominant Species		
2.				That Are OBL, FACW, or FAC:	(A)	
3.				Total Number of Dominant		
4.				Species Across All Strata:	(B)	
5.				Percent of Dominant Species		
6.	•			That Are OBL, FACW, or FAC:	(A/B)	
7.				Prevalance Index worksheet:		
··		= Total Cove		Total % Cover of: Multiply b	v.	
Sapling Stratum (Plot size:	)	rotal cove	•	OBL species x1=	<u>.</u>	
Schinus terebinthifolius	25	yes	FAC	FACW species x2=		
2. Quercus laurifolia	10	yes	FACW	FAC species x3=		
3. Salix spp.	10	yes	FACW	FACU species x4=		
Sapium sebiferum	5	no	FAC	UPL species x5=		
5.				Column Totals: (A)	— <sub>(B)</sub>	
6.					— ``'	
7.				Prevalance Index = B/A =		
•	50	= Total Cove	er	Hydrophytic Vegetation Indicators:		
Shrub Stratum (Plot size:				✓ Dominance Test is 50%		
Cephalanthus occidentalis		yes	OBL	Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (I	Evolain)	
3.				1 roblematic rijaroprijac vegetation (	-Apidini)	
4.				Indicators of hydric soil and watland hydrolog		
<del>5</del> .	. —			Indicators of hydric soil and wetland hydrolog be present, unless disturbed or problematic.	jy musi	
6.	<del></del>	***************************************		Definitions of Vegetation Strata:	**************************************	
7.				Deminions of Vegetation Strata.		
7.		= Total Cove		Tree Weeds plants evaluating superficulting		
Herb Stratum (Plot size:)	2 = Total Cover		4	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in. (7.6		
· —	15	V00	FACW	cm) or larger in diameter at breast height (DBH).		
Blechnum serrulatum     Ludwigia peruviana	15	yes	OBL	•		
		yes	-	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3		
Ludwigia octovalvis     Licens labets	10	yes	OBL FACU	in. (7.6 cm) DBH.	:55 tilali 5	
Urena lobata     The luntaria ann	10	yes		· · · · ·		
5. Thelypteris spp.	10	yes	FACW	Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.		
6. Colocasia esculenta	5	no			_	
7. Juncus marginatus	2	no	FACW	Herb- All herbaceous (non-woody)plants, includi		
8.				herbaceous vines, regardless of size. Includes of plants, except woody vines, less than approximate	•	
9.				m) in height.	itely 5 it (1	
10.				∤ ′	-1-4	
11.				Woody vine- All woody vines, regardless of heig	jnt.	
12.		<del></del>				
Woody Vine Stratum (Plot size:	67	= Total Cove	r.			
Vitus rotundifolia	35	VOC	FAC			
Rubus spp.	10	yes	FACU	1		
		yes	FACO			
3.				I budan abudin		
<u>4.</u> 5.		<del></del>	<del> </del>	Hydrophytic		
3.	AE	- Tatal Cause		Vegetation Present? Yes <u>√</u> No	<del></del>	
Daniel de décharación fiction de la	45	= Total Cove	:r			
Remarks: (If observed, list morpho	-	•		_		
Percent cover estimates based or	i meandering s	survey of the b	roader cor	mmunity.		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  Depth Matrix Redox Feature  (inches)  Color (moist)  % Color (moist)  % Type' Loc' Texture  Remarks    Dark fine sand   Gray fine sand	SOIL								Sampling Point:B
Color (moist)	Profile Do	escription: (Describe t	to the dep	oth needed to doo	ument ti	ne indicator or	confirm the ab	sence of indicators.	.)
D-7									
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.	(inches)	Color (moist)	%	Color (moist)	%_	Type'	Loc²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.	0-7	10 YR 2/1							black fine sand
10 YR 5/3; 10 YR 28-42   5/2   brown and grayish brown fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine	7-28								gray fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.								1	•
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix.  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 2:  Indicators for Problematic Hydric Soils 2:  Indicators for Problematic Hydric Soils 2:  Indicators for Problematic Hydric Soils 2:  Indicators for Problematic Hydric Soil Present?  Yes No	28-42	5/2							brown and grayish brown fine sand
Hydric Soil Indicators: Histol (A1) Histol (A2) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F2) Stratified Layers (A5) Communic (A7) (LRR P, T, U) Depleted Dark Surface (F6)  It m Muck (A9) (LRR P, T, U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchinic (F11) (MLRA 151) Sandy Mucky Mineral (S1) (LRR P, S, S) Delta Orchinic (F13) (LRR P, T, U) Delta Orchinic (F13) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchinic (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR P, T, U) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix	42-80	10 YR 6/2							light brownish gray fine sand
Hydric Soil Indicators: Histol (A1) Histol (A2) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F2) Stratified Layers (A5) Communic (A7) (LRR P, T, U) Depleted Dark Surface (F6)  It m Muck (A9) (LRR P, T, U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchinic (F11) (MLRA 151) Sandy Mucky Mineral (S1) (LRR P, S, S) Delta Orchinic (F13) (LRR P, T, U) Delta Orchinic (F13) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchinic (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR P, T, U) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix									
Hydric Soil Indicators: Histol (A1) Histol (A2) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F2) Stratified Layers (A5) Communic (A7) (LRR P, T, U) Depleted Dark Surface (F6)  It m Muck (A9) (LRR P, T, U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchinic (F11) (MLRA 151) Sandy Mucky Mineral (S1) (LRR P, S, S) Delta Orchinic (F13) (LRR P, T, U) Delta Orchinic (F13) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchinic (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR P, T, U) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix									
Hydric Soil Indicators: Histol (A1) Histol (A2) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F2) Stratified Layers (A5) Communic (A7) (LRR P, T, U) Depleted Dark Surface (F6)  It m Muck (A9) (LRR P, T, U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchinic (F11) (MLRA 151) Sandy Mucky Mineral (S1) (LRR P, S, S) Delta Orchinic (F13) (LRR P, T, U) Delta Orchinic (F13) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchinic (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR P, T, U) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix (S6) Pedivating Matrix									
Histol (A1) Histic Epidon (A2) Histic Epidon (A2) Histic Epidon (A2)  Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Pelpeted Matrix (F2) Muck Presence (AB) (LRR P, T, U) Pelpeted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A)  Brown Mark (F10) (LRR O)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A)  Brown Mark (A10) (LRR P, T, U)  Depleted Orchric (F18) (MLRA 151)  Thick Dark Surface (A30)  Brown Mark (A90) (LRR P, T) Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A11)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A16) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Park Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present?  Type: Depth (inches):  Tirin Muck (A9) (LRR S, T, U) Pelated Surface (S9) (LRR S, T, U) Pelated Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  1 cm Muck (A9) (LRR O, S) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Poly Value (A10) (LRR O, S) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Poly Value (A10) (LRR O, S) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Presente (A20) (LRR O, S) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Presente (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20) (A20)			etion, RM	=Reduced Matrix,	CS=Cove	red or Coated	Sand Grains.	*Location: PL=Por	
Histic Epidon (A2)  Black Histic (A3)  Black Histic (A3)  Coamy Mucky Mineral (F1) (LRR O)  Reduced Vertic (F18) (outside MLRA 150A, B)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Sometime of Mucky Mineral (A7) (LRR P, T, U)  Pepleted Matrix (F3)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Red Parent Material (TF2)  Muck Presence (A8) (LRR U)  Pepleted Dark Surface (F7)  Red Parent Material (TF2)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A11)  Depleted Delow Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Piedmont Floodplain Soils (F20)  Muck (F18) (LRR S, T, U)  Redox Dark Surface (F7)  Red Parent Material (TF2)  Per Muck (F19) (LRR T, U)  Other (Explain in Remarks)  Depleted Drinc (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Redox (S5)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 150A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type: Depth (inches):  Hydric Soil Present? Yes ✓ No					D-1	natura Batan O	-f (00) (I DD	0.7.10	•
Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A6)  Organic Bodies (A6) (LRR P, T, U)  Service Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mecky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Stripped Matrix (S4)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Loamy Mucky Mineral (F1) (LRR O)  Loamy Mucky Mineral (F1) (LRR O)  Piedmont Floodplain Soils (F19) (LRR O, P, T)  Piedmont Floodplain Soils (F19) (LRR O, P, T)  Piedmont Floodplain Soils (F19) (LRR O, P, T)  Piedmont Floodplain Soils (F19) (MLRA 1514)  Piedmont Floodplain Soils (F19) (MLRA 1514)  Piedmont Floodplain Soils (F19) (MLRA 1514)  Piedmont Floodplain Soils (F19) (MLRA 1514)  Thick Dark Surface (A12)  Depleted Dark Surface (F13) (LRR O, P, T)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Piedmont Floodplain Soils (F19) (MLRA 150A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present? Yes ✓ No		• •							
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T)  Depleted Matrix (F2)  Mard (F10) (LRR U)  Depleted Dark Surface (F7)  Mard (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7)  Detelted Dark Surface (B18) (MLRA 150A)  Stripped Matrix (S4)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 150A)  Anomalous Bright Loamy Soils (F19) (LRR O, FT)  Anomalous Bright Loamy Soils (F19) (LRR O, FT)  Piedmont Floodplain Soils (F19) (LRR O, FT)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Piedmont Floodplain Soils (F19) (MLRA 150A)  Stripped Matrix (S4)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)						•		•	
Stratified Layers (À5)  Organic Bodies (A6) (LRR P, T, U)  Edox Dark Surface (F6)  Sem Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Redox Dark Surface (F7)  Redox Dark Surface (F7)  Redox Dark Surface (F7)  Redox Dark Surface (F7)  Redox Peressions (F8)  Very Shallow Dark Surface (TF12) (LRR T, U)  I cm Muck (A9) (LRR P, T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Stripped Matrix (S4)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No	_	, ,							
Organic Bodies (A6) (LRR P, T, U)  Sedox Dark Surface (F6)  Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S7)  Detected Dark Surface (A19)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  John Cast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No									
			P, T, U)						
✓ Muck Presence (AB) (LRR U)       Redox Depressions (F8)      Very Shallow Dark Surface (TF12) (LRR T, U)        1 cm Muck (A9) (LRR P,T)      Mart (F10) (LRR U)      Other (Explain in Remarks)        Depleted Below Dark Surface (A11)      Depleted Orchric (F11) (MLRA 151)        Thick Dark Surface (A12)      Iron-Manganese Masses (F12) (LRR O, P,T)      Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or hydrology must be present, unless disturbed or problematic.        Sandy Mucky Mineral (S1) (LRR O, S)      Delta Orchric (F17) (MLRA 151)      problematic.        Sandy Redox (S5)      Reduced Vertic (F18) (MLRA 150A, 150B)      problematic.        Sandy Redox (S5)      Piedmont Floodplain Soils (F19) (MLRA 149A)      Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)        Dark Surface (S7) (LRR P, S, T, U)      Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)        Restrictive Layer (If observed):	5 cm	Mucky Mineral (A7) (LF	RRPTII	1	— Dep	leted Dark Surfa	ace (F7)		•
	_								<del></del>
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jeftled Orchric (F13) (LRR P, T, U)  Nydrology must be present, unless disturbed or problematic.  problematic.  Pelta Orchric (F17) (MLRA 151)  problematic.  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Pelta Orchric (F17) (MLRA 150A)  Matrix (S4)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No			٠,			•	` '		
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Pestrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Iron-Manganese Masses (F12) (LRR O, P, T)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  problematic.  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  problematic.  problematic.  MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No									outer (Explain in Nemarks)
Coast Prairie Redox (A16) (MLRA 150A)			e (A11)			•			
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Type	Thick Dark Surface (A12)				•			<sup>3</sup> Indicators of hydrophytic vegetation and wetland	
	Coas	t Prairie Redox (A16) (I	MLRA 150	DA)	Umb	oric Surface (F1	3) (LRR P, T, U)	1	
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	Sand	y Mucky Mineral (S1) (L	_RR O, S)	•	Delt	a Orchric (F17)	(MLRA 151)		problematic.
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	Sand	y Gleyed Matrix (S4)			Red	uced Vertic (F1	8) (MLRA 150A,	150B)	
	Sand	y Redox (S5)			Pied	lmont Floodplaii	n Soils (F19) (MI	.RA 149A)	
Restrictive Layer (If observed):    Type:   Depth (inches): Hydric Soil Present? Yes✓ No	Stripp	oed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)
Type:	Dark	Surface (S7) (LRR P, S	S, T, U)						
Depth (inches): Hydric Soil Present? Yes No	Restrictiv	ve Layer (If observed):	;					T	
	ł	Type:							
Remarks:		Depth (inches):						Hydric Soil Preser	nt? Yes <u>√</u> No
	Remarks:								
	İ								
	1								
	1								
	ļ								

Lines	City/County: Hillsboro	ıgh	_Sampling Date:_	10/5/09
	State: FL		Sampling Point:_	BBa
	Section, Township, Range	e: <u>22 27S 18E</u>		
Α	Local relief (concave, con	vex, none): <u>none</u>	Slo	pe (%):
Lat: 28.116019	9 Long: <u>-82,4</u>	194502	Dat	um: <u>WGS84</u>
				1
pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in F	Remarks)
or Hydrology	_significantly disturbed?	Are circumstances	s normal? Yes	s✓_No
		(If needed, explain	any answers in Re	emarks)
YesNo				
YesNo	is the Sampled Area v	vithin a Wetland?	Yes/ No	<u></u>
Yes No				
		Secondary Indicat	ors (minimum of tw	o required)
check all that apply)				O (CQUIICQ)
	(R9)		• ,	urface (R8)
	(50)	·	_	unace (Bo)
	PP III			
		<del></del>	` '	
<del></del>	• •			
				nen/(C9)
	• •			igery (CO)
			, ,	
		17181188	1001 (20)	····
Yes✓No	Depth (inches): 0-12			
	-	1		
Yes No	-	Wetland		
		Hydrology Present?	Yes <u>✓                                    </u>	
ring well, aerial photos, previous	s inspections), if available:	1	Yes <u>✓</u> No	
	check all that apply)  water-Stained Leaves Aquatic Fauna (B13)  Marl Deposits (B15) (LI  Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Thin Muck Surface (C7 Other (Explain in Rema	Section, Township, Range Local relief (concave, come Lat: 28.116019 Long: _82.4  pical for this time of year? Yes/_ or Hydrology significantly disturbed? or Hydrology naturally problematic?  ite map showing sampling point locations, to the map showing sampling point locations, to the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sampled Area with the sample	Section, Township, Range: 22 27S 18E  A Local relief (concave, convex, none): _none  Lat: 28.116019 Long:82.494502  NWI classification  Pical for this time of year? Yes/ No  or Hydrology significantly disturbed? Are circumstances or Hydrology naturally problematic? (If needed, explair ite map showing sampling point locations, transects, import  Yes/ No  Yes/_ No Is the Sampled Area within a Wetland?  Check all that apply) Surface Soil	Section, Township, Range: 22 27 S 18E  A Local relief (concave, convex, none): _none

VEGETATION - Use scientific nar	mes of plants				Sampling Point:	BBa
	Absolute %	Dominant	Indicator	Dominance Test Works	sheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	•	•		Number of Dominant Spe	ecies	/
2.				That Are OBL, FACW, o	• • • • • • • • • • • • • • • • • • • •	(A)
3.	• ——			Total Number of Domina	ant	
4.				Species Across All Strata	)	(B)
5.	-			╡ '		
6.	- ——			Percent of Dominant Spe		(A/B)
6. 7.				That Are OBL, FACW, o		
7.				Prevalance Index work		
District	, 0	= Total Cove	)r	Total % Cover of:		I
Sapling Stratum (Plot size:	)			OBL species	x1=	
1. Salix spp.	15	yes	FACW	FACW species	x2=	
2.				FAC species	x3=	
3.		<del>-</del>		FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	— <sub>(В)</sub>
6.				1 -	· ·	<del></del> '
7.				Prevalance Index =	B/A =	-
<del>  `                                   </del>	15	= Total Cove	-ir	Hydrophytic Vegetation		
Shrub Stratum (Plot size:	)		,,	✓ Dominance Test i		
l	/			Prevalence Index		
13	<u> </u>			<del></del>		(م:-۱-
2.				Problematic riyur	ophytic Vegetation <sup>1</sup> (Ex	plain)
3.	- ——			4.		
4.				Indicators of hydric soil		must
5.				be present, unless distur		
6.				Definitions of Vegetation	on Strata:	
7.	·			]		
	0	= Total Cove	er	Tree- Woody plants, exclu	uding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) o		. (7.6
1. Panicum repens	50	yes	FACW	cm) or larger in diameter a	at breast height (DBH).	
Panicum repens	5	no	FACW	Sapling- Woody plants, ex	xcluding woody vines,	
Wedelia trilobata	5	no	FACU	approximately 20 ft (6m) o		than 3
4. Commelina spp.	3	no	FACW			
5. Sesbania spp.	3	no	FAC	Shrub- Woody plants, exc	cluding woody vines.	
6.	· —		17.0	approximately 3 to 20 ft (1		
7.				<del>-</del>		
8.				Herb- All herbaceous (nor	• //	
g.				herbaceous vines, regardl plants, except woody vines	ess of size. Includes wor	Duy Waft/1
U	- ———			m) in height.	s, less than approximate.	youn
10.	- —			J '		
11.				Woody vine- All woody vir	nes, regardless of height.	•
12.				]		
	66	= Total Cove	er .			
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.		<del></del>		Hydrophytic		
5.	•	<del></del>		Vegetation Present?	Yes ✓ No	
0.		= Total Cove		Tregemion i ioconi.		<u> </u>
Remarks: (If observed, list morph			<u> </u>			
Percent cover estimates based or			roader cor	mmunitu		

County/soi SOIL	il: Hillsborough- Myakka	а								Sampling	Point:	BBa
	escription: (Describe t	a the den	th candad to doo	ment the	indicator or	confirm the abe	once of indicators \			Jamping	POIII.	טטע
Profile De Depth	escription: (Describe t Matrix	O tile Gep	th needed to doc		e indicator or o Features	CONTINUE aus	ence of indicators.					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture			Remarks		
(IIICIIC3)	0000 (1110131)		Color (moist)		,,,,,		TOXILITO	<del></del>		Terriario		
0-5	10 YR 3/1							very dark gra	ay fine sa	nd		
5-20	10 YR 6/1							gray fine sar	ıd			
20-25	N 2/0							black fine sa	nd			
25-30	5 YR 3/3							dark reddish	brown fin	ie sand		
	Concentration, D=Depl	etion, RM=	Reduced Matrix,	CS=Cover	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore					
	oil Indicators:							ndicators for			Soils 3:	
Histol						face (S8) (LRR \$		1 cm Muck				
	Epidon (A2)					9) (LRR S, T, U	) _	2 cm Muck				
Black	Histic (A3)			Loam	y Mucky Miner	al (F1) (LRR O)	_	Reduced V	ertic (F18	3) (outside N	VILRA 150A,	B)
	gen Sulfide (A4)				y Gleyed Matri:		-	Piedmont F	loodplain	Soils (F19)	(LRR P, S, 1	Γ)
	fied Layers (A5)				ted Matrix (F3)		_	Anomalous	Bright Lo	oamy Soils (f	F20)	
Organ	nic Bodies (A6) (LRR P	, T, U)		Redo:	x Dark Surface	(F6)		(MLRA 1	53B)			
5 cm	Mucky Mineral (A7) (LF	R P.T.UI		Deple	ted Dark Surfa	ce (F7)		Red Paren	t Material	(TF2)		
	Presence (A8) (LRR L			Redo	x Depressions	(FR)	-	Very Shallo	w Dark S	Surface (TE1)	2) (LRR T, U	n
		••			•	(, 0)	-	Other (Exp		•	L) (LIU 1, O	•,
_	Muck (A9) (LRR P,T)				(F10) (LRR U)		-	Other (Exp	am in Re	marks)		
Deple	ted Below Dark Surface	e (A11)		Deple	ted Orchric (F1	11) (MLRA 151)						
Thick	Dark Surface (A12)			Iron-N	Manganese Ma:	sses (F12) (LRR	O, P,T) 3					
Coast	t Prairie Redox (A16) (M	AI DA 450	۸۱	Umbr	ic Surface (E13	) (LRR P, T, U)		Indicators of hy				
			Α)					ydrology must	be prese	nt, unless dis	sturbed or	
Sandy	y Mucky Mineral (S1) (L	.RR O, S)		Delta	Orchric (F17) (	MLRA 151)	F	roblematic.				
Sandy	y Gleyed Matrix (S4)			Redu	ced Vertic (F18	) (MLRA 150A,	150B)					
Sandy	y Redox (S5)			Piedn	nont Floodplain	Soils (F19) (ML	RA 149A)					
Stripp	ed Matrix (S6)			Anom	nalous Bright Lo	amy Soils (F20)	(MLRA 149A, 153C,	153D)				
Dark	Surface (S7) (LRR P, S	TUN										
	e Layer (If observed):											
	Туре:											
	Depth (inches):						Hydric Soil Present	? Ye	· /	No		
Remarks:	Depart (inches).		4 (A.A. A.) A.A. A. B. A. A. B. B. B. B. B. B. B. B. B. B. B. B. B.				riyane oon ritesem	., 10		_ 110	<u> </u>	
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Project/Site: Levy Nuclear Plant - Transmission Li	ines		City/County: Hillsborou	gh	Sampling Date: 10/5/09
Applicant/Owner: Progress Energy Florida, Inc.			State: FL		Sampling Point: BC
Investigator(s): Justin Styer, Karl Bullock			Section, Township, Range:	22 27S 18E	
Landform (hillslope, terrace, etc.): N/A			Local relief (concave, conv	ex, none): none	Slope (%):
Subregion (LRR or MLRA):LRR U	L	at: <u>28.117025</u>	Long:82.49	91277	Datum: WGS
Soil Map Unit Name: Basinger fine sands				NWI classification:	Shrub Wetland
Are climatic / hydrologic conditions on the site typ	ical for this time	of year?	Yes <u>√</u>	. No	(If no, explain in Remarks)
Are Vegetation, Soil	or Hydrology		significantly disturbed?	Are circumstances	
			naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map show	ing samplir	ng point locations, tr	ansects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes✓N	lo			
Hydric Soil Present?	Yes✓N	lo	Is the Sampled Area w	ithin a Wetland?	YesNo
Wetland Hydrology Present?	Yes✓N	lo			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indicato	rs (minimum of two required)
Primary Indicators (minimum of one is required; c	heck all that anni	(v)		Surface Soil (	
✓ Surface Water (A1)		11 ained Leaves (E	39)	-	etated Concave Surface (B8)
High Water Table (A2)		auna (B13)	,	Drainage Pati	
✓ Saturation (A3)		osits (B15) <b>(LRI</b>	R UI)	Moss Trim Lir	, ,
Water Marks (B1)		Sulfide Odor (	·		Vater Table (C2)
Sediment Deposits (B2)	<u> </u>	•	n Living Roots (C3)	Crayfish Burre	
Drift Deposits (B3)		of Reduced Iro			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			Tilled Soils (C6)	Geomorphic I	
Iron Deposits (B5)		Surface (C7)		Shallow Aquit	• •
✓ Inundation Visible on Aerial Imagery (B7)		plain in Remarl	(S)	FAC Neutral	
Field Observations:				]	
Surface Water Present?	Yes <u>√</u> N	lo	Depth (inches): 0-6	]	
Water Table Present?	Yes/_N		Depth (inches): 0		
Saturation Present?	Yes <u>√</u> N		Depth (inches): 0	Wetland Hydrology	
(includes capillary fringe)				Present?	Yes _/ No
Describe Recorded Data (stream gauge, monitori Remarks:	ng well, aerial ph	otos, previous	inspections), if available:		

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	BC
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	•			Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC: 5	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	00 (0.5)
6.				That Are OBL, FACW, or FAC:	33 (A/B)
7.			-	Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multiply	bv:
Sapling Stratum (Plot size:	)			OBL species x1=	
1. Acer rubrum	 15	yes	OBL	FACW species x2=	
Quercus laurifolia	10	yes	FACW	FAC species x3=	
Pinus elliottii	5	no	FACW	FACU species x4=	
Cinnamomum camphora	3	no	FACU	UPL species x5=	
5.	· — —		.,,,,,,	Column Totals: (A)	(B)
6.				(,,,	——\` <sup>'</sup>
7.	·	<del></del>		Prevalance Index = B/A =	
	33	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	10101 0010	.,	✓ Dominance Test is 50%	
Baccharis glomeruliflora	/ 5	VOC	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.		<u>yes</u>	TACVV	Problematic Hydrophytic Vegetation <sup>1</sup>	(Evolain)
3.				Froblematic Hydrophytic Vegetation	(Explain)
4.	· ——	<del></del>		Indicators of hydric onlined watend hydroli	
5.				Indicators of hydric soil and wetland hydrole be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	•
7.				The initial of the general of the diam.	
	5	= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	3	- 10tal 00ve	••	approximately 20 ft (6m) or more in height and	13 in 76
Panicum hemitomon	25	yes	OBL	cm) or larger in diameter at breast height (DBH	
Blechnum serrulatum	10	yes	FACW	Sapling- Woody plants, excluding woody vines	<i>'</i>
Ludwigia peruviana	5	no	OBL	approximately 20 ft (6m) or more in height and	
Rhexia spp.	2	no	FACW	in. (7.6 cm) DBH.	1000 111011 0
Andropogon virginicus	2	no	FAC	Shrub- Woody plants, excluding woody vines,	
Setaria geniculata	2	no	FAC	approximately 3 to 20 ft (1 to 6 m) in height.	
7.		110	170	1	
8.				Herb- All herbaceous (non-woody)plants, inclu herbaceous vines, regardless of size. Includes	•
9.				plants, except woody vines, less than approxin	
10.				m) in height.	natory of it (1
11.				Woody vine- All woody vines, regardless of he	eiaht
12.		<del></del>		Twoody vine- All woody vines, regardless of he	signit.
12.	46	= Total Cove		1	
Moody Vino Stratum (Blot ciza:	40 \	- Total Cove	:1		
Woody Vine Stratum (Plot size:	·/ 15	V00	FACU	1	
1. Rubus spp.		yes	FACU	-	
2.	·				
3.				11	
<b>5</b> .	·			Hydrophytic	lo.
ان. 	· <del></del>	- Total Carre		Vegetation Present? Yes√N	No
Demonstra (If also are all link are are	15	= Total Cove	ei .	<u> </u>	
Remarks: (If observed, list morph	-				
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	ŀ

	scription: (Describe to the d	eptn needed to do		confirm the absence of	indicators.)	
Depth (inches)	Matrix Color (moist) %	Color (moist)	Redox Features % Type¹	Loc <sup>2</sup> T	exture	Remarks
 )-7	10 YR 2/1					black fine sand
7-28	10 YR 6/1	·	· <del></del>	· — —		gray fine sand
-20	10 YR 5/3; 10 YR					gray file said
28-42	5/2					brown and gravish brown fine sand
12-80	10 YR 6/2		·			light brownish gray fine sand
			·			<u> </u>
		· ———				
Type: C=0	Concentration, D=Depletion, R	M=Reduced Matrix,	CS=Covered or Coated	Sand Grains. <sup>2</sup> Loca		Lining, M=Matrix.
	il Indicators:				lr	ndicators for Problematic Hydric Soils 3:
Histo!				ırface (S8) (LRR S, T, U)	_	1 cm Muck (a9) (LRR O)
	Epidon (A2)		Thin Dark Surface (		_	2 cm Muck (A10) (LRR S)
	Histic (A3)		Loamy Mucky Mine		_	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		Loamy Gleyed Mati		_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)		Depleted Matrix (F3		_	Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR P, T, U)		Redox Dark Surfac			(MLRA 153B)
	Mucky Mineral (A7) (LRR P,T,	U)	Depleted Dark Surf		_	Red Parent Material (TF2)
_✓_Muck	Presence (A8) (LRR U)		Redox Depressions	(F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm !	Muck (A9) (LRR P,T)		Marl (F10) (LRR U)	)	_	Other (Explain in Remarks)
	ted Below Dark Surface (A11)		Depleted Orchric (F	11) (MLRA 151)		
	Dark Surface (A12)			asses (F12) (LRR O, P,T)		
					1	ndicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (MLRA 1	50A)	Umbric Surface (F1			ydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (LRR O,	S)	Delta Orchric (F17)	(MLRA 151)	р	roblematic.
Sandy	Gleyed Matrix (S4)		Reduced Vertic (F1	8) (MLRA 150A, 150B)		
Sandy	Redox (S5)		Piedmont Floodplai	n Soils (F19) (MLRA 149)	A)	
Stripp	ed Matrix (S6)	,	Anomalous Bright L	oamy Soils (F20) (MLRA	149A, 153C,	153D)
Dark S	Surface (S7) (LRR P, S, T, U)					
Restrictiv	e Layer (If observed):					
	Type:			į		
	Depth (inches):			Hydric	Soil Present	? Yes <u>√</u> No
Remarks:			<u> </u>			

Project/Site: Levy Nuclear Plant - Transmission Li	ines	City/County: Hillsborou	ugh	_ Sampling Date: 10/5/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	<del></del>	Sampling Point: BD
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range	e: <u>22 27S 18E</u>	<u> </u>
Landform (hillslope, terrace, etc.): N/A				Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.118434	Long: <u>-82.4</u>	487173	Datum: <u>WGS84</u>
Soil Map Unit Name: Basinger fine sands			_NWI classification	: Shrub/ Freshwater Emergent Wetla
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	No	_ (If no, explain in Remarks)
Are Vegetation, Soil,			Are circumstances	s normal? YesNo
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	transects, impo	ortant features, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Yes✓ No	Is the Sampled Area v	within a Wetland?	YesNo
Wetland Hydrology Present? Remarks:	Yes No			
LIVEROL GOV				
HYDROLOGY Wetland Hydrology Indicators:		·	Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum of one is required; c	heck all that apply)			Cracks (B6)
✓ Surface Water (A1)	Water-Stained Leaves (I	'R9)		getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	20)	Drainage Pa	
✓ Saturation (A3)	Marl Deposits (B15) (LR	2R (I)	Moss Trim L	•
Water Marks (B1)	Hydrogen Sulfide Odor (	•	<del></del>	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	• ,	Crayfish Bur	, ,
Drift Deposits (B3)	Presence of Reduced Iro	-		/isible on Aerial Imagery (C9)
Algai Mat or Crust (B4)	Recent Iron Reduction in	, ,		Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutral	• •
Field Observations:			1	
Surface Water Present?	Yes ✓ No	_ Depth (inches):0-6		
Water Table Present?	Yes ✓ No	Depth (inches): 0	_	i
Saturation Present?	Yes No	Depth (inches): 0	Wetland - Hydrology	
(includes capillary fringe)			Present?	Yes <u>✓ No</u>
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:		

VEGETATION - Use scientific na	mes of plants				Sampling Point:	BD
	Absolute %	Dominant	Indicator	Dominance Test Worksho		
Tree Stratum (Plot size:)	Cover	Species?	Status			
Taxodium distichum	- 5	yes	OBL	Number of Dominant Speci	es	
2.				That Are OBL, FACW, or F		(A)
3.	· ——			Total Number of Dominant	40	<b></b>
4.				Species Across All Strata:	<u>, 10</u>	(B)
5.				Percent of Dominant Speci	es on on	/ A /D)
6.				That Are OBL, FACW, or F		(A/B)
7.				Prevalance Index worksh	eet:	
	5	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	_
Quercus laurifolia	25	yes	FACW	FACW species	x2=	_
2. Salix spp.	10	yes	FACW	FAC species	x3=	
Schinus terebinthifolius	10	yes	FAC	FACU species	x4=	_
Acer rubrum	5	no	OBL	UPL species	x5=	
5. Magnolia virginiana	5	no	FACW	Column Totals:	(A)	(B)
6.				_		
7.				Prevalance Index = B/		
L	55	= Total Cove	er	Hydrophytic Vegetation II		
Shrub Stratum (Plot size:	)			✓ Dominance Test is \$		
Myrica cerifera	40	yes	FAC	Prevalence Index is		
Sambucus canadensis	5	no	FACW	Problematic Hydrop	hytic Vegetation <sup>1</sup> (Ex	plain)
Ilex cassine	2	no	FACW	1		
4.				Indicators of hydric soil an		must
5. 6.				be present, unless disturbe		
7.				Definitions of Vegetation	Strata:	
<i>[1.</i>	47	= Total Cove		Trop. Woody planta avaludi	aa waadu sinaa	
Herb Stratum (Plot size:)	71	- rotal Cove	<b>51</b>	Tree- Woody plants, excluding approximately 20 ft (6m) or n	•	(7.6
Eupatorium capillifolium	15	yes	FACU	cm) or larger in diameter at b		. (7.0
Blechnum serrulatum	15	yes	FACW	Sapling- Woody plants, excl		
Ludwigia peruviana	15	yes	OBL	approximately 20 ft (6m) or n	•	than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, exclud	dina woody vines.	
6.				approximately 3 to 20 ft (1 to		
7.		-		Herb- All herbaceous (non-w	oody)plants, including	Ī
8.	•			herbaceous vines, regardles		
9.	-			plants, except woody vines, I	ess than approximatel	ly 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vine:	s, regardless of height	
12.				]		
	45	= Total Cove	er	]		
Woody Vine Stratum (Plot size:	)					
1. Rubus spp.	10	yes	FACU	]		
Dioscorea bulbifera	5	yes	NL			
Lygodium sp.	5	yes	FAC			
4.				Hydrophytic		
5.				Vegetation Present?	YesNo	<del></del>
	20	- Total Cove	35	i .		

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

rofile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)  repth Matrix Redox Features  Remarks  10 YR 2/1 28 10 YR 6/1	SOIL	assistion. (Dees -it -	a tha d-	oth pooded to de-	umant th	a indicator	soutiem the -b	nance of indicat-	Sampling Point:B
Color (moist) % Color (moist) % Type* Loc* Texture Remarks    10 YR 2/1			to the dep	orn needed to doc			confirm the ab	sence of indicators.	•)
28 10 YR 6/1 10 YR 5/3; 10 YR 8-42 5/2 2-80 10 YR 6/2  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  To RM=Reduced Vertic, Final Matrix, M=Matrix.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  To RM=Reduced Vertic, Final Matrix.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  To RM=Reduced Vertic, Final Matrix.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  To RADA Matrix, M=Matrix.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration.  Type: C=Concentration.  Type: C=Concentration.  Type: C=Concentration.  Type: C=Concentration.  Type: C=Concentration.  Type: Lending Matrix (Sand Grains.  Type: Lending Matrix (Sand Grains.  Type: Lending Matrix	inches)		%	Color (moist)			Locz	Texture	Remarks
28 10 YR 6/1 10 YR 5/3; 10 YR 8-42 5/2 2-80 10 YR 6/2	~	40.1/2.014							had 6 and d
B42   5/2   5/2   brown and grayish brown fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light									
5/2   brown and grayish brown fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gra	-28								gray fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   Turns   T	8.42								brown and gravish brown fine sand
Fype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    Varice Soil Indicators:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 5:   Indicators for Problematic Hydric Soils 5:   Indicators for Problematic Hydric Soils 5:   Indicators for Problematic Hydric Soils 5:   Indicators for Problematic Hydric Soils (F18)   Indicators for Problematic Hydric Soils 5:   Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Indicators Ind				<del></del>					
ydric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sufface (S9) (LRR S, T, U) Stratified Layers (A5) Crganic Bodies (A6) (LRR P, T, U) Depleted Matrix (F2) Loamy Mucky Mineral (F1) Marl (F10) (LRR P, T, U) Depleted Below Dark Surface (F7) Marl (F10) (LRR P, T, U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR P, S, T) Derivalue Below Surface (F13) (MLRA 151) Sandy Mucky Mineral (S1) (LRR P, S, T, U) Derivalue Below Surface (F13) (MLRA 150B) Dark Surface (S7) MInicators for Problematic Hydric Soils :  1 cm Muck (A9) (LRR P, S, T) Depleted Matrix (F2) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Annomalous Bright Loamy Soils (F20) (MLRA 153B) Reduced Vertic (F18) (MLRA 150B)  Sandy Redox (A16) (MLRA 150A) Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Estrictive Layer (If observed): Type:  Indicators for Problematic Hydric Soils :  1 cm Muck (A9) (LRR S, T, U) Piedmont Floodplain Soils (F10) (LRR O, T, U) Piedmont Floodplain Soils (F10) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	. 00	10 11( 3/2							inght provincing by hite stand
ydric Soil Indicators: Histol (A1) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F2) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Mard (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A11) Thick Dark Surface (A11) Thick Dark Surface (A16) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (F3) Depleted Matrix (F3) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Depleted Dark Surface (F13) (LRR O, T, U) Dep				<u> </u>					
Histol (A1)	ype: C=	Concentration, D=Depl	etion, RM	=Reduced Matrix, (	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Por	re Lining, M=Matrix.
Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S9) (LRR P, T, U)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F2)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Reduced Vertic (F18) (outside MLRA 150A, B)  Reduced Vertic (F18) (outside MLRA 150A, B)  Reduced Vertic (F18) (outside MLRA 150A, B)  Reduced Vertic (F19) (LRR P, S, T)  Piedmont Floodplain Soils (F20)  (MLRA 153B)  Reduced Vertic (F18) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (A7) (LRR P, T, U)  Depleted Orchric (F17) (MLRA 151)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Delta Orchric (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20)  (MLRA 150A, B)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20)  (MLRA 153B)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20)  (MLRA 153B)  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Reduced Vertic (F10 Served):  Type:  Type:									Indicators for Problematic Hydric Soils 3:
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR Q) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Piedmont Floodplain Soils (F19) (LRR P, S, T) Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20)  (MLRA 153B) Anomalous Bright Loamy Soils (F20)  (MLRA 153B) Anomalous Bright Loamy Soils (F20)  (MLRA 153B) Anomalous Bright Loamy Soils (F20)  (MLRA 153B) Anomalous Bright Loamy Soils (F20)  (MLRA 153B) Anomalous Bright Loamy Soils (F20)  (MLRA 153B) Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20)  (MLRA 153B) Piedmont Floodplain Soils (F19) (LRR O, P,T) Anomalous Bright Loamy Soils (F20)  Piedmont Floodplain Soils (F10)  (MLRA 153B) Piedmont Floodplain Soils (F10)  Piedmont Floodplain Soils (F10)  (MLRA 153B) Piedmont Floodplain Soils (F20)  (MLRA 153B) Piedmont Floodplain Soils (F20) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Piestrictive Layer (If observed): Type:  Type:		, ,					, , ,		
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F2) Depleted Matrix (F2) Depleted Matrix (F2) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Som Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Mark Presence (A8) (LRR U) Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR T, U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Depleted Orchric (F11) (MLRA 151) Lron-Manganese Masses (F12) (LRR Q, P, T) Sandy Mucky Mineral (S1) (LRR Q, S) Sandy Mucky Mineral (S1) (LRR Q, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Type:  Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F29) (MLR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Piedmont Floodplain Soils (F19) (MLRA 151)  Anomalous Bright Loamy Soils (F20)  Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)				,		•		•	, , , ,
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Evertictive Layer (Bf observed):  Depleted Matrix (F3) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B)  Red Parent Material (TF2) Red Parent Material (TF2)  Pepleted Dark Surface (F7) Red Parent Material (TF2)  Nuck Presence (A8) (LRR U) Pepleted Dark Surface (F7) Mard (F10) (LRR U) Depleted Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F13) (MLRA 151)  Petalor (F17) (MLRA 150A, 150B)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A, 150B)  Sandy Redox (S5)  Delta Orchric (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Type:		` '							
Organic Bodies (A6) (LRR P, T, U)  Seem Mucky Mineral (A7) (LRR P,T,U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7)  Redox Dark Surface (F6)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:									
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)  John (Explain in Remarks)									
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:	✓ Muck	Presence (A8) (LRR I	J)		Red	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:	1 cm	Muck (A9) (LRR P,T)							Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)	Deple	ted Below Dark Surfac	e (A11)			•			
Coast Prairie Redox (A16) (MLRA 150A)	Thick	Dark Surface (A12)			Iron-	Manganese Ma	sses (F12) (LRI	R O, P,T)	3Indicators of hydrophytic vegetation and wetland
Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17) (MLRA 151) problematic. Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)	Coast	Prairie Redox (A16) (!	MLRA 150	DA)	Umb	oric Surface (F13	3) (LRR P, T, U)	)	
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type:	Sandy Mucky Mineral (S1) (LRR O, S)				Delta	a Orchric (F17)	(MLRA 151)		
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type:			-1414 0, 0,			, ,		150R)	
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type:		. , , ,				•		•	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type:									C. 153D)
Restrictive Layer (If observed): Type:			S T III				, (	, (	,,
Type:								1	
			-						
								Hydric Soil Prese	nt? Yes ✓ No .
Remarks:	Remarks:							1.,	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/5/09				
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: BE		
Investigator(s): Justin Styer, Karl Bullock	· · · · · · · · · · · · · · · · · · ·	Section, Township, Range	: 23 27S 18E			
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.119395	Long: <u>-82.4</u>	84464	Datum: WGS8		
Soil Map Unit Name: Myakka fine sands			_NWI classification:	Freshwater Pond		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology		Are circumstances			
	or Hydrology		(If needed, explain	any answers in Remarks)		
SUMMARY OF FINDINGS - Attach sit			•	•		
Hydrophytic Vegetation Present?	YesNo		, , , , , , , , , , , , , , , , , , , ,	,		
Hydric Soil Present?	Yes✓No	is the Sampled Area w	ithin a Wetland?	YesNo		
Wetland Hydrology Present?	YesNo					
Remarks:						
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)		
Primary Indicators (minimum of one is required; of	heck all that annly)		Surface Soil			
✓ Surface Water (A1)	<u>песк ан кнак арргуу</u> Water-Stained Leaves (E	30/		getated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	59)	Drainage Pat	, ,		
✓ Saturation (A3)	Mart Deposits (B15) (LRI	P III	Moss Trim Li	, ,		
		·		Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (  Oxidized Rhizospheres of	•	Crayfish Burr	• ,		
Sediment Deposits (B2)	Presence of Reduced Iro		<del></del>	sible on Aerial Imagery (C9)		
Drift Deposits (B3) Algal Mat or Crust (B4)	Recent Iron Reduction in	•		Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	Tilled Solis (Co)	Shallow Aqui			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ke)	FAC Neutral	• •		
Field Observations:	Other (Explain in Neman	ns)	FAC Neutral	Test (D3)		
Surface Water Present?	Yes No	Depth (inches): 0-72				
Water Table Present?	Yes No		1			
		Depth (inches): 0	Wetland			
Saturation Present?	103 NO	Deptir (menes)	Hydrology	Voc. / No.		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ng well aerial photos previous	inspections) if available:	Present?	Yes <u>✓ No</u>		
Pessine Nessided Bata (Stream gauge, monitor)	ng well, desidi priotos, previous	mopeonono), n available.	•			
Remarks:			<del> </del>			
, contains.		•				

VEGETATION - Use scientific nar	nes of plants			Sampling Point:BE
	Absolute %	Dominant		Dominance Test Worksheet:
Tree Stratum (Plot size:)	Cover	Species?	Status	
1.				Number of Dominant Species  That Are ORL 5ACM as 5ACM
2.				That Are OBL, FACW, or FAC:
3.				Total Number of Dominant (B)
4.				Species Across All Strata:
5.				Percent of Dominant Species #DIV/0! (A/B)
6.				That Are OBL, FACW, or FAC:
7.				Prevalance Index worksheet:
Canling Stratum (Dist size:	, 0	= Total Cove	r	Total % Cover of: Multiply by:  OBL species x1=
Sapling Stratum (Plot size:	)			OBL species x1= x1= x2=
<u>1.</u> 2.				
3.				FAC species
				UPL species
4.			****	4 · · — — — — — — — — — — — — — — — — —
5.				Column Totals: 2 (A) 8 (B)
6.				Branches as Indan = D/A = 4.00
7.		= Total Cause		Prevalance Index = B/A = 4.00
Charle Chartery (Districts	,	= Total Cove	r	Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:	_)			Dominance Test is 50%
1.		-		Prevalence Index is ≤3.0¹
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3.				Virtually no vegitation.
4.				Indicators of hydric soil and wetland hydrology must
5.				be present, unless disturbed or problematic.
6.				Definitions of Vegetation Strata:
7.				
	0	= Total Cove	r	Tree- Woody plants, excluding woody vines,
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) or more in height and 3 in. (7.6
Paspalum notatum	2	yes	FACU	cm) or larger in diameter at breast height (DBH).
2.	. <u></u>			Sapling- Woody plants, excluding woody vines,
3.				approximately 20 ft (6m) or more in height and less than 3
4.	<del></del>			in. (7.6 cm) DBH.
5.			-	Shrub- Woody plants, excluding woody vines,
6.				approximately 3 to 20 ft (1 to 6 m) in height.
7.				Herb- All herbaceous (non-woody)plants, including
8.				herbaceous vines, regardless of size. Includes woody
9.				plants, except woody vines, less than approximately 3 ft (1
10.				m) in height.
11.				Woody vine- All woody vines, regardless of height.
12.				
	2	= Total Cove	r	
Woody Vine Stratum (Plot size:	)			
1.				
2.				
3.				]
4.				Hydrophytic
5.				Vegetation Present? YesNo
	0	= Total Cove		
Remarks: (If observed, list morph				
Percent cover estimates based or	n meandering s	survey of the b	roader coi	mmunity.

SOIL								Sampling Point:
	scription: (Describe	to the de	•	ument th	ne indicator or	r confirm the ab	sence of indicator	s.)
Depth	Matrix		Redox Features		<del></del>		<b>.</b> .	<u> </u>
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Туре	Loc <sup>2</sup>	Texture	Remarks
0-5	10 YR 3/1							very dark gray fine sand
5-20	10 YR 6/1							gray fine sand
20.25	N 0/0							blast Francisco
20-25 25-30	N 2/0 5 YR 3/3	. —				· ———		black fine sand  dark reddish brown fine sand
20-00	3 11( 3/3	· ——	·					dark reddisii brown in e sand
				_				
	Concentration, D=Dep	letion, RM	=Reduced Matrix,	CS=Cove	red or Coated	Sand Grains.	Location: PL=P	ore Lining, M=Matrix.
	I Indicators:			D-1	onton Dalasso Co	-f (00) (I DE	. C T III	Indicators for Problematic Hydric Soils 3:
Histol	(A1) Epidon (A2)					urface (S8) (LRF (S9) (LRR S, T,		1 cm Muck (a9) (LRR 0) 2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR 0)	•	2 CHI Muck (A10) (LRR 3)Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matr		,	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR F	P, T, U)		Red	ox Dark Surfac	e (F6)		(MLRA 153B)
5 cm N	Nucky Mineral (A7) (L	RR P,T,U	)	Depl	eted Dark Surf	ace (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)			Redo	ox Depressions	s (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)	
1 cm N	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)	)		Other (Explain in Remarks)
Deplet	ed Below Dark Surfac	æ (A11)		Depl	eted Orchric (F	11) (MLRA 151	)	
Thick I	Dark Surface (A12)			Iron-	Manganese Ma	asses (F12) (LR	R O, P,T)	3
Coast	Prairie Redox (A16) (	MLRA 15	0A)	Umb	ric Surface (F1	13) (LRR P, T, U	)	
Sandy	Mucky Mineral (S1) (	LRR O, S	)	Delta	Orchric (F17)	(MLRA 151)		•
Sandy	Gleyed Matrix (S4)			Redu	uced Vertic (F1	8) (MLRA 150A	, 150B)	
Sandy	Redox (S5)			Pied	mont Floodplai	n Soils (F19) (M	LRA 149A)	
Strippe	ed Matrix (S6)			Anor	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 153	C, 153D)
Dark S	Surface (S7) (LRR P,	S, T, U)						
Restrictive	Layer (If observed)	:						
	Туре:						l	
	Depth (inches):						Hydric Soil Prese	ent? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Date: 10/5/	09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	Sampling Point: BF		
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range	: 22 27S 18E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none	Slope (%)	:
Subregion (LRR or MLRA): LRR U	Lat: <u>28.119522</u>	Long: <u>-82.4</u>	82015	Datum:	WGS84
Soil Map Unit Name: St. John's fine sands			_NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remark	(s)
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstances	normal? Yes_ ✓	_No
Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed, explain	any answers in Remarks	a)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	YesNo	
Wetland Hydrology Present?	Yes No	]			
Remarks:	<u> </u>	•			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two requ	ired)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil		
✓ Surface Water (A1)	Water-Stained Leaves (	'B9)		getated Concave Surface	(B8)
High Water Table (A2)	Aquatic Fauna (B13)	,20)	Drainage Pa	-	()
✓ Saturation (A3)	Marl Deposits (B15) (LF	DD 111	Moss Trim L	, ,	
<del>}</del>		•	·		
Water Marks (B1)	Hydrogen Sulfide Odor			Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	, ,	201
Drift Deposits (B3)	Presence of Reduced Ir		· · · · · · · · · · · · · · · · · · ·	isible on Aerial Imagery (	.9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	, ,	Geomorphic		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	_	4		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			
Remarks:					
Traine.					
	4				
l .					

VEGETATION - Use scientific nar	mes of plants			Sampl	ing Point:	BF
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
Quercus laurifolia	5	yes	FACW	Number of Dominant Species	_	
2.				That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.				Total Number of Dominant		
4.				Species Across All Strata:	<u>6</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>83.33</u>	(A/B)
7.	· <del></del>	•		Prevalance Index worksheet:		
	5	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	١	· Total Gove	<b>~</b> 1	OBL species x1		
Taxodium distichum	/ 15	yes	OBL	FACW species x2		_
Callistemon viminalis	10	yes	NL	FAC species x3		_
Quercus laurifolia	5	no	FACW	FACU species x4		_
Acer rubrum	5	no	OBL	UPL species x5		_
Sapium sebiferum	5		FAC	<del></del>		- <sub>(B)</sub>
6.		no	FAC	Column Totals:(A	·)	_(B)
7.				Brouglance Index = B/A =		
<i>i</i> .	40	= Total Cove	·	Prevalance Index = B/A = Hydrophytic Vegetation Indicate		
Shrub Stratum (Blot size:	1	- Total Cove	<b>31</b>	✓ Dominance Test is 50%	vis.	
Shrub Stratum (Plot size:	<i><del>)</del></i>		<b>540</b>			
Myrica cerifera	40	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	1	
Sambucus canadensis	5	no	FACW	Problematic Hydrophytic Ve	egetation (Exp	olain)
3. Ilex cassine	2	no	FACW	4,		
4.				Indicators of hydric soil and wetla		nust
5.				be present, unless disturbed or pro		
6.				Definitions of Vegetation Strata:		
7.						
Literto Obrationa (Diet aleas)	47	= Total Cove	er	Tree- Woody plants, excluding wood		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in I		(7.6
Ludwigia peruviana		yes	OBL	cm) or larger in diameter at breast he	-	
Eupatorium capillifolium	10	yes	FACU	Sapling- Woody plants, excluding w	•	
Panicum repens	10	yes	FACW	approximately 20 ft (6m) or more in I	neight and less	than 3
4. Lantana camara	5	no	FACU	in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding wo	•	
6.	·			approximately 3 to 20 ft (1 to 6 m) in	height.	
7.				Herb- All herbaceous (non-woody)pl		
8.				herbaceous vines, regardless of size		
9.				plants, except woody vines, less that	n approximately	/ 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, regard	dless of height.	
12.						
	45	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes _	✓No	<u>.</u>
	0	= Total Cove	er	1		
Remarks: (If observed, list morph-	ological adapta	tions below).	······································			
Percent cover estimates based or	n meandering s	urvev of the b	roader cor	mmunity.		j

	scription: (Describe to	tne dep	tn needed to doc		r or confirm the abs	sence of indicators.,	)
oth hes)	Matrix Color (moist)	%	Color (moist)	Redox Features  % Type	Loc²	Texture	Remarks
			Color (molety				
	10 YR 2/1						black fine sand
2	10 YR 3/2						very dark grayish brown fine sand
29	10 YR 6/2						light brownish gray fine sand
36	10 YR 2/1					· · · · · · · · · · · · · · · · · · ·	black fine sand
e: C=C	Concentration, D=Deple	tion, RM=	Reduced Matrix, 0	S=Covered or Coat	ed Sand Grains.		e Lining, M=Matrix.
	il Indicators:						Indicators for Problematic Hydric Soils 3:
_Histol					Surface (S8) (LRR		1 cm Muck (a9) (LRR O)
_Histic	Epidon (A2)			Thin Dark Surfa	ce (S9) <b>(LRR S, T, L</b>	J)	2 cm Muck (A10) (LRR S)
_Black I	Histic (A3)			Loamy Mucky M	lineral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
_Hydrog	gen Sulfide (A4)			Loamy Gleyed N	Natrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)	<b>-</b>		Depleted Matrix			Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P,			Redox Dark Sur	• •		(MLRA 153B)
_	Mucky Mineral (A7) (LR			Depleted Dark S	` '		Red Parent Material (TF2)
_	Presence (A8) (LRR U	)		Redox Depressi	• •		Very Shailow Dark Surface (TF12) (LRR T, U)
_1 cm N	Muck (A9) (LRR P,T)			Mari (F10) (LRF	≀U)		Other (Explain in Remarks)
Deplet	ed Below Dark Surface	(A11)		Depleted Orchri	c (F11) (MLRA 151)		
Thick I	Dark Surface (A12)			Iron-Manganese	Masses (F12) (LRF	RO, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (N	ILRA 150	Α)	Umbric Surface	(F13) (LRR P, T, U)		hydrology must be present, unless disturbed or
•	Mucky Mineral (S1) (L		•	Delta Orchric (F	17) (MLRA 151)		problematic.
	Gleyed Matrix (S4)	KK 0, 3,			(F18) (MLRA 150A,	150B)	•
	Redox (S5)				plain Soils (F19) (ML	•	
	ed Matrix (S6)					) (MLRA 149A, 153C	:, 153D)
	Surface (S7) (LRR P, S	T 10				, (	, ,
	E Layer (If observed):	, ,, 0,				1	
	Type:						
	Depth (inches):					Hydric Soil Presen	nt? Yes ✓ No .
	Depar (mones).					inyana com ricoch	100
marks:	Depth (inches):					Hydric Soil Presen	t? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/5/09			
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	Sampling Point: BG				
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range: 22 27S 18E					
Landform (hillslope, terrace, etc.): N/A	<u>.                                    </u>	Local relief (concave, conv	Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: <u>28.119331</u>	Long: <u>-82.4</u>	80623	Datum: WGS84			
Soil Map Unit Name: Zolfo fine sands			NWI classification:	NA			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	(If no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes/_No			
	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)			
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.			
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland? Yes✓No					
Wetland Hydrology Present?	Yes No						
Remarks:		<u> </u>					
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)			
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (f	B9)	Sparsely Veg	getated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season \	Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	rows (C8)			
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	sible on Aeriał Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic	Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)			
Field Observations:							
Surface Water Present?	Yes No	Depth (inches): 0-24	1				
Water Table Present?	Yes No	Depth (inches): 0					
Saturation Present?	Yes No	Depth (inches):0	Wetland Hydrology				
(includes capillary fringe)		•	Present?	Yes <u>✓No</u>			
Describe Recorded Data (stream gauge, monitor	ng well, aerial photos, previous	inspections), if available:	1				
		,					
Paradia.							
Remarks:							
	•						

VEGETATION - Use scientific nan	nes of plants			Sampling Point:	BG
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Quercus laurifolia	20	yes	FACW	Number of Dominant Species	/A\
Sabal palmetto	5	yes	FAC	That Are OBL, FACW, or FAC: $\frac{4}{}$	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.			-	That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	25	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)		•	OBL species x1=	
Schinus terebinthifolius	 50	yes	FAC	FACW species x2=	-
Prunus caroliniana	10	no	NL	FAC species x3=	-
3.				FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	— <sub>(B)</sub>
6.	······		-	(//)	一 <sup>(')</sup>
7.				Prevalance Index = B/A =	
	60	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	. 5.0.	•	✓ Dominance Test is 50%	
1.	_/			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	(nieln)
3.				Troblematic riyuropriyiic vegetation (Ex	piairi)
4.				Indicators of hydric soil and watland hydrology	t
<del>5</del> .				Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic.	must
6.				Definitions of Vegetation Strata:	
7.				Deminitions of vegetation strata.	
1.		= Total Cove		Trac Mandu plants avaluding woods wines	
Herb Stratum (Plot size:)	U	- Total Cove	<b>31</b>	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in	(7.6
,	1	VOC	OBL	cm) or larger in diameter at breast height (DBH).	. (7.0
Hydrocotyle spp. 2.		yes	OBL		
3.				Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less	than 3
4.				in. (7.6 cm) DBH.	, illali 5
5.	·			<b>l</b> ' '	
6.				Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
7.				<b>1</b> ''	
8.				Herb- All herbaceous (non-woody)plants, including	
9.				herbaceous vines, regardless of size. Includes wo plants, except woody vines, less than approximate	
				m) in height.	y S It (1
10. 11.				<b>.</b>	
				Woody vine- All woody vines, regardless of height	
12.		- Total Caus			
Marada Marada Otas Come (District	, 1	= Total Cove	er		
Woody Vine Stratum (Plot size:					
Paederia foetida	25	yes	NL		
Vitus rotundifolia	5	no	FAC		
3.				<del>.</del>	
4.		•	<del></del>	Hydrophytic	!
5.				Vegetation Present? YesNo	·
	30	= Total Cove	er	<u> </u>	
Remarks: (If observed, list morpho	_				
Percent cover estimates based on	ı meandering s	survey of the b	roader co	mmunity.	

Histol (A1)	fine sand
10 YR 3/1	r fine sand fine sand sand
10 YR 7/1; 10 YR 4/4 10 YR 5/2 15-51 10 YR 7/2 10 YR 6/6 10 YR 5/2 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 5/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 YR 6/6 10 YR 7/2 10 Yeldmont Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alorand Fle Alora	fine sand
10 YR 5/2 YR 4/4 common fine distinct mottles grayish brown common fine distinct mottles grayish brown common fine distinct mottles grayish brown grayish brown problematic.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Sand Grains.  Type: C=Concentration, D=Depleted Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Coater Patric Matrix, S1, S1, S1, S1, S1, S1, S1, S1, S1, S1	sand
5-51 10 YR 7/2 YR 6/6 distinct mottles light gray fine gray/ish brown  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Deplete Ining, M=Matrix (F2)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Yersence (A8) (LRR P,T,U)  Muck Yersence (A8) (LRR P,T)  Depleted Dark Surface (F7)  Redox Depressions (F8)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Polyvalue Below Surface (Coad Grains.  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (A9) (LRR S, T, U)  1 cm Muck (A9)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F2)  Piedmont Fice Anomalous E  Redox Dark Surface (F7)  Red Parent I  Very Shallow  Other (Explant II)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Umbric Surface (F13) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    Addric Soil Indicators:	fine sand
ydric Soil Indicators:  Histol (A1)  Histol (A2)  Black Histic Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (A7)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F8)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thic Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Micking Mucky Mineral (S1) (LRR P, T, U)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Mucky Mineral (S1) (LRR P)  Loamy Mucky Mineral (S1) (LRR P, T, U)  Picking Mucky Mineral (A7)  Polyvalue Below Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (F1) (LRR O)  Redox Dark Surface (F1)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Umbric Surface (F13) (LRR P, T, U)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Redox Deressions (F8)  Very Shallow  Other (Explant Marl Surface (A12)  Liron-Manganese Masses (F12) (LRR O, P,T)  And (F10) (LRR P, T, U)  And (F10) (LRR P, T, U)  Poleta Orchric (F11) (MLRA 151)  Redox Deressions (F8)  New Yery Shallow  Other (Explant Marl Surface (A12)  Liron-Manganese Masses (F12) (LRR O, P,T)  And (F10) (LRR P, T, U)  Poleta Orchric (F11) (MLRA 151)  Redox Deressions (F8)  New Yery Shallow  Other (Explant Marl Surface (A12)  Loamy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Redox Deressions (F8)  Loamy Mucky Mineral (S1) (LRR O, S)  Poleta Orchric (F18) (MLRA 150A, 150B)	
ydric Soil Indicators:  Histol (A1)  Histol (A2)  Black Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Tem Muck (A9)  Loamy Mucky Mineral (A7) (LRR P, T, U)  Peleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orderic (F18) (MLRA 150A)  Delta Orderic (F18) (MLRA 150A)  Delta Orderic (F18) (MLRA 150A)  Delta Orderic (F18) (MLRA 150A)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Gleyed Matrix (F2)  Loamy Mucky Mineral (S1) (LRR O, S)  Peleted Matrix (F2)  Loamy Gleyed Matrix (F2)  Peddornot Fic Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E	
ydric Soil Indicators:  Histol (A1)  Histol (A2)  Black Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P, T, U)  Tem Muck (A9)  Loamy Mucky Mineral (A7) (LRR P, T, U)  Peleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orderic (F18) (MLRA 150A)  Delta Orderic (F18) (MLRA 150A)  Delta Orderic (F18) (MLRA 150A)  Delta Orderic (F18) (MLRA 150A)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Gleyed Matrix (F2)  Loamy Mucky Mineral (S1) (LRR O, S)  Peleted Matrix (F2)  Loamy Gleyed Matrix (F2)  Peddornot Fic Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E Anomalous E	X.
Histic Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR P,T)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Thin Dark Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (F1) (LRR O)  Redox Dark Surface (F1)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Red Parent I  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Umbric Surface (F13) (LRR P, T, U)  Sandy Mucky Mineral (S1) (LRR O, S)  Reduced Vertic (F18) (MLRA 151A)  Problematic.	roblematic Hydric Soils 3:
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR Q) Reduced Ver Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F2) Piedmont Fit Redox Dark Surface (F6) Mucky Mineral (A7) (LRR P, T, U) Pepleted Dark Surface (F7) Red Parent for Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Coast Prairie Redox (A16) Coast Prairie Redox (A16) (MLRA 150A) Loamy Mucky Mineral (F1) (LRR Q) Depleted Dark Surface (F7) Red Parent for Mart (F10) (LRR U) Depleted Dark Surface (F7) Red Parent for Mart (F10) (LRR U) Other (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Explainment of the Martin (Expl	a9) (LRR O)
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Matrix (F2) Depleted Matrix (F3) Anomalous E Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Strat	A10) (LRR S)
Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Dark Surface (F7)  Red Parent I  Warl (F10) (LRR U)  Other (Explation Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Depleted Matrix (F3)  Redox Depressions (F8)  Very Shallow  Other (Explation Dark Surface (A11)  Iron-Manganese Masses (F12) (LRR O, P,T)  Alndicators of hydrology must be problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)	rtic (F18) (outside MLRA 150A, B)
Organic Bodies (A6) (LRR P, T, U)  Seedox Dark Surface (F6)  (MLRA 153  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Dark Surface (F7)  Red Parent I  Very Shallow  Other (Expla  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Redux Dark Surface (F6)  (MLRA 150  And (F10) (LRR U)  Depleted Drchric (F11) (MLRA 151)  Ton-Manganese Masses (F12) (LRR O, P,T)  yallocators of hyd hydrology must b problematic.	podplain Soils (F19) (LRR P, S, T)
	Bright Loamy Soils (F20)
✓ Muck Presence (A8) (LRR U)	•
1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jumbric Surface (F13) (LRR P, T, U)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)	Dark Surface (TF12) (LRR T, U)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jeff Coast Prairie Redox (A16) (MLRA 150A)  Jumbric Surface (F13) (LRR P, T, U)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)	. ,,
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jumbric Surface (F13) (LRR P, T, U)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)	in in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Lumbric Surface (F13) (LRR P, T, U)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)	
Coast Prairie Redox (A16) (MLRA 150A)	rophytic vegetation and wetland
Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B)	hydrology must be present, unless disturbed or
5 1 4 5 1 1 1 0 1 (510) (51 5 4 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)	
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)	
testrictive Layer (If observed):	
Type:	
Depth (inches): Hydric Soil Present? Yes Remarks:	No

Applicant/Owner: Progress Energy Florida, Inc.    State: FL   Sampling Point: BH	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Date:1	10/5/09	
Landform (hillslope, terrace, etc.): NIA Local relief (concave, convex, none): none   Slope (%): Subregion (LRR or MLRA)   LRR U	Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: B			ВН	
Subregion (LRR or MLRA): LRR U Lat: 28.119509 Long: 42.477535 Datum: WGS84  Soil Map Unit Name: Basinger fine sands NVI classification: Shub Wetland  Are dimatic / hydrologic conditions on the site typical for this time of year? Yes No (iff no, explain in Remarks)  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances norma? Yes No hare Vegetation. Soil or Hydrology naturally problematic? (iff needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrochytic Vegetation Present? Yes No Substantial Hydrology Present? Yes No Substantial Hydrology Present? Yes No Substantial Hydrology Present? Yes No Substantial Hydrology Indicators: Substantial Hydrology Indicators (Bib)  HYDROLOGY  Wetland Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Indicators (Bib) Substantial Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydrology Hydr	Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range	e: <u>22 27S 18E</u>			
Soil Map Unit Name: Basinger fine sands  Are climatic / hydrologic conditions on the site typical for this time of year?  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation  Soil  or Hydrology  significantly disturbed?  Are circumstances norma?  Yes No anturally problematic?  (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (86)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (88)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Surface (89)  Sparsely Vegetated Concave Su	Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	vex, none): none	Slope	(%):	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Subregion (LRR or MLRA): LRR U	Lat: 28.119509	Dong:82.4	177535	Datum	n: <u>WGS84</u>	
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes / No	Soil Map Unit Name: Basinger fine sands			_NWI classification	n: Shrub Wetland		
Are Vegetation	Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u>✓</u>	_ No	_ (If no, explain in Rer	marks)	
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydric Phytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Mater Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Sediment Deposits (B3)  Presence of Reducted Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inol Deposits (B5)  In Jundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Depth (inches):  Surface Soil Cracks, (B6)  Wetland Hydrology Present?  Yes No Depth (inches):  Output Deposits (B1)  Wetland Hydrology Present?  Yes No Depth (inches):  Output Deposits (Pesent)?  Yes	Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstance	s normal? Yes_	✓No	
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydric Phytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Mater Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Sediment Deposits (B3)  Presence of Reducted Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inol Deposits (B5)  In Jundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  Depth (inches):  Surface Soil Cracks, (B6)  Wetland Hydrology Present?  Yes No Depth (inches):  Output Deposits (B1)  Wetland Hydrology Present?  Yes No Depth (inches):  Output Deposits (Pesent)?  Yes	Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in Rem	arks)	
Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Stained Leaves (B9)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Dry-Season Water Table (C2)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Aquatic Fauna (B1)  Research fron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  I non Deposits (B5)  Thin Muck Surface (C7)  I nundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owtland Hydrology Present?  Yes _ No _ Depth (inches): _ Owt				transects, impo	ortant features, e	etc.	
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Primary Indicators (B1)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Drainage Patterns (B16)  Water Marks (B1)  Drainage Patterns (B16)  Moss Trim Lines (B16)  Drainage Patterns (B16)  Moss Trim Lines (B16)  Drainage Patterns (B16)  Drainage Patterns (B16)  Moss Trim Lines (B16)  Dray-Season Water Table (C2)  Crayfish Burrows (C8)  Drift Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches): Uetland Hydrology  Present? Yes No Depth (inches): Wetland Hydrology  Present? Yes No	Hydrophytic Vegetation Present?	Yes✓No		-			
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Moss Trim Lines (B16)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced fron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Inundation Visible on Aerial Imagery (B7)  — Other (Explain in Remarks)  Field Observations:  Surface Water Present?  — Yes ✓ No — Depth (inches): _ 0.24  Wetland  Hydrology  Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland  Hydrology  Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland  Hydrology  Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland  Hydrology  Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland  Hydrology  Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland  Hydrology  Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland  Hydrology  Present?  Yes ✓ No _ Depth (inches): _ 0  Wetland	Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland? YesNo				
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9)  — Sparsely Vegetated Concave Surface (B8)  — High Water Table (A2)  — Aquatic Fauna (B13)  — Drainage Patterns (B10)  ✓ Saturation (A3)  — Marl Deposits (B15) (LRR U)  — Water Marks (B1)  — Hydrogen Sulfide Odor (C1)  — Sediment Deposits (B2)  — Oxidized Rhizospheres on Living Roots (C3)  — Drift Deposits (B3)  — Presence of Reduced fron (C4)  — Algal Mat or Crust (B4)  — Recent Iron Reduction in Tilled Soils (C6)  — Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  ✓ Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  ✓ Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  ✓ Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  ✓ Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  ✓ Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  ✓ Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  ✓ Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?  ✓ Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present?	Wetland Hydrology Present?	Yes No	]				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Field Observations:       FAC Neutral Test (D5)         Surface Water Present?       Yes ✓ No Depth (inches): 0         Water Table Present?       Yes ✓ No Depth (inches): 0         Saturation Present?       Yes ✓ No Depth (inches): 0         Wettand Hydrology       Present? No Present? No Depth (inches): 0	Remarks:						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Field Observations:       FAC Neutral Test (D5)         Surface Water Present?       Yes ✓ No Depth (inches): 0         Water Table Present?       Yes ✓ No Depth (inches): 0         Saturation Present?       Yes ✓ No Depth (inches): 0         Wettand Hydrology       Present? No Present? No Depth (inches): 0							
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Field Observations:       FAC Neutral Test (D5)         Surface Water Present?       Yes ✓ No Depth (inches): 0         Water Table Present?       Yes ✓ No Depth (inches): 0         Saturation Present?       Yes ✓ No Depth (inches): 0         Wettand Hydrology       Present? No Present? No Depth (inches): 0							
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Field Observations:       FAC Neutral Test (D5)         Surface Water Present?       Yes ✓ No Depth (inches): 0         Water Table Present?       Yes ✓ No Depth (inches): 0         Saturation Present?       Yes ✓ No Depth (inches): 0         Wettand Hydrology       Present? No Present? No Depth (inches): 0			···-				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         Field Observations:       FAC Neutral Test (D5)         Surface Water Present?       Yes ✓ No Depth (inches): 0         Water Table Present?       Yes ✓ No Depth (inches): 0         Saturation Present?       Yes ✓ No Depth (inches): 0         Wettand Hydrology       Present? No Present? No Depth (inches): 0	HVDDOL OOV						
Primary Indicators (minimum of one is required, check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes   No  Depth (inches):  Oxidated Reves (B9)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Visible on Aerial Imagery (C9)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes   No  Depth (inches):  O  Wetland  Hydrology  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  Present?  Yes   No  No  No  Present?  Yes   No  No  No  Present?  Yes   No  No  No  No  No  No  No  No  No  N							
✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)         ✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)						<u>equirea)</u>	
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNoDepth (inches):O  Water Table Present? YesNoDepth (inches):O			(20)		• •	(50)	
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)         Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)         Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)         Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes✓ No Depth (inches):0         Water Table Present?       Yes✓ No Depth (inches):0       Wettand Hydrology         Yes✓ No Depth (inches):0       Present?       Yes✓ No	· · · · ·		(89)		-	ace (B8)	
Water Marks (B1)							
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)	· ` '		·		` '		
Drift Deposits (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Iron Deposits (B5)  Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0-24  Water Table Present?  Yes ✓ No Depth (inches): 0 Wettand Hydrology  (includes capillary fringe)  Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present?	· · ·	<del></del>	` ,				
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2) Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/ NoDepth (inches):0_ Water Table Present? Yes/ NoDepth (inches):0_ Saturation Present? Yes/ NoDepth (inches):0_ Hydrology Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Hydrology Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDepth (inches):0_ Present? Yes/ NoDept	<del></del> -			<del></del> -	` *		
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/ No Depth (inches):0  Water Table Present? Yes/ No Depth (inches):0  Saturation Present? Yes/ No Depth (inches):0  Hydrology  Present? Yes/ No	<del></del>		, ,		-	ry (C9)	
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/ NoDepth (inches):0 Water Table Present? Yes/ NoDepth (inches):0 Saturation Present? Yes/ NoDepth (inches):0 (includes capillary fringe)  Wetland Hydrology Present? Yes/ No	. ,		, ,		, ,		
Field Observations:           Surface Water Present?         Yes _ ✓ No Depth (inches):							
Surface Water Present?  Yes _		Other (Explain in Rema	rks)	FAC Neutra	I Test (D5)		
Water Table Present?       Yes ✓ No Depth (inches): _0		V /	Darth (inches): 0.04				
Saturation Present?  Yes No Depth (inches):0				-			
(includes capillary fringe) Present? YesNo		Yes No	_ Depth (inches):0	- Wetland			
		res No	_ Depth (inches):u	1			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		innual point about a province	- 1	Present?	Yes <u> </u>		
	Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:				
	Remarks:						
Remarks:	· ·						
Remarks:							
Remarks:							
Remarks:							
Remarks:							
Remarks:							
Remarks:							
Remarks:							
Remarks:							
Remarks:							
Remarks:							

<b>VEGETATION</b> - Use scientific name	nes of plants			S	ampling Point:	BH
!	Absolute %	Dominant	Indicator	Dominance Test Workshee	t:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
Taxodium distichum	5	yes	OBL	Number of Dominant Species	3	(4)
2.				That Are OBL, FACW, or FA	C: <u>4</u>	(A)
3.				Total Number of Dominant		(D)
4.				Species Across All Strata:	<u>4</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FA		(A/B)
7.				Prevalance Index workshee		
	5	= Total Cove	<del></del>	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1. Salix spp.	, 	yes	FACW	FACW species	x2=	-
2.			77.011	FAC species	x3=	-
3.				FACU species	x4=	-
4.				UPL species	x5=	-
5.	<del></del>			Column Totals:	(A)	- (В)
6.						-\ <sup>''</sup>
7.				Prevalance Index = B/A	<del>_</del>	ļ
1.	25	= Total Cove	<del></del> -	Hydrophytic Vegetation Ind		
Shrub Stratum (Plot size:	)	- 10tal 0010	l	✓ Dominance Test is 50		
Sambucus canadensis	_/ 10	1100	FACW	Prevalence Index is ≤		
2.		yes	PACVV	Problematic Hydrophy		lain\
3.				Froblematic riyuropity	tic vegetation (Exp	naiii)
4.				11		
5.				Indicators of hydric soil and		nust
5. 6.	<del></del>			be present, unless disturbed Definitions of Vegetation S		
				Deminitions of Vegetation 5	ıraıa:	
7.	40					
Horb Stratum (Plot size:	10	= Total Cove	ľ	Tree- Woody plants, excluding approximately 20 ft (6m) or mo		(7.6
Herb Stratum (Plot size:)	25		OBL	cm) or larger in diameter at bre		(7.6
Ludwigia peruviana     Urena lobata	<u>25</u> 5	yes	OBL FACU	<b>l</b> ' -		
		no	FACU	Sapling- Woody plants, exclude approximately 20 ft (6m) or mo		than 2
3.				in. (7.6 cm) DBH.	re in neight and less	uiaii S
4.				i ' '		
5.				Shrub- Woody plants, excludir approximately 3 to 20 ft (1 to 6		
6.						
7.				Herb- All herbaceous (non-woo		
8.				herbaceous vines, regardless		
9.				plants, except woody vines, les m) in height.	S than approximately	/ S IL (1
10.						
11.				Woody vine- All woody vines,	regardless of neight.	
12.		<del></del>				
	30	= Total Cove	ſ			
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present? Y	es <u> </u>	<del>·</del>
	0	= Total Cove	r			
Remarks: (If observed, list morpho		•				
Percent cover estimates based on	meandering s	urvey of the bi	oader cor	mmunity.		

County/soil	l: Hillsborough- Basing	jer						Sampling Point: BH
	scription: (Describe	to the dep	th needed to doo	ument th	ne indicator or c	onfirm the ab	sence of indicators.)	
Depth	Matrix				Features		·	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Lœ⁴	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1	=						gray fine sand
28-42	10 YR 5/3; 10 YR - 5/2							brown and grayish brown fine sand
42-80	10 YR 6/2							light brownish gray fine sand
	Concentration, D=Dep	letion, RM	Reduced Matrix,	CS=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	
	il Indicators:							ndicators for Problematic Hydric Soils <sup>3</sup> :
Histol	` '				value Below Surf			1 cm Muck (a9) (LRR O)
	Epidon (A2)				Dark Surface (S			2 cm Muck (A10) (LRR S)
_	Histic (A3)				my Mucky Minera		٠ ـ	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				my Gleyed Matrix	(F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5) iic Bodies (A6) (LRR F	) T III			leted Matrix (F3) ox Dark Surface	(F6)	_	Anomalous Bright Loamy Soils (F20)
	Mucky Mineral (A7) (L				leted Dark Surface	• •		(MLRA 153B)Red Parent Material (TF2)
	Presence (A8) (LRR				ox Depressions (		_	Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	•		Marl	(F10) (LRR U)		_	Other (Explain in Remarks)
Deple	ted Below Dark Surfac	æ (A11)		Dep	leted Orchric (F1	1) (MLRA 151)	)	
Thick	Dark Surface (A12)			lron-	-Manganese Mas	ses (F12) (LRI	R O, P,T) 3	Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 150	A)	Umt	oric Surface (F13	) (LRR P, T, U	) h	nydrology must be present, unless disturbed or
	Mucky Mineral (S1) (	LRR O, S)		_	a Orchric (F17) (	-	•	problematic.
	Gleyed Matrix (S4)				uced Vertic (F18			
	Redox (S5)				lmont Floodplain		LRA 149A) )) (MLRA 149A, 153C,	153D)
	ed Matrix (S6) Surface (S7) (LRR P. :	e T III			naious brigin Eo	arry Sons (1 20	) (MEICH 143A, 1330,	, 1000)
	e Layer (If observed)						T	
	Type:	•						
	Depth (inches):						Hydric Soil Present	t? Yes ✓ No .
Remarks:								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	Sampling Date: 10/5/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	BI
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range: 22 27S 18E			
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	SI	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28,119631	Long: <u>-82.4</u>	75496	Da	atum: WGS84
Soil Map Unit Name: Myakka fine sands			_NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		esNo
	or Hydrology		(If needed, explain	any answers in F	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant feature	s, etc.
Hydrophytic Vegetation Present?	Yes / No				-
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	Yes ✓ No	o	
Wetland Hydrology Present?	Yes/No				
Remarks:					
					i
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of t	wo required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil		
Surface Water (A1)	Water-Stained Leaves (E	39)		getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	•	Drainage Pat		, ,
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li		
Water Marks (B1)	Hydrogen Sulfide Odor (	·		Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	•	Crayfish Burr		
Drift Deposits (B3)	Presence of Reduced Iro			sible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic		
tron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	, ,	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	, ,	
Field Observations:		,			
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No				
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)		. Борин (шенев).	Hydrology Present?	Yes ✓ No	0
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections) if available:	1. 1000.11.		<u> </u>
	g, ac.i.a. prictoc, proticac	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Remarks:					
·					
· ·	•				

VEGETATION - Use scientific na	mes of plants			<b></b>	Sampling Po	int:	BH
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:		
Tree Stratum (Plot size:)	_ Cover	Species?	Status				
Melia azedarach	10	yes	NL	Number of Dominant Spe		<u>3</u>	(A)
2.				That Are OBL, FACW, or		_	
3.				Total Number of Domina		<u>4</u>	(B)
4.				Species Across All Strata		_	` .
5.				Percent of Dominant Spe		75.00	(A/B)
6.	<del> </del>			That Are OBL, FACW, or	FAC:		
7.				Prevalance Index works			
Sapling Stratum (Plot size:	)	= Total Cov	er	Total % Cover of: OBL species	<u>Mult</u> x1=	iply by:	
Prunus caroliniana	5	yes	NL	FACW species	x2=		
2. Quercus laurifolia	5	yes	FACW	FAC species	x3=		_
3.				FACU species	x4=		
4.				UPL species	x5=		
5.				Column Totals:	(A)		— (B)
6.				1 -			
7.				Prevalance Index =	B/A =		
	10	= Total Cov	er	Hydrophytic Vegetation	Indicators:		
Shrub Stratum (Plot size:	)			✓ Dominance Test i	s 50%		
Sambucus canadensis	10	yes	FACW	Prevalence Index	is ≤3.0 <sup>1</sup>		
2.				Problematic Hydro	ophytic Vegetati	ion¹ (Ex	plain)
3.	-	-	- '				
4.				Indicators of hydric soil	and wetland hyd	drology r	must
5.				be present, unless distur			
6.				Definitions of Vegetation	n Strata:		
7.							
	10	= Total Cov	er	Tree- Woody plants, exclu	ding woody vine	s,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) o			. (7.6
Ludwigia peruviana	30	yes	OBL	cm) or larger in diameter a	t breast height (l	DBH).	
Urena lobata	10	yes	FACU	Sapling- Woody plants, ex	• .		
3. Lantana camara	5	no	FACU	approximately 20 ft (6m) o	r more in height	and less	than 3
4.				in. (7.6 cm) DBH.			
5.				Shrub- Woody plants, exc			
6.				approximately 3 to 20 ft (1	to 6 m) in height	t.	
7.				Herb- All herbaceous (nor			
8.				herbaceous vines, regardle			
9.	<del>.</del>			plants, except woody vines	s, less than appr	oximatel	y 3 ft (1
10.				m) in height.			
11.				Woody vine- All woody vii	nes, regardiess o	of height	
12.							
Woody Vine Stratum (Plot size:_	45 )	= Total Cov	er				
Dioscorea bulbifera	20	yes	NL				
2.				1			
3.							
4.			•	Hydrophytic			
5.			-	Vegetation Present?	Yes✓_	No	
	20	= Total Cov	er	1			

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

County/soil:	Hillsborough-	Muakka

SOIL								Sampling Point:E
Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the ab	sence of indicators.	)
Depth	Matrix				Features			•
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc	Texture	Remarks
0-5	10 YR 3/1							very dark gray fine sand
5-20	10 YR 6/1							gray fine sand
20-25	N 2/0							black fine sand
25-30	5 YR 3/3							dark reddish brown fine sand
				·				
Type: C=0	Concentration, D=Dep	letion, RM=	Reduced Matrix, (	CS=Cover	ed or Coated S	and Grains.	2Location: PL=Por	e Lining, M=Matrix.
Hydric So	I Indicators:		<del> · · · · · · · · · · · · · · · · · ·</del>					Indicators for Problematic Hydric Soils 3:
Histol				Polyv	alue Below Su	face (S8) (LRR	STU	1 cm Muck (a9) (LRR O)
	Epidon (A2)					69) (LRR S, T, t		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR F	², T, U)		Redo	x Dark Surface	(F6)		(MLRA 153B)
5 cm !	Mucky Mineral (A7) (L	RR P.T.III		Deple	eted Dark Surfa	ice (F7)		Red Parent Material (TF2)
_	Presence (A8) (LRR				x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
		<i>.,</i>			•	(, 5)		
1 cm l	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
Denle	ed Below Dark Surfac	e /Δ11)		Denle	eted Orchric (F	11) (MLRA 151)		
		C (/ (11)			,			
— I nick	Dark Surface (A12)				•	sses (F12) (LRF		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 150	A)	Umbr	ic Surface (F1:	3) (LRR P, T, U)	)	hydrology must be present, unless disturbed or
Condi	Musica Mineral (C1) (	BB 0 61		Delta	Orchric (F17)	MI PA 151)		problematic.
	Mucky Mineral (S1) (I	LKK 0, 3)					4505	
	Gleyed Matrix (S4)				•	B) (MLRA 150A,	,	
Sandy	Redox (S5)				•	Soils (F19) (ML	,	
Stripp	ed Matrix (S6)			Anom	nalous Bright Le	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)
Dark S	Surface (S7) (LRR P,	STIN						
	Layer (If observed)						1	
1		•					1	
	Type:						l	
	Depth (inches):						Hydric Soil Preser	nt? Yes <u>✓</u> No
Remarks:								
								•
i								
i								

Applicant/Owner: Progress Energy Floida_Inc.	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date: 10/6/09
Local relief (concave, convex, none):nene	Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: BJ
Subtregion (LRR or MLRA): LRR U Lat: 28.119601 Long. 82.473786 NWI classification: Freshwater Emergent Wetland Are climater / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soll or Hydrology significantly disturbed? Are circumstances normal? Yes_No_No_Ret Vegetation Soll or Hydrology naturally problematic? ((if needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes_No_No_Hydrology Indicators:  Wetland Hydrology Present? Yes_No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_High Wetland (Present? No_No_No_No_No_No_No_No_No_No_No_High Repeated (Present? No_No_No_No_No_No_No_No_No_No_No_No_No_N	Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range	e: 22 27S 18E	
Soil Map Unit Name: Water	Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	vex, none): none	Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Subregion (LRR or MLRA): LRR U	Lat: <u>28.11960</u>	1 Long:82.	473786	Datum: WGS84
Are VegetationSoil or Hydrologysignificantly disturbed? Are circumstances normal? YesNo					
Are VegetationSoil or Hydrologysignificantly disturbed? Are circumstances normal? YesNo	Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes _ ✓	No	_ (If no, explain in Remarks)
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrocyptytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Remarks:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Water (At) Surface Soil Cracks (B6)  High Water Table (A2) Aquatic Fauna (B13) Surface Soil Cracks (B6)  Water Marks (B1) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  FILE Observations:  Surface Water Present?  Yes No Depth (inches): 0_2  Wetland Hydrology Indicators:  Yes No Depth (inches): 0_2  Wetland Hydrology Indicators:  Yes No Depth (inches): 0_2  Wetland Hydrology Indicators:  Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches): 0_4  Wetland Hydrology Present? Yes No Depth (inches):	Are Vegetation, Soil,	or Hydrology			
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrocypytic Vegetation Present? Hydrocypy Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Marl Deposits (B15) (LRR U)  Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Present?  Water Marks (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Sturface Water Present?  Yes No Depth (inches): Capth (inches): Wetland (inches): Capth (inches): Capth (inches): Capth (inches): Capth (inches): Capth (inches): Capth (inches): Capth (inches):				(If needed, explai	n any answers in Remarks)
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Present?  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Recent Iron Reduction in Remarks) FAC Neutral Test (D5) Field Observations:  Surface Water Present? Yes No Depth (inches): Capth (inches): Wetland Wetland Hydrology Present? Yes No Depth (inches): Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetland Wetla				transects, imp	ortant features, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Drainage Patterns (B10)  Saturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Inon Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Inon Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Inon Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Inon Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Metland  Hydrology  Present? Yes ✓ No Mo Metland  Hydrology  Present? Yes ✓ No Mo Metland  Hydrology  Present? Yes ✓ No Mo Metland  Hydrology  Present? Yes ✓ No Mo Metland  Hydrology  Present? Yes ✓ No Mo Metland	Hydrophytic Vegetation Present?	YesNo			
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of none is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes No Depth (inches): 0  Wetland Hydrology Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present? Yes No Depth (inches): 0  Wetland  Hydrology  Present? Yes No Depth (inches): 0  Wetland  Hydrology  Present? Yes No Depth (inches): 0  Present? Yes No Depth (inches): 0  Present? Yes No Depth (inches): 0  Wetland  Hydrology  Present? Yes No Depth (inches): 0  Present? Yes No Present?	Hydric Soil Present?	YesNo	Is the Sampled Area	within a Wetland?	Yes No
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Drift Deposits (B3)  Agal Mat or Crust (B4)  Agal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Water Table (Present?  Water Able Present?  Wes ✓ No Depth (inches): 0  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology  Fresent? Yes ✓ No Depth (inches): 0  Wetland Hydrology  Present? Yes ✓ No Modern Able (C7)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Saturation Again Musc Table (C2)  Secondary Indicators (minimum of two required)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Sparsely Vegetated Concave Surface (B8)  Drain	Wetland Hydrology Present?	Yes ✓ No			
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Remarks:		•		
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	HADBOLOGA				
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0-2  Water Table Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Present?  Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Present?				Socondon Indian	tors (minimum of two required)
✓ Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)        High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)	• • • • • • • • • • • • • • • • • • • •	shook all that apply)			
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)			(P0)	· · · · · · · · · · · · · · · · · · ·	• •
Marl Deposits (B15) (LRR U)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Table Present?  Yes ✓ No Depth (inches): 0  Saturation (C1)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Wetland  Hydrology  Present? Yes ✓ No Depth (inches): 0  Wetland  Hydrology  Present? Yes ✓ No Mo Present?  Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No	` ′		(69)		
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNoDepth (inches):O2  Water Table Present? YesNoDepth (inches):O  Saturation Present? YesNoDepth (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):OPEPTH (inches):	` ′	<del></del> ,	DD 11)		. ,
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)Saturation Visible on Aerial Imagery (C9)Saturation Visible on Aerial Imagery (C9)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D3)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow Aquitard (D5)Shallow A	<del></del>				
Drift Deposits (B3)	` ′	<u> </u>	• •		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes / No Depth (inches): 0-2  Water Table Present? Yes / No Depth (inches): 0  Saturation Present? Yes / No Depth (inches): 0  Wetland Hydrology  Present? Yes / No No No No No No No No No No No No No	<del></del>			, ,	
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/ NoDepth (inches):0  Water Table Present? Yes/ NoDepth (inches):0  Saturation Present? Yes/ NoDepth (inches):0  (includes capillary fringe) Wetland  Hydrology	<del></del>		, ,		
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes/ NoDepth (inches):0  Water Table Present? Yes/ NoDepth (inches):0  Saturation Present? Yes/ NoDepth (inches):0  (includes capillary fringe) Wetland	<del></del>		, ,		• •
Field Observations:           Surface Water Present?         Yes _ ✓ _ No Depth (inches):			,		, .
Surface Water Present?  Yes _		Other (Explain in Rema	irs)	FAC Neutra	i Test (D5)
Water Table Present?  Yes _		Ves ✓ No	Denth (inches): 0-2		
Saturation Present? Yes No Depth (inches):0		· · · · · · · · · · · · · · · · · · ·			
(includes capillary fringe) Present? Yes <a href="Yes">Yes</a> <a href="Yes">No</a>				- Wetland	
		162 No			
		ing well posial photos provious	a inapactions) if available:	Present?	Yes ✓ No
	Remarks:				<del></del>
Demotie:	remarks.				
Remarks:					

VEGETATION - Use scientific nan	mes of plants			Sampling Point:	BJ
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Melaleuca quinquenervia	55	yes	FAC	Number of Dominant Species 5	(4)
2. 3.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B) ·
5.				Percent of Dominant Species	15.40)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.	. ——			Prevalance Index worksheet:	
	5	= Total Cove	er	Total % Cover of: Multiply by:	ļ
Sapling Stratum (Plot size:	)	. =		OBL species x1=	ļ
Melaleuca quinquenervia	20	yes	FAC	FACW species x2=	-
				FAC species x3=	-
3			-	FACU species x4=	- ,
4				UPL species x5=	- ,
5				Column Totals: (A)	– (B)
le					-\-',
2. 3. 4. 5. 6.			-	Prevalance Index = B/A =	!
<del>                                     </del>	20	= Total Cove	er	Hydrophytic Vegetation Indicators:	$\overline{}$
Shrub Stratum (Plot size:	1	= 10tm =	<b>31</b>	✓ Dominance Test is 50%	!
Cephalanthus occidentalis	<del>.                                    </del>	yes	OBL	Prevalence Index is ≤3.0¹	!
		yes	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	dain)
2				Flobicitiatio Hydrophytio Vogetation (Exp	laii,
3.				1	4
[4.	. —			<sup>1</sup> Indicators of hydric soil and wetland hydrology make present, unless disturbed or problematic.	านรเ
2. 3. 4. 5. 6.		<del></del>		Definitions of Vegetation Strata:	
7.				Definitions of vegetation on ata.	1
/		= Total Cove		Martin allerte avaluding woody vince	
Herb Stratum (Plot size:)	۷	= 10(a) 0040	<b>3</b> r	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in.	/7 G
	20	1106	OBL	cm) or larger in diameter at breast height (DBH).	(1.0
Panicum hemitomon     Euthamia spp.	20	yes	FAC	<b>∮</b> ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	
		yes		Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less	than 3
	20	yes	FACU	in. (7.6 cm) DBH.	lian 5
	10	no	OBL		
	10	no	FACW	Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
Andropogon virginicus     Rhexia spp.	5	no	FAC	<b>-</b>	
L	5	no	FACW	Herb- All herbaceous (non-woody)plants, including	
8. Solidago spp.	5	no	<u>FACU</u>	herbaceous vines, regardless of size. Includes woo	
9.				plants, except woody vines, less than approximately m) in height.	3π(1
10.				<u> </u>	
11.				Woody vine- All woody vines, regardless of height.	!
12.				1	ļ
	95	= Total Cove	er		1
Woody Vine Stratum (Plot size:	)				1
1.				]	
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	<u>.</u>
	0	= Total Cove	er		
Remarks: (If observed, list morpho	ological adapta	itions below).			
Percent cover estimates based on	n meandering s	survey of the h	proader cor	mmunity	- 1

County/soil: Hillsborough- Water SOIL			Sampling Point:
Profile Description: (Describe to the depth needed to		nce of indicators.	)
Depth Matrix	Redox Features	<b>-</b>	Demode
inches) Color (moist) % Color (mo	ist) % Type¹ Loc²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Ma	atrix, CS=Covered or Coated Sand Grains.		e Lining, M=Matrix.
lydric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8) (LRR S	, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S, T, U)		2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
	Depleted Orchric (F11) (MLRA 151)		
Depleted Below Dark Surface (A11)			
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR 0	J, P, i j	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)		problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 1	50B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLR		
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (		;, 153D)
Dark Surface (S7) (LRR P, S, T, U)		•	,
Restrictive Layer (If observed):			
Type:			
Depth (inches):	h	Hydric Soil Presen	nt? Yes ✓ No .
Remarks:	,	Tyuric Son i resen	. 169 , 110 .
terrains.			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County:Hillsborou	igh	Sampling Date: 10/6/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: BK
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range	: 22 27S 18E	
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	/ex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.119490	) Long: <u>-82.4</u>	72332	Datum: WGS84
Soil Map Unit Name: Water			NWI classification:	Freshwater Pond
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normal? Yes/_No
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes No		_	
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes/ No			
Remarks:				
HYDROLOGY		·	<del></del>	······································
Wetland Hydrology Indicators:				ors (minimum of two required)
Primary Indicators (minimum of one is required; c			Surface Soil (	` '
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	ierns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim Li	nes (B16)
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season V	Vater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	ows (C8)
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction is	n Tilled Soils (C6)	Geomorphic I	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	ard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Fest (D5)
Field Observations:		<b>5</b>		
Surface Water Present?	Yes ✓ No		1	
Water Table Present?	Yes No		Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	
(includes capillary fringe)			Present?	Yes No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:		
Remarks:				
	,			

VEGETATION - Use scientific na	mes of plants			Sampling Point:	BK
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	•			Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>(D)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.		***************************************		That Are OBL, FACW, or FAC:	(A/B)
7.	· <del></del>			Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by	r:
Sapling Stratum (Plot size:	)			OBL species x1=	<u>-</u>
1.	/			FACW species x2=	
2.	· —			FAC species x3=	_
3.				FACU species x4=	
4.	• •			UPL species x5=	_
5.				Column Totals: (A)	— <sub>(B)</sub>
6.				(A)(A)	— (D)
7.	· <del></del>			Prevalance Index = B/A =	
1.		= Total Cove	<u></u>	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	١	- Total Cove	<u>.</u> !	✓ Dominance Test is 50%	
	<i>'</i>		FACIAL		
Baccharis glomeruliflora	1	yes	FACW	Prevalence Index is ≤3.01	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (E	-xpiain)
3.				1	
4.				Indicators of hydric soil and wetland hydrolog	y must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
<b></b> . <u>.</u>	1	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3	in. (7.6
Panicum repens	10	yes	FACW	cm) or larger in diameter at breast height (DBH).	
Nuphar luteum	5	yes	OBL	Sapling- Woody plants, excluding woody vines,	
3. Fuirena spp.	55	yes	OBL	approximately 20 ft (6m) or more in height and le	ss than 3
4.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
<b>7.</b>				Herb- All herbaceous (non-woody)plants, includi	ng
8.				herbaceous vines, regardless of size. Includes v	oody
9.				plants, except woody vines, less than approximate	ely 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of heig	ht.
12.					
	20	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.	·/				
2.	-				
3.	· ———				
4.				Hudrophytic	
5.	•			Hydrophytic	
J.		- Total Carra		Vegetation Present? Yes <u>√</u> No	
Pomarka: (If absorted list man-	0 alagical adapte	= Total Cove	1	<u> </u>	
Remarks: (If observed, list morph	-	•			
Percent cover estimates based or	n meandering s	survey of the b	roader cor	nmunity.	

County/soil: Hillsborough- Water SOIL			Sampling Point:B
Profile Description: (Describe to the depth needed to		m the absence of indicator	, , , , , , , , , , , , , , , , , , , ,
Depth Matrix	Redox Features		
(inches) Color (moist) % Color (mois	st) % Type' I	Loc <sup>2</sup> Texture	Remarks
<del></del>			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Mat Hydric Soil Indicators:	rix, CS=Covered or Coated Sand G	rains. <sup>2</sup> Location: PL=P	Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Hydric Soil Indicators: Histol (A1)	Polyvalue Below Surface (S	COL / I DD C T [])	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LF	, , , , ,	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1)	· · ·	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (F2)	(LKK C)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Nydrogen Sunde (A4) Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
	Depleted Dark Surface (F7	n	Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P,T,U)	'	,	
✓ Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MI	•	
Thick Dark Surface (A12)	Iron-Manganese Masses (F	-12) (LRR O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRF	R P, T, U)	hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA	151)	problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLI	•	
Sandy Redox (S5)	Piedmont Floodplain Soils		
Stripped Matrix (S6)		Soils (F20) (MLRA 149A, 153	3C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		• • •	,
Restrictive Layer (If observed):			
Type:			
Depth (inches):		Hydric Soil Pres	ent? Yes ✓ No .
Remarks:		11.05-11-2-11	
·			
·			
			•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Da	ite: 10/6/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Po	int:BL
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range	e: <u>22 27S 18E</u>		
Landform (hillslope, terrace, etc.):N/A	<b>\</b>	Local relief (concave, con	vex, none): none		_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.11945</u> 6	6 Long: <u>-82.</u>	470797		Datum: WGS84
Soil Map Unit Name: Water			NWI classification	: Freshwater	Pond
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes	_ No	_ (If no, explair	n in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstance:	-	Yes/_No
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers	in Remarks)
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ing point locations, t	transects, impo	rtant featu	res, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area v	within a Wetland?	Yes/	_No
Wetland Hydrology Present?	Yes No	]			
Remarks:		•			
HADBOLOCA					
HYDROLOGY			0		
Wetland Hydrology Indicators:	.b(1) 45 - ( (. )		Secondary Indicat		of two required)
Primary Indicators (minimum of one is required; of		(50)	Surface Soil		0.5 (00)
Surface Water (A1)	Water-Stained Leaves ( Aquatic Fauna (B13)	(89)		_	ve Surface (B8)
High Water Table (A2)		Drainage Pa			
Saturation (A3)	RR U)	Moss Trim L	` '		
Water Marks (B1)	(C1)		Water Table (	C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	. ,	Crayfish Bur		
Drift Deposits (B3)	Presence of Reduced Ir	, ,		isible on Aeria	I Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutra	Test (D5)	
Field Observations:	V /	Donth (inches): 0.20			
Surface Water Present?	YesNo		┪		
Water Table Present?	Yes_ ✓ No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ing well porial photos, provious	inspections) if evallable:	Present?	Yes <u>✓</u>	_No
Describe Necolded Data (Stream gauge, monitor	ing well, aeliai photos, previous	inspections), il avallable.			
Remarks:					
1					

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	BL_
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>(D)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	- rotar oove		OBL species x1=	
Melaleuca quinquenervia	, 5	yes	FAC	FACW species x2=	-
Quercus laurifolia	5		FACW	FAC species x3=	— I
3.		yes	TACVV	FACU species x4=	
4.				UPL species x5=	— I
5.	<del></del>				— <sub>(B)</sub>
				Column Totals:(A)	— <sup>(B)</sup>
6.	·		<del></del>	Dravelance Index = B/A =	
7.		- Total Caus		Prevalance Index = B/A =	
OL 1 OL 1 (DL 1	10	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
Cephalanthus occidentalis	5	yes	OBL	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (E	(plain)
3.					Ì
4.				Indicators of hydric soil and wetland hydrology	must
5.	·			be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
	5	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	า. (7.6
Panicum repens	10	yes	FACW	cm) or larger in diameter at breast height (DBH).	
<ol><li>Nymphaea spp.</li></ol>	10	yes	OBL	Sapling- Woody plants, excluding woody vines,	
Blechnum serrulatum	5	yes	FACW	approximately 20 ft (6m) or more in height and les	s than 3
4. Andropogon virginicus	5	yes	FAC	in. (7.6 cm) DBH.	
5. Eupatorium capillifolium	5	yes	FACU	Shrub- Woody plants, excluding woody vines,	
6. Rhexia spp.	5	yes	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Ludwigia peruviana	5	yes	OBL	Herb- All herbaceous (non-woody)plants, includin	a l
8. Solidago spp.	2	no	FACU	herbaceous vines, regardless of size. Includes we	
9. Urena lobata	2	no	FACU	plants, except woody vines, less than approximate	-
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of heigh	ıt. İ
12.				<b>1</b>	
12.	49	= Total Cove	r	1	
Woody Vine Stratum (Plot size:	)	10141 0010	<b>,</b>		
1.	······································				
2.				1	j
		<del></del>			
3.				Hydrophydio	
<u>4.</u> 5.	<del></del>			Hydrophytic Vegetation Present? Yes ✓ No	]
O		= Total Carre		Vegetation Present? YesNo	i
Daniel de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de la lace de lace de la lace de la lace de lace de lace de lace de la lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de lace de la	0	= Total Cove	:1		
Remarks: (If observed, list morph Percent cover estimates based or	-		roader cor	mmunity.	

file Description: (Describe to the depth needed to document Matrix hes) Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Description: Color (moist) % Color (moist)  Descrip	Redox Features  % Type' Lo	Texture  Texture  2 Location: PL=Pc  () (LRR S, T, U)  R S, T, U)	Remarks  Remarks  ore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :1 cm Muck (a9) (LRR O)
hes) Color (moist) % Color (moist)  De: C=Concentration, D=Depletion, RM=Reduced Matrix, Color (Soil Indicators: Listol (A1) Listic Epidon (A2) Black Histic (A3) Litydrogen Sulfide (A4) Stratified Layers (A5) Lorganic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)	% Type¹ Lo	ins. <sup>2</sup> Location: PL=Pc	ore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
pe: C=Concentration, D=Depletion, RM=Reduced Matrix, C tric Soil Indicators: Listol (A1) Listic Epidon (A2) Black Histic (A3) Llydrogen Sulfide (A4) Stratified Layers (A5) Lorganic Bodies (A6) (LRR P, T, U)	S=Covered or Coated Sand Gra  Polyvalue Below Surface (S6)  Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I Loamy Gleyed Matrix (F2)	ins. <sup>2</sup> Location: PL=Pc	ore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
tric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)	Polyvalue Below Surface (S& Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I	i) (LRR S, T, U) R S, T, U)	Indicators for Problematic Hydric Soils 3:
tric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)	Polyvalue Below Surface (S& Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I	i) (LRR S, T, U) R S, T, U)	Indicators for Problematic Hydric Soils 3:
ric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P,T,U)	Polyvalue Below Surface (S& Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I	i) (LRR S, T, U) R S, T, U)	Indicators for Problematic Hydric Soils 3:
ric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P,T,U)	Polyvalue Below Surface (S& Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I	i) (LRR S, T, U) R S, T, U)	Indicators for Problematic Hydric Soils 3:
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ric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P,T,U)	Polyvalue Below Surface (S& Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I	i) (LRR S, T, U) R S, T, U)	Indicators for Problematic Hydric Soils 3:
ric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P,T,U)	Polyvalue Below Surface (S& Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I	i) (LRR S, T, U) R S, T, U)	Indicators for Problematic Hydric Soils 3:
ric Soil Indicators: Histol (A1) Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P,T,U)	Polyvalue Below Surface (S& Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I	i) (LRR S, T, U) R S, T, U)	Indicators for Problematic Hydric Soils 3:
_Histol (A1) _Histic Epidon (A2) _Black Histic (A3) _Hydrogen Sulfide (A4) _Stratified Layers (A5) _Organic Bodies (A6) (LRR P, T, U) _5 cm Mucky Mineral (A7) (LRR P,T,U)	Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I Loamy Gleyed Matrix (F2)	ŔŚ, T, U)	
Histic Epidon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P,T,U)	Thin Dark Surface (S9) (LRF Loamy Mucky Mineral (F1) (I Loamy Gleyed Matrix (F2)	ŔŚ, T, U)	1 cm Muck (a9) (LRR O)
Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)	Loamy Mucky Mineral (F1) (I Loamy Gleyed Matrix (F2)		
Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P,T,U)	Loamy Gleyed Matrix (F2)		2 cm Muck (A10) (LRR S)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P,T,U)		LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B
Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T,U)	Denieted Mathy (F.3)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
5 cm Mucky Mineral (A7) (LRR P,T,U)			Anomalous Bright Loamy Soils (F20)
	Redox Dark Surface (F6)		(MLRA 153B)
Must December (AO) (LDD II)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLI	RA 151)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F1		3
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR	, , , , ,	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
• • • • • • • • • • • • • • • • • • • •			hydrology must be present, unless disturbed or problematic.
_Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA		problematic.
_Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLR/	. ,	
_Sandy Redox (S5)	Piedmont Floodplain Soils (F Anomalous Bright Loamy So		00 4500)
_Stripped Matrix (S6)	Anomalous Bright Loamy 50	IIS (FZU) (INILKA 149A, 153	,C, 153DJ
Dark Surface (S7) (LRR P, S, T, U)			
strictive Layer (If observed):		ļ	
Type:		Hydric Soil Prese	ent? Yes ✓ No
Depth (inches):		Hyaric Soil Prese	ent? Yes <u>√</u> No
narks: .			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ghS	Sampling Date: 10/6/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: BM
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range	: <u>24 27S 18E</u>	
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.119533	Long: <u>-82.4</u>	66208	Datum: WGS84
Soil Map Unit Name: Water			NWI classification:	Freshwater Pond
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No (i	lf no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances n	
	or Hydrology		(If needed, explain a	ny answers in Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, import	ant features, etc.
Hydrophytic Vegetation Present?	YesNo	]	•	·
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland? Y	′esNo
Wetland Hydrology Present?	YesNo	]		
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators	s (minimum of two required)
Primary Indicators (minimum of one is required; of			Surface Soil Cr	` '
Surface Water (A1)	Water-Stained Leaves (	B9)		lated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patte	
Saturation (A3)	Marl Deposits (B15) (LF		Moss Trim Line	
Water Marks (B1)	Hydrogen Sulfide Odor	•	Dry-Season Wa	·
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burrov	· ,
Drift Deposits (B3)	Presence of Reduced Ir	, ,		ble on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	` ,	Geomorphic Po	` '
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquita	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral Te	est (D5)
Field Observations:		B # # 1		
Surface Water Present?	Yes No			:
Water Table Present?	Yes No		Wetland	
Saturation Present?	Yes No	_Depth (inches):0	Hydrology	
(includes capillary fringe)		:	Present? Y	'es <u>√</u> No
Describe Recorded Data (stream gauge, monitori	ng well, aenal photos, previous	inspections), it available:		
Remarks:				
				•
,				

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	BM
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Taxodium distichum	. 2	yes	OBL	Number of Dominant Species	/A\
2. Quercus virginiana		yes	FACU	That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>(5)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
`	4	= Total Cove	er	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	7014.001		OBL species x1=	
Schinus terebinthifolius	2	yes	FAC	FACW species x2=	-
2.				FAC species x3=	-
3.				FACU species x4=	-
4.				UPL species x5=	-
5.	· ———			Column Totals: (A)	(B)
6.				(, ,	_ ( _ /
7.				Prevalance Index = B/A =	
	2	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	, 0,0,	•	✓ Dominance Test is 50%	
Cephalanthus occidentalis	<del>. '</del> 2	yes	OBL	Prevalence Index is ≤3.0 <sup>1</sup>	
Sambucus canadensis	2	yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	lain)
Myrica cerifera	2	yes	FAC	Problematic Hydrophytic Vegetation (Exp	iaiii)
4.		<del>yes</del>	TAC	Indicators of hudrin pail and wathood hudralage w	
5.	•			<sup>1</sup> Indicators of hydric soil and wetland hydrology m be present, unless disturbed or problematic.	ust
6.				Definitions of Vegetation Strata:	
7.	·			Deminions of Vegetation Strata.	
1.	6	= Total Cove		Tana Marada alamba analadia anna di mina	
Herb Stratum (Plot size:)	b	6 = Total Cover		Tree- Woody plants, excluding woody vines,	
1	F		ODI	approximately 20 ft (6m) or more in height and 3 in. cm) or larger in diameter at breast height (DBH).	(7.6
1. Ludwigia peruviana	5	yes	OBL		
2. Typha spp.	5	yes	OBL	Sapling- Woody plants, excluding woody vines,	
Colocasia esculenta	2	no	FACW	approximately 20 ft (6m) or more in height and less t in. (7.6 cm) DBH.	nan 3
4. Commelina spp.	2	no	FACW	<b>l</b> ` '	
5. Sagittaria spp.	2	no	OBL	Shrub- Woody plants, excluding woody vines,	
6. Panicum repens	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	
9.			_	plants, except woody vines, less than approximately m) in height.	3 H (1
10.				'	
11.				Woody vine- All woody vines, regardless of height.	
12.					
	18	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	
	0	= Total Cove	er	1	
Remarks: (If observed, list morph	ological adapta	ations below).		•	
Percent cover estimates based on meandering survey of the broader community.					
	-				

Profile De	scription: (Describe t	to the der	oth needed to doc	ument	the indicator or	r confirm the abr	sence of indicators	)
Depth	Matrix				ox Features	**********	******	,
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
<u> </u>			<u> </u>			•		
		·						
		·						
	····					-		
	·					- —		
Type: C=0	Concentration, D=Depl	etion, RM	=Reduced Matrix, (	CS=Cov	ered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Por	re Lining, M=Matrix.
	il Indicators:					<del></del>		Indicators for Problematic Hydric Soils 3:
Histol				Pol	yvalue Below Si	urface (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
_	Epidon (A2)					(S9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
_	Histic (A3)					eral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4) ied Layers (A5)				amy Gleyed Matr pleted Matrix (F3			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5) iic Bodies (A6) (LRR P	7 T U)			dox Dark Surfac			Anomalous Bright Loamy Soils (F20)
					pleted Dark Surf			(MLRA 153B)
	Mucky Mineral (A7) (LF	,			•	` '		Red Parent Material (TF2)
	Presence (A8) (LRR L	J)			dox Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm /	Muck (A9) (LRR P,T)				rd (F10) <b>(LRR U)</b>	•		Other (Explain in Remarks)
	ted Below Dark Surface	e (A11)			•	F11) (MLRA 151)		
Thick	Dark Surface (A12)			lror	ր-Manganese Ma	lasses (F12) (LRR	₹ O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (N	MLRA 150	JA)	Um	ibric Surface (F1	13) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandv	Mucky Mineral (S1) (L	RR O. S)	1	Del	Ita Orchric (F17)	(MLRA 151)		problematic.
	Gleyed Matrix (S4)	, <u>-,</u>			, ,	18) (MLRA 150A,	150B)	
	Redox (S5)		•			in Soils (F19) (ML		
	ed Matrix (S6)		•	_		, ,,	) (MLRA 149A, 153C	C, 153D)
	Surface (S7) (LRR P, S	S. T. U)			=	•	•	,
	e Layer (If observed):						T	
	Туре:					!		
	Depth (inches):						Hydric Soil Preser	nt? Yes <u>√</u> No
Remarks:								
į								
į								
í								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	_Sampling Date: 10/6/0	09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: BN	
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range: 24 27S 18E			
Landform (hillslope, terrace, etc.):N/A	<u> </u>	Local relief (concave, conv	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.119635	Long: <u>-82.4</u>	63513	Datum:\	WGS84
Soil Map Unit Name: Basinger fine sand				Freshwater Emergent V	Netland
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks	s)
Are Vegetation, Soil,	or Hydrology		Are circumstances		
	or Hydrology		(If needed, explain	any answers in Remarks)	)
SUMMARY OF FINDINGS - Attach sit				-	
Hydrophytic Vegetation Present?	YesNo		•		
Hydric Soil Present?	Is the Sampled Area w	vithin a Wetland?	YesNo	_	
Wetland Hydrology Present?	Yes ✓ No	]			
Remarks:		•			
•					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two requir	red)
Primary Indicators (minimum of one is required; of	check all that apply)	,	Surface Soil Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	·	Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor		· <del></del>	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur		
Drift Deposits (B3)	Presence of Reduced In		•	turation Visible on Aerial Imagery (C9)	
· ` ` '	Recent Iron Reduction is		· · · · · · · · · · · · · · · · · · ·	Geomorphic Position (D2)	
Algal Mat or Crust (B4)	Thin Muck Surface (C7)	• •			
Iron Deposits (B5)  ✓ Inundation Visible on Aerial Imagery (B7)	,		Shallow Aqu		
, (- · /	Other (Explain in Remar	185)	FAC Neutral	rest (D5)	
Field Observations:	Yes No	Depth (inches): 0-6			
Surface Water Present?			1		
Water Table Present?	Yes No	Depth (inches): 0	Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓ No</u>	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:			
Remarks:					

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	BN
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
Taxodium distichum	. 5	•	OBL	Number of Dominant Species	
		yes	OBL	That Are OBL, FACW, or FAC:	(A)
2. 3. 4. 5.				<b>-</b>	
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	
5.				Percent of Dominant Species 100.00	(A/B)
6. 7.				That Are OBL, FACW, or FAC:	
/.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	5	= Total Cove	)r	Total % Cover of: Multiply by: OBL species x1=	
1. Morus rubra		yes	FAC	FACW species x2=	_
2.				FAC species x3=	_
3.				FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	— <sub>(B)</sub>
6.				(/ /	<b>—</b> (2)
7.				Prevalance Index = B/A =	
		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	- Total Cove	71	✓ Dominance Test is 50%	
	.–/ <sub>.</sub>		EAC\A(	Prevalence Index is ≤3.0¹	
Sambucus canadensis	2	yes	FACW	<del></del> .	-1-!->
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	piain)
3.				<b>4</b> , ,, , , , , , , , , , , , , , , , , ,	
4. 5.				Indicators of hydric soil and wetland hydrology r	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				_	
Horb Strotum (Blot oize:	2	= Total Cove	)r	Tree- Woody plants, excluding woody vines,	/7 C
Herb Stratum (Plot size:)	00		ODI	approximately 20 ft (6m) or more in height and 3 in. cm) or larger in diameter at breast height (DBH).	. (7.0 `
Ludwigia peruviana	60	yes	OBL	• •	
Colocasia esculenta	3	no	FACW	Sapling- Woody plants, excluding woody vines,	O
Blechnum serrulatum	22	no	FACW	approximately 20 ft (6m) or more in height and less	than 3
<ul><li>4.</li><li>5.</li><li>6.</li></ul>				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	
9.				plants, except woody vines, less than approximatel	y 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.				_	
	65	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
Dioscorea bulbifera	30	yes	NL		
2.					
2. 3.					
4.				Hydrophytic	
5.	,			Vegetation Present? Yes <u>√</u> No_	
	30	= Total Cove	er	1 -	
Remarks: (If observed, list morph-	ological adapta	ations below).			
Percent cover estimates based or	-		roader cor	mmunity	

SOIL Profile De	escription: (Describe	to the de	oth needed to doc	ument th	ne indicator or	confirm the ab	sence of indicators	Sampling Point: Bh
Depth	Matrix	to the de	pui needed to doc		k Features	committee an	series of indicators	,
(inches)	Color (moist)	%	Color (moist)	%	Type¹	Loc²	Texture	Remarks
0-7	10 YR 2/1						,	black fine sand
7-28	10 YR 6/1							gray fine sand
7-20	10 YR 5/3; 10 YR							gray fine sard
28-42	5/2							brown and grayish brown fine sand
42-80	10 YR 6/2							light brownish gray fine sand
T	Concentration, D=Depl	D1	Dadina d Markin (	· <del></del> -		\	21	ore Lining, M=Matrix.
	oil Indicators:	etion, Rivi	=Reduced Matrix, (	JS=Cove	red or Coated S	sand Grains.	Location: PL=Po	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histol				Polv	vatue Below Su	rface (S8) (LRR	: S. T. U)	1 cm Muck (a9) (LRR O)
	Epidon (A2)				Dark Surface (			2 cm Muck (A10) (LRR S)
	Histic (A3)				my Mucky Miner	, ,	•	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	gen Sulfide (A4)				my Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				leted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR P	P, T, U)		Red	lox Dark Surface	e (F6)		(MLRA 153B)
5 cm	Mucky Mineral (A7) (LI	RR P,T,U	)	Dep	leted Dark Surfa	ace (F7)		Red Parent Material (TF2)
Muck					ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm					Other (Explain in Remarks)			
Deple	ted Below Dark Surfac	e (A11)		Dep	leted Orchric (F	11) (MLRA 151	)	
	Dark Surface (A12)	,		Iron-	-Manganese Ma	sses (F12) (LR	R O, P,T)	3
• • • • • • • • • • • • • • • • • • • •			bric Surface (F1:			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or		
			•		a Orchric (F17)	,	•	problematic.
	y Mucky Mineral (S1) (I y Gleyed Matrix (S4)	LKK U, S	)		luced Vertic (F18		150D)	F
	y Redox (S5)				mont Floodplair			
	ped Matrix (S6)						) (MLRA 149A, 153	C. 153D)
	Surface (S7) (LRR P, S	STIN			· ·	, ,	,,	•
	e Layer (if observed)						1	
	Type:							
	Depth (inches):						Hydric Soil Prese	nt? Yes <u>√</u> No
Remarks:								
								,
								·
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Ì								
ļ					*			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh .	Sampling Date: 10/6/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: BO	
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range: 24 27S 18E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): <u>none</u>	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.119644	Long: <u>-82.4</u>	60484	Datum: WGS84	
Soil Map Unit Name: Basinger fine sand			_NWI classification:	Shrub Wetland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes _ No	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)	
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes No	
Wetland Hydrology Present?	YesNo				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:				ors (minimum of two required)	
Primary Indicators (minimum of one is required; of			Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (F	39)		etated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat		
Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	` '	
Water Marks (B1)	Hydrogen Sulfide Odor (	•	Dry-Season \	Nater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burr	ows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vi	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?		Depth (inches): 0-12	-		
Water Table Present?		Depth (inches): 0	Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			
Remarks:					
	•				

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	BO
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	, A.
2.				That Are OBL, FACW, or FAC: $\frac{7}{}$	(A)
3.			***	Total Number of Dominant	
4.				Species Across All Strata:	(B)
5.				Percent of Deminant Species	
6.	•••			That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	<u></u>	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	- 10tal 0010	•	OBL species x1=	
Sapium sebiferum		yes	FAC	FACW species x2=	-
Acer rubrum	10	ves	OBL	FAC species x3=	-
3.		yes	OBL	FACU species x4=	- 1
4.				UPL species x5=	- 1
	<del></del>	<del></del>			一 <sub>/B</sub> 、
5.				Column Totals:(A)	— <sup>(B)</sup>
6.					
7.				Prevalance Index = B/A =	
	20	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
Baccharis glomeruliflora	15	yes	FACW	Prevalence Index is ≤3.0¹	
<ol><li>Cephalanthus occidentalis</li></ol>	2	no	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.					
4.				Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
	17	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	. (7.6
Panicum hemitomon	20	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Nuphar luteum	15	yes	OBL	Sapling- Woody plants, excluding woody vines,	
3. Ludwigia peruviana	15	yes	OBL	approximately 20 ft (6m) or more in height and less	than 3
Woodwardia virginica	15	yes	OBL	in. (7.6 cm) DBH.	
5. Panicum repens	10	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Andropogon virginicus	10	no	FAC	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Hypericum spp.	5	no	FACW	Herb- All herbaceous (non-woody)plants, including	ı
8. Blechnum serrulatum	5	no	FACW	herbaceous vines, regardless of size. Includes wo	
9. Andropogon glomeratus	3	no	FACW	plants, except woody vines, less than approximatel	y 3 ft (1
10.				m) in height.	
11.		100.510.510		Woody vine- All woody vines, regardless of height	<u>.</u>
12.				1	
	98	= Total Cove		1	
Woody Vine Stratum (Plot size:	)	7014.0014	•		
1.	,				
				1	
2.					
3.				<del> </del>	
4.				Hydrophytic	
5.				Vegetation Present? YesNo	<del></del>
	0	= Total Cove	er		
Remarks: (If observed, list morph					
Percent cover estimates based or	n meandering s	survey of the b	roader co	mmunity.	

SOIL Destile De	escription: (Describe t	- 44 - 4 -					anna of indicators \	Sampling Point:B
	• •	o the aep	ith needed to doc			confirm the ab	sence of indicators.)	
Depth	Matrix				Features	<del></del>		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0.7	40 VD 0/4							blook fine and
0-7	10 YR 2/1						····	black fine sand
7-28	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							
28-42	5/2							brown and grayish brown fine sand
42-80	10 YR 6/2							light brownish gray fine sand
	· -							
Type: C=	Concentration, D=Deple	etion, RM=	Reduced Matrix, (	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric So	il Indicators:							ndicators for Problematic Hydric Soils 3:
Histol				Poly	value Below Sui	face (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					89) (LRR S, T, I		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
_	gen Sulfide (A4)				ny Gleyed Matri		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				eted Matrix (F3)		-	Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR P	T. 10			ox Dark Surface		-	
								(MLRA 153B)
5 cm	Mucky Mineral (A7) (LF	RR P,T,U)			eted Dark Surfa			Red Parent Material (TF2)
_✓ Muck	Presence (A8) (LRR L	J)		Redo	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
						44 4841 15 8 4 5 4 1		
	ted Below Dark Surface	e (A11)			•	11) (MLRA 151)		
Thick Dark Surface (A12)				Iron-	Manganese Ma	sses (F12) (LRF	R O, P,T)	Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)		(A)	Umb	ric Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or	
	, ,,		•	D-4-	·	MI DA 4541		problematic.
	Mucky Mineral (S1) (L	.RR (), S)			Orchric (F17)			orobiomado.
	Gleyed Matrix (S4)				,	B) (MLRA 150A,	•	
	/ Redox (S5)					Soils (F19) (MI		,
Stripp	ed Matrix (S6)			Anor	nalous Bright Lo	oamy Soils (F20	) (MLRA 149A, 153C,	153D)
Dark :	Surface (S7) (LRR P, S	S. T. U)						
	e Layer (If observed):						T	
11000110111	Type:							
	Depth (inches):						Hydric Soil Present	t? Yes ✓ No .
D	Depth (inches).						Invalic Soil Fresen	r res v No
Remarks:								
		-						

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Date:_	10/6/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:_	BP
Investigator(s): Justin Styer, Karl Bullock		Section, Township, Range: 24 27S 18E			
Landform (hillslope, terrace, etc.): N/A	<del>\</del>	Local relief (concave, con-	vex, none): <u>none</u>	Slo	pe (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.119764	Long: <u>-82.4</u>	58825	Dat	um: <u>WGS84</u>
Soil Map Unit Name: Zolfo fine sand			NWI classification	: Shrub Wetland	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in F	Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Yes	sNo
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in Re	emarks)
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ng point locations, t	ransects, impo	ortant features	, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Is the Sampled Area w	vithin a Wetland?	Yes✓ No		
Wetland Hydrology Present?	Yes No	]			
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of tw	o required)
Primary Indicators (minimum of one is required;	check all that apply)			Cracks (B6)	<u>o roquirou</u>
✓ Surface Water (A1)	Water-Stained Leaves (	'B9)		getated Concave S	urface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	,,	Drainage Pa	-	
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L		
Water Marks (B1)				Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bui	, ,	
Drift Deposits (B3)	Presence of Reduced In			isible on Aerial Ima	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	-		: Position (D2)	.3, (,
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutra		
Field Observations:		···· <b>·</b>	1		
Surface Water Present?	Yes <u> </u>	Depth (inches): 0-36			
Water Table Present?	Yes✓ No	="			
Saturation Present?	Yes No	-	Wetland		
(includes capillary fringe)	<u></u>	_ , , , ,	Hydrology Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	<u> </u>		
Remarks:					
remarks:					
-					

VEGETATION - Use scientific na	mes of plants				ing Point:	BP
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
Taxodium distichum	20	yes	OBL	Number of Dominant Species	<u>5</u>	(A)
2.			. <u></u>	That Are OBL, FACW, or FAC:	⊻	(* •)
3.	_			Total Number of Dominant	<u>5</u>	(B)
4.				Species Across All Strata:	2	(0)
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	100.00	(AVD)
7.				Prevalance Index worksheet:		
	20	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x	1=	
Acer rubrum	10	yes	OBL		2=	_
2.				+ · · · ——	3=	-
3.					4=	-
4.				<del></del>	 5=	_
5.	- — —				A)	(B)
6.	• ———	·		Column Fotals.	·/	-(5)
7.	<del></del>			Prevalance Index = B/A =		
1.	10	= Total Cove		Hydrophytic Vegetation Indicate	nre ·	
Shrub Stratum (Plot size:	, ,	- Total Cove	<b>5</b> 1	✓ Dominance Test is 50%	713.	
			FACW	Prevalence Index is ≤3.01		
	5	yes	FACVV			
2.				Problematic Hydrophytic V	egetation (Exp	nain)
3.				1		
4.				Indicators of hydric soil and wetla		nust
5.				be present, unless disturbed or pr		
6.				Definitions of Vegetation Strata	:	
7.						
	5	= Total Cove	er	Tree- Woody plants, excluding woo		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in		(7.6
Ludwigia peruviana	30	yes	OBL	cm) or larger in diameter at breast h	eight (DBH).	
Blechnum serrulatum	10	yes	FACW	Sapling- Woody plants, excluding v	•	
Panicum hemitomon	5	no	OBL	approximately 20 ft (6m) or more in	height and less	than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding wo	•	
6.				approximately 3 to 20 ft (1 to 6 m) ir	ı height.	
7.				Herb- All herbaceous (non-woody)p	lants, including	
8.				herbaceous vines, regardless of size		
9.				plants, except woody vines, less tha	n approximately	3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, regar	dless of height.	
12.				1		
	45	= Total Cove	er	1		
Woody Vine Stratum (Plot size:	)					
1.						
2.				1	•	
3.	_		-			
4.	-		-	  Hydrophytic		
5.				Vegetation Present? Yes _	✓ No	
		= Total Cove				
Remarks: (If observed, list morph					· · · · · · · · · · · · · · · · · · ·	

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region-Interim Version

Percent cover estimates based on meandering survey of the broader community.

SOIL	l: Hillsborough- Zolfo						Sampling Point:BP	
	• •	to the de	pth needed to doc	ument the indicator or	confirm the ab	sence of indicators.		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox Features  W Type <sup>1</sup>	Loc²	Texture	Remarks	
(inches)	Color (moist)		Color (moist)			Texture	Remarks	
0-3	10 YR 3/1						very dark gray fine sand	
2.45	40 VD 5/0		10 YR 7/1; 10			common medium	arouish brown fine cond	
3-15	10 YR 5/2		YR 4/4 10 YR 5/8; 10			distinct mottles common fine	grayish brown fine sand	
15-51	10 YR 7/2		YR 6/6			distinct mottles	light gray fine sand	
51-60	10 YR 5/2						grayish brown fine sand	
¹Tyne: C=	Concentration D=Dept	etion RM	I=Reduced Matrix (	CS=Covered or Coated S	and Grains	2I ocation: PI =Por	e Lining, M=Matrix.	
	il Indicators:	Cuori, Tair	i-reduced matrix, e	50-00verea or obalea e	and Grains.		Indicators for Problematic Hydric Soils 3:	
Histol				Polyvalue Below Sur	face (S8) (LRR	R S, T, U)	1 cm Muck (a9) (LRR O)	
	Epidon (A2)			Thin Dark Surface (\$	89) <b>(LRR S, T,</b>	U)	2 cm Muck (A10) (LRR S)	
	Histic (A3)			Loamy Mucky Miner		)	Reduced Vertic (F18) (outside MLRA 150A, B)	
	gen Sulfide (A4) ied Layers (A5)			Loamy Gleyed Matri. Depleted Matrix (F3)			Piedmont Floodplain Soils (F19) (LRR P, S, T)	
	ic Bodies (A6) (LRR P	P. T. U)		Redox Dark Surface			Anomalous Bright Loamy Soils (F20) (MLRA 153B)	
	Mucky Mineral (A7) (LI		1	Depleted Dark Surfa			Red Parent Material (TF2)	
	Presence (A8) (LRR I		,	Redox Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)	
1 cm Muck (A9) (LRR P,T)				Marl (F10) (LRR U)			Other (Explain in Remarks)	
ı—	ted Below Dark Surfac	e (A11)		Depleted Orchric (F	11) (MLRA 151	)		
	Dark Surface (A12)	- ( ,		Iron-Manganese Ma		DO DT)	36-41-44	
_	Coast Prairie Redox (A16) (MLRA 150A)			Umbric Surface (F13	3) (LRR P, T, U		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or	
	Mucky Mineral (S1) (I		•	Delta Orchric (F17)	(MLRA 151)		problematic.	
_	Gleyed Matrix (S4)	-1410,0	,	Reduced Vertic (F18		, 150B)		
_	Redox (S5)			Piedmont Floodplain	Soils (F19) (M	LRA 149A)		
Stripp	ed Matrix (S6)			Anomalous Bright Lo	oamy Soils (F20	0) (MLRA 149A, 153C	, 153D)	
	Surface (S7) (LRR P,							
Restrictiv	e Layer (If observed)	:						
ĺ	Type: Depth (inches):					Hydric Soil Presen	nt? Yes ✓ No .	
Remarks:	Depth (inches):					Inyunc Son Fresen	Tes	
Kemarks.								
i								
ļ								
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ŀ								
1								
I								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/6/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: BQ				
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range: 24 27S 18E				
Landform (hillstope, terrace, etc.): N/A		Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: 28.119839	Long: <u>-82.4</u>	55897	Datum: WGS84		
Soil Map Unit Name: Quartzipasaments			NWI classification:	Freshwater Pond		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)		
	or Hydrology		Are circumstances			
	or Hydrology			any answers in Remarks)		
SUMMARY OF FINDINGS - Attach sit			•	•		
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	Yes No			
Wetland Hydrology Present?	Yes✓No	1				
Remarks:		1				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of two required)		
Primary Indicators (minimum of one is required; c	heck all that apply)	Surface Soil Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	etated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patt	erns (B10)		
✓ Saturation (A3)	Mart Deposits (B15) (LR	R U)	Moss Trim Lir	nes (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (		Dry-Season V	Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burro			
Drift Deposits (B3)	Presence of Reduced Iro			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	• •	Geomorphic F	• • • •		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	` '		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral 1			
Field Observations:		,	1	-		
Surface Water Present?	Yes No	Depth (inches): 0-12				
Water Table Present?	Yes/No	• • • •				
	Yes No	Depth (inches): 0	Wetland			
Saturation Present?	162 NO	Deptii (inches)	Hydrology	Was de Na		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na well periol photos, previous	inenactions) if available:	Present?	Yes <u>✓ No</u>		
Describe Recorded Data (stream gauge, monitor	ng weir, aeriai priotos, previous	mspections), ii avaliable.				
Remarks:						
		•				

VEGETATION - Use scientific nai	mes of plants			Sampling	Point:	BQ
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.	=	•		Number of Dominant Species		
2.				That Are OBL, FACW, or FAC:	<u>3</u>	(A)
				Total Number of Dominant		
3.					<u>5</u>	(B)
4.				Species Across All Strata:		
5.				Percent of Dominant Species	60.00	(A/B)
6.				That Are OBL, FACW, or FAC:		·/
7.				Prevalance Index worksheet:		
	0	= Total Cove	r		Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=		_
Cinnamomum camphora	5	yes	FACU	FACW speciesx2=		_
2. Sapium sebiferum	5	yes	FAC	FAC species x3=		
3.				FACU species x4=		
4.				UPL species x5=		_
5.	·			Column Totals: (A)		— <sub>(B)</sub>
6.	· <del></del>			(//)_		— (B)
7.	·			Prevalance Index = B/A =		
1.		Tatal Cause				
	10	= Total Cove	er	Hydrophytic Vegetation Indicators	<b>5</b> :	
Shrub Stratum (Plot size:	<u>_</u> )	÷		✓ Dominance Test is 50%		
<ol> <li>Cephalanthus occidentalis</li> </ol>	5	yes	OBL	Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Veg	etation <sup>1</sup> (Ex	plain)
3.						
4.	-			<sup>1</sup> Indicators of hydric soil and wetland	d hydrology i	must
5.				be present, unless disturbed or prob		
6.				Definitions of Vegetation Strata:		
7.	· ——					
1.	5	= Total Cove		Tana Mandu planta avaludina waadu	uinna	
Herb Stratum (Plot size:)		- Total Cove		Tree- Woody plants, excluding woody approximately 20 ft (6m) or more in he	ight and 3 in	. (7.6
Ludwigia peruviana	50	yes	OBL	cm) or larger in diameter at breast hei	gnt (DBH).	
<ol><li>Eupatorium capillifolium</li></ol>	20	yes	FACU	Sapling- Woody plants, excluding woo		
3. Panicum hemitomon	2	no	OBL	approximately 20 ft (6m) or more in he	ight and less	than 3
4.		-		in. (7.6 cm) DBH.		
5.		-		Shrub- Woody plants, excluding wood	ly vines.	
6.				approximately 3 to 20 ft (1 to 6 m) in h		
7.				Herb- All herbaceous (non-woody)plar	_	
8				herbaceous vines, regardless of size.		
9.	- ——			plants, except woody vines, less than		
				m) in height.	арргодинаю	y 0 it ( i
10.			-	1		
11.				Woody vine- All woody vines, regardle	ess of height	-
12.						
	72	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.	• ——			Hydrophytic		
5.				Vegetation Present? / Yes	/ No	
-		= Total Cove				<del>.</del>
Domostos (If observed list seems						
Remarks: (If observed, list morph	•	•	roodor oo	mmunity		

Profile Des	scription: (Describe to	o the dep	th needed to do	cument t	the indicator or	confirm the ab	sence of indicators	.)					
Depth	Matrix			Redo	x Features								
(inches)	Color (moist)	%	Color (moist)	%_	Type	Loc <sup>2</sup>	Texture				Rema	rks	
				- —									
		—			<del></del>	•							
	Concentration, D=Deple	etion, RM=	Reduced Matrix,	CS=Cove	ered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Poi				4:-11		
Hyarıc Soi Histol (	I Indicators:			Poh	walue Below Si	ırface (S8) (LRR	STIN		ors for Pro m Muck (a			dric Soils <sup>3</sup>	•
	Epidon (A2)					S9) (LRR S, T, 1			m Muck (A				
	Histic (A3)					ral (F1) (LRR O)						ide MLRA	150A. B)
	gen Sulfide (A4)				my Gleyed Mati							F19) (LRR	
	ed Layers (A5)				oleted Matrix (F3				omalous B				., .,
Organi	ic Bodies (A6) (LRR P,	, T, U)		Rec	lox Dark Surfac	e (F6)			MLRA 153		, O.	(. <u>_</u> ,	
5 cm N	Aucky Mineral (A7) (LR	R P,T,U)		Dep	oleted Dark Surf	ace (F7)		Re	d Parent M	laterial	(TF2)		
	Presence (A8) (LRR U			Rec	dox Depressions	(F8)		Ve	ry Shallow	Dark S	urface (	(TF12) (LR	RT, U)
1 cm N	fuck (A9) (LRR P,T)			Mar	1 (F10) (LRR U	1		Oth	ner (Explair	n in Rei	marks)		
	ed Below Dark Surface	e (A11)				11) (MLRA 151)							
Thick [	Dark Surface (A12)				-	asses (F12) (LRI		3Indicat	ors of hydr	ophytic	vegeta	tion and we	etland
Coast	Prairie Redox (A16) (N	/ILRA 150	A)	Uml	bric Surface (F1	3) (LRR P, T, U)	)	hydrolo	gy must be			ss disturbe	
Sandy	Mucky Mineral (S1) (L	RR O, S)			ta Orchric (F17)			problem	natic.				
	Gleyed Matrix (S4)					8) (MLRA 150A,							
	Redox (S5)					n Soils (F19) (MI							
Strippe	ed Matrix (S6)			And	omalous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)	1				
	Surface (S7) (LRR P, S												
	Layer (If observed):												
	Type:						l						
Remarks:	Depth (inches):						Hydric Soil Prese	nt?	Yes		No _	<del></del>	
Remarks:													
			•										

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date:_	10/6/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	BR
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	24 27S 18E		
Landform (hillslope, terrace, etc.):N/A	·	Local relief (concave, conv	ex, none): none	Sto	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.119842</u>	Long: <u>-82.4</u>	54820	Da	tum: WGS84
Soil Map Unit Name: Quartzipasaments			_NWI classification:	Freshwater Por	nd
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Ye	sNo
Are Vegetation, Soil	or Hydrology	_naturally problematic?	(If needed, explain	any answers in R	emarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features	, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	ithin a Wetland?	Yes <u></u> ✓ No	
Wetland Hydrology Present?	YesNo	]			
Remarks:		<u> </u>			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	vo required)
Primary Indicators (minimum of one is required; of	theck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	getated Concave S	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	isible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	l	Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-72	_		
Water Table Present?	Yes No	Depth (inches): 0			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes No	·
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:			
Remarks:					
Terrarks.					

VEGETATION - Use scientific nar	mes of plants			San	npling Point:	BR
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	6	/A)
2.				That Are OBL, FACW, or FAC:	<u>6</u>	(A)
3.				Total Number of Dominant	6	(5)
4.				Species Across All Strata:	<u>6</u>	(B)
5.	-			Percent of Dominant Species	100.00	
6.	-	-		That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.		-		Prevalance Index worksheet:		
	0	= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Schinus terebinthifolius	<del></del> ´ 25	yes	FAC	FACW species	x2=	-
Quercus laurifolia	15	yes	FACW	FAC species	x3=	-
Melaleuca quinquenervia	10	yes	FAC	FACU species	x4=	-
4.			17.0	UPL species	_x5=	-
5.	- —			Column Totals:	-(A)	- (B)
6.					_(^)	-(5)
7.				Prevalance Index = B/A =		
	50	= Total Cove	<u></u>	Hydrophytic Vegetation Indic	atore	
Shrub Stratum (Plot size:	1	- 10ta, 0010.	1	✓ Dominance Test is 50%		
	<del></del> /			L		
1.				Prevalence Index is ≤3.0		、
2.				Problematic Hydrophytic	: Vegetation (Exp	lain)
3.				1.		
4.				Indicators of hydric soil and we		nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ıta:	
7.		<del></del>		1		
l a	0	= Total Cove	L	Tree- Woody plants, excluding w		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Ludwigia peruviana	5	yes	OBL	cm) or larger in diameter at breas	st height (DBH).	
Andropogon virginicus	55	yes	FAC	Sapling- Woody plants, excluding		
Panicum repens	5	yes	FACW	approximately 20 ft (6m) or more	in height and less t	than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding		
6.				approximately 3 to 20 ft (1 to 6 m	) in height.	
7.				Herb- All herbaceous (non-woody	v)plants, including	
8.				herbaceous vines, regardless of	• • • •	dy
9.				plants, except woody vines, less t		
10.				m) in height.		
11.	-			Woody vine- All woody vines, reg	gardless of height.	
12.				1	·	
	15	= Total Cover	:r	1		
Woody Vine Stratum (Plot size:	)		"			
1.	,		ļ			
2.	-		-	•		
3.						
4.						
5.	- —			Hydrophytic	s ✓ No	
J.		= Total Cove		Vegetation Present? Yes	,110	<del></del>
Remarks: (If observed, list morpho			<u>'</u>			
Percent cover estimates based or			rooder oor	mm, mitu		
Leine conei estimates nasca oi	.i ilicanucing s	urvey or one or	Dauei coi	mmunity.		

le Description: (Describe to the depth neede h Matrix			Sampling Point:
h Matrix		firm the absence of indicato	ors.)
	Redox Features	·····	
es) Color (moist) % Color (r	moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture	Remarks
e: C=Concentration, D=Depletion, RM=Reduced	Matrix, CS=Covered or Coated San	Grains. <sup>2</sup> Location: PL=	Pore Lining, M=Matrix.
ic Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface	e (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9)	(LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (	F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	-,	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F	6)	(MLRA 153B)
	Depleted Dark Surface	•	Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P,T,U)		• •	
Muck Presence (A8) (LRR U)	Redox Depressions (F8	5)	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Mart (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11)	(MLRA 151)	
	Iron-Manganese Masse		
Thick Dark Surface (A12)	<del></del>		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (	LRR P, T, U)	hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (M	.RA 151)	problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (		
Sandy Redox (S5)	Piedmont Floodplain S		
		ny Soils (F20) (MLRA 149A, 1:	E3C 153D)
Stripped Matrix (S6)	Atioinalous Bright Loan	19 30115 (F20) (MILRA 143A, 13	330, 1330)
Dark Surface (S7) (LRR P, S, T, U)			
rictive Layer (If observed):			
Type:			
Depth (inches):	•	Hydric Soil Pre	sent? Yes <u></u> ✓ No
arks;			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	Sampling Date: 10/6/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: BS	
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range: 19 27S 19E			
Landform (hilislope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.119790	Long: <u>-82.4</u>	48866	Datum: WGS84	
Soil Map Unit Name: Basinger fine sand			_NWI classification:	Shrub Wetland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>√</u>	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes_/_No	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes No	
Wetland Hydrology.Present?	Yes No				
Remarks:					
	•				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of two required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil (	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (i	B9)	Sparsely Veg	etated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)	
Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season V	Vater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burre	ows (C8)	
Drift Deposits (B3)	Presence of Reduced In	on (C4)Saturation Visible on Aerial Imagery (C			
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	ard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No	Depth (inches): 0	Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			
Remarks:					

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Poir	nt: <u>BS</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	3 (A)
<u>1.</u> 2.				That Are OBL, FACW, or FAC:	<u>3</u> (A)
3.				Total Number of Dominant	2 (5)
4.				Species Across All Strata:	<u>3</u> (B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	<u>)0.00</u> (A/B)
7.				Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multip	oly by:
Sapling Stratum (Plot size:	)			OBL species x1=	
Acer rubrum	30	yes	OBL	FACW species x2=	
2. Quercus laurifolia	5	no	FACW	FAC species x3=	
3. Cinnamomum camphora	5	no	FACU	FACU species x4=	
				UPL species x5=	
5.				Column Totals: (A)	(B)
6.					
<ul><li>4.</li><li>5.</li><li>6.</li><li>7.</li></ul>				Prevalance Index = B/A =	
	40	= Total Cove	 er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	<del></del> /			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetatio	n <sup>1</sup> (Explain)
3.				1 Toblemano Hydrophyno Vegetano	TI (Explain)
4.				Indicators of hydric soil and wetland hydr	ology must
5.				be present, unless disturbed or problemate	
6.				Definitions of Vegetation Strata:	
7.				i	
		= Total Cove		Tree- Woody plants, excluding woody vines	
Herb Stratum (Plot size:)	ŭ	10101 0011	•	approximately 20 ft (6m) or more in height a	•
Panicum hemitomon	30	yes	OBL	cm) or larger in diameter at breast height (D	
Ludwigia repens	15	yes	OBL	Sapling- Woody plants, excluding woody vir	•
Osmunda cinnamomea	10	no	FACW	approximately 20 ft (6m) or more in height a	
Osmunda regalis	10	no	OBL	in. (7.6 cm) DBH.	
Nephrolepis exaltata	5	no	FACU	Shrub- Woody plants, excluding woody vine	26
6. Bacopa monnieri	3	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	,,,
7.				Herb- All herbaceous (non-woody)plants, in	oludina
8.	· ——			herbaceous vines, regardless of size. Include	
9.				plants, except woody vines, less than approx	
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of	height
12.				1	
, Then	73	= Total Cove		1	
Woody Vine Stratum (Plot size:	)	10101 0011	21		
1.					
2.	·			1	
3.					
4.				Hydrophydia	
5.	· ——			Hydrophytic Vegetation Present? Yes ✓	No .
<u> </u>		= Total Cove		Vegetation Present? Yes✓	_140
Remarks: (If observed, list morph					
Percent cover estimates based or		•	oroader cor	mmunity.	

SOIL									Sampling P	Point: B
	scription: (Describe t	o the de	oth needed to doo			confirm the abs	ence of indicators.)			
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox %	Features Type <sup>1</sup>	Loc²	Texture		Remarks	
0-7	10 YR 2/1							black fine sand		
7-28	10 YR 6/1							gray fine sand		
	10 YR 5/3; 10 YR							•		
28-42	5/2								ish brown fine sand	
42-80	10 YR 6/2							light brownish g	ray fine sand	
										<del> </del>
	Concentration, D=Depl	etion, RM	=Reduced Matrix,	CS=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore			
Histol Histic Hlate Hlate Hydro Stratif Orgar 5 cm Muck 1 cm Deple Thick Coast Sandy Sandy Stripp	il Indicators: (A1) Epidon (A2) Histic (A3) gen Sulfide (A4) ied Layers (A5) iic Bodies (A6) (LRR P Mucky Mineral (A7) (LF Presence (A8) (LRR P, T) ted Below Dark Surfac Dark Surface (A12) Prairie Redox (A16) (I  r Mucky Mineral (S1) (L  r Gleyed Matrix (S4) r Redox (S5) ed Matrix (S6) Surface (S7) (LRR P, S	RR P,T,U)	DA)	Thin I Loam Loam Deple Redo Marl I Deple Iron-I Umbr Delta Redu	Dark Surface (:  y Mucky Miner y Gleyed Matri teted Matrix (F3 x Dark Surface eted Dark Surface (F10) (LRR U) eted Orchric (F Manganese Ma ric Surface (F1 Orchric (F17) ced Vertic (F17) nont Floodplair	) (F6) ice (F7) (F8)  11) (MLRA 151) sses (F12) (LRR 3) (LRR P, T, U) (MLRA 151) 3) (MLRA 150A, Soils (F19) (MLI	S, T, U)	1 cm Muck (as 2 cm Muck (A Reduced Verti Piedmont Floc Anomalous Br (MLRA 153E Red Parent M Very Shallow I Other (Explain Indicators of hydrology must be problematic.	10) (LRR S) ic (F18) (outside ML idplain Soils (F19) (L ight Loamy Soils (F2i i) aterial (TF2) Dark Surface (TF12)	RA 150A, B) RR P, S, T) 0) (LRR T, U) d wetland
Restrictiv	e Layer (If observed): Type:									
	Depth (inches):						Hydric Soil Presen	? Yes	✓ No	
Remarks:						•	-			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/6/09			
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Samp			nt:BT
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range			
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, conv	/ex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.119648	Long: <u>-82.4</u>	42241		Datum: WGS84
Soil Map Unit Name: Zolfo fine sand			_NWI classification:	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil	or Hydrology		Are circumstances		YesNo
	or Hydrology		(If needed, explain	any answers i	n Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featu	res, etc.
Hydrophytic Vegetation Present?	Yes✓No				
Hydric Soil Present?	Is the Sampled Area w	vithin a Wetland?	Yes <u></u> ✓	No	
Wetland Hydrology Present?	Yes No				
Remarks:		•			
11177701 0014					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate		of two required)
Primary Indicators (minimum of one is required; of			Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	getated Concar	ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
Saturation (A3)	RR U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season	Water Table (0	C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	- · · · · · · · · · · · · · · · · · · ·			
Drift Deposits (B3)	Presence of Reduced Ire	ron (C4)Saturation Visible on Aerial Imagery (C			Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	in Tilled Soils (C6)Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	')Shallow Aquitard (D3			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No	Depth (inches): 0	Modera		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:			
Remarks:					
		ů.			

County/soil:	Hillsborough-	Zolfo
SOIL		

SOIL								Sampling Point:BT
Profile De	scription: (Describe	to the de	pth needed to doc			onfirm the ab	sence of indicators.)	
Depth	Matrix				Features			
(inches)	Color (moist)	%	Color (moist)	%	Type¹	Loc2	Texture	Remarks
0-3	10 YR 3/1							very dark gray fine sand
0-5	10 11( 3/1	·	10 YR 7/1; 10				common medium	very dark gray line sand
3-15	10 YR 5/2		YR 4/4				distinct mottles	grayish brown fine sand
			10 YR 5/8; 10		<del></del>		common fine	<del> </del>
15-51	10 YR 7/2		YR 6/6				distinct mottles	light gray fine sand
51-60	10 YR 5/2							grayish brown fine sand
		. ——						
1							2	
	Concentration, D=Dep il Indicators:	letion, RM	=Reduced Matrix, (	S=Cover	ed or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:
Histol				Poho	alue Below Surf	ace (S8) (I RR		1 cm Muck (a9) (LRR O)
	Epidon (A2)				Dark Surface (S			2 cm Muck (A10) (LRR S)
	Histic (A3)				y Mucky Minera			Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ry Midday Millera		•	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				eted Matrix (F3)	. (1 2)		Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR I	P. T. U)			x Dark Surface	(F6)	-	(MLRA 153B)
_ `	Mucky Mineral (A7) (L		<b>A</b>	—— Dente	eted Dark Surfac	e (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR		,	<del></del> ·	x Depressions (	` '	•	Very Shallow Dark Surface (TF12) (LRR T, U)
		υ,				1 0)	-	<del></del> -
1 cm	Muck (A9) (LRR P,T)			man (	(F10) (LRR U)		-	Other (Explain in Remarks)
Deple	ted Below Dark Surface	ce (A11)		Deple	eted Orchric (F1	1) (MLRA 151)	)	
Thick	Dark Surface (A12)			Iron-M	Manganese Mas	ses (F12) (LR	R O, P,T)	Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 15	(A)	Umbr	ric Surface (F13	) (LRR P, T, U		hydrology must be present, unless disturbed or
			•	—— Dolta	Orchric (F17) (	MI DA 151)		problematic.
	/ Mucky Mineral (S1) (	LKK U, S	)			· ·		
	Gleyed Matrix (S4)				ced Vertic (F18)			
	Redox (S5)				nont Floodplain			4520)
	ed Matrix (S6)			Anor	naious Bright Lo	amy Soils (F20	) (MLRA 149A, 153C	, 1630)
	Surface (S7) (LRR P,							
Restrictiv	e Layer (If observed)	:						
	Type:						l	
	Depth (inches):						Hydric Soil Presen	t? Yes <u>√</u> No
Remarks:								
Í								
İ								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	Sampling Date: 10/7/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: BU	
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range: 19 27S 19E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slope (%):	
		06 Long:82,438372 Datum: _			
Soil Map Unit Name: St. John's fine sand				Freshwater Emergent Wetland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes/_No	
	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing samplir	ng point locations, t	ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	YesNo	
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:		•	Secondary Indicate	rs (minimum of two required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (E	39)	Sparsely Veg	etated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season \	Vater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burr	ows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)Saturation Visible on Aerial Imagery (C			
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic	: Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	tard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No	Depth (inches):			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes No ·	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	•		
Remarks:					
			•		
-					
				ů.	

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	BU
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	•	,		Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	(B)
<del>4.</del> 5.				<b>d</b> '	ł
6.				Percent of Dominant Species That Are OBL, FACW, or FAC:  100.00	(A/B)
7.				Prevalance Index worksheet:	
1.				4	
Canling Chrotum (Dlot sing)	, 0	= Total Cover	ſ	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)		E40)4/	OBL species x1=	- i
1. Salix spp.	10	yes	FACW	FACW species x2=	_
2.				FAC speciesx3=	-
3.				FACU speciesx4=	_
4.				UPL speciesx5=	_
5.				Column Totals:(A)	_(B)
6.					
7.				Prevalance Index = B/A =	
	10	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
Sambucus canadensis	5	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.		<del></del> _		Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	lain)
3.				, , , , , , , , , , , , , , , , , , ,	
2. 3. 4.				Indicators of hydric soil and wetland hydrology m	nuet
5.				be present, unless disturbed or problematic.	'ust
6.				Definitions of Vegetation Strata:	
7.	· <del></del>			1	1
	5	= Total Cover	-	Tree Weeds plants, evaluding weeds since	1
Herb Stratum (Plot size:)	3	- Total Cove		Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in.	/7.6
	20		<b>∩</b> BI	cm) or larger in diameter at breast height (DBH).	(7.0
Ludwigia peruviana     2.	30	yes	OBL	1	
2.				Sapling- Woody plants, excluding woody vines,	45 0
3. 4.				approximately 20 ft (6m) or more in height and less	man 3
4.				in. (7.6 cm) DBH.	
5. 6.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8. 9.				herbaceous vines, regardless of size. Includes woo	
				plants, except woody vines, less than approximately	3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.					
	30	= Total Cover	r		
Woody Vine Stratum (Plot size:	)				
1.					
2.		<del>- , </del>	· · · · · · · · · · · · · · · · · · ·	1	
3.					
4.	· <del></del>			  Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	
	0	= Total Cover	<u> </u>	100011111111111111111111111111111111111	<del></del>
Remarks: (If observed, list morph-				I	
Percent cover estimates based or		•	oader cor	mmunity	
i crosiii cover estimates based of	i meanueiling s	urvey or the Di	Jauel COI	minumy.	

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks  Def 10 YR 2/1	SOIL								Sampling Point:B
Color (moist)	Į.	• •	to the de	oth needed to doc			confirm the ab	sence of indicators	5.)
Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description   Description									
12-29   10 YR 3/2   very dark grayish brown fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   light brownish   li	(inches)	Color (moist)	%	Color (moist)	%_	Type'	Loc	Texture	Remarks
6.12 10 YR 3/2   very dark grayish brown fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand black fine sand black fine sand black fine sand black fine sand black fine sand black fine sand black fine sand black fine sand black fine sand black fine sand black fine sand sand gray fine sand black fine sand black fine sand black fine sand black fine sand black fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand sand gray fine sand gray fine sand gray fine sand gray fine sand gray fin	0-6	10 YR 2/1							black fine sand
29-36 10 YR 2/1    Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.									very dark grayish brown fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Tocation: PL=Pore Lining, M=Matrix.  Hydric Soil Indicators: Histol (A1) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) Thin Dark Surface (S9) (LRR S, T, U) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Stratified Layers (A5) Depleted Matrix (F2) Peledmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Dark Surface (F6) Mucky Mineral (A7) (LRR P, T, U) Peledmont Floodplain Soils (F20) (MLRA 153B) Som Mucky Mineral (A7) (LRR P, T, U) Peledmont Floodplain Soils (F20) (MLRA 153B) Peledmont Floodplain Soils (F20) (MLRA 153B) Peledmont Floodplain Soils (F20) (MLRA 153B) Peledmont Floodplain Soils (F20) (MLRA 153B) Peledmont Floodplain Soils (F20) (MLRA 153B) Peledmont Floodplain Soils (F20) (MLRA 153B) Peledmont Floodplain Soils (F20) (MLRA 153B) Peledmont Floodplain Soils (F20) (MLRA 153B) Peledmont Floodplain Soils (F20) (MLRA 150B) Peledmont Floodplain Soils (F20) (MLRA 150B) Peledmont Floodplain Soils (F20) (MLRA 150B) Peledmont Floodplain Soils (F20) (MLRA 150B) Peledmont Floodplain Soils (F20) (MLRA 150B) Peledmont Floodplain Soils (F20) (MLRA 150B) Peledmont Floodplain Soils (F10) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F10) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Peledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)	12-29	10 YR 6/2							light brownish gray fine sand
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Black Histic (A3)  Hydrogen Sutfide (A4)  Stratified Layers (A5)  Crganic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck (A9) (LRR P, T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR P, T, U)  Depleted Orchric (F11) (MLRA 151)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, S)  Delta Orchric (F13) (LRR P, T, U)  Delta Orchric (F13) (LRR P, T, U)  Delta Orchric (F13) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, T)  Delta Orchric (F17) (MLRA 151)  Thick Dark Surface (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, T)  Delta Orchric (F17) (MLRA 151)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No   I cm Muck (A9) (LRR P, C)  2 cm Muck (A9) (LRR P, C)  Reduced Vertic (F18) (MLRA 159A)  Mari (F10) (LRR U)  Depth (inches):  Hydric Soil Present? Yes No   I cm Muck (A9) (LRR O, S)  Soil Cumbro (Reduced Vertic (F18) (MLRA 150A)  Mari (F10) (LRR U)  Depte (Below Dark Surface (A12)  Loamy Mucky Mineral (S1) (LRR O, S)  Soil Cumbro (Reduced Vertic (F18) (MLRA 150A)  Mari (F10) (LRR U)  Depte (Reduced Vertic (F18) (MLRA 150B)  Soil Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No	29-36	10 YR 2/1							black fine sand
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Black Histic (A3)  Hydrogen Sutfide (A4)  Stratified Layers (A5)  Crganic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3)  Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck (A9) (LRR P, T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR P, T, U)  Depleted Orchric (F11) (MLRA 151)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, S)  Delta Orchric (F13) (LRR P, T, U)  Delta Orchric (F13) (LRR P, T, U)  Delta Orchric (F13) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, T)  Delta Orchric (F17) (MLRA 151)  Thick Dark Surface (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, T)  Delta Orchric (F17) (MLRA 151)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No   I cm Muck (A9) (LRR P, C)  2 cm Muck (A9) (LRR P, C)  Reduced Vertic (F18) (MLRA 159A)  Mari (F10) (LRR U)  Depth (inches):  Hydric Soil Present? Yes No   I cm Muck (A9) (LRR O, S)  Soil Cumbro (Reduced Vertic (F18) (MLRA 150A)  Mari (F10) (LRR U)  Depte (Below Dark Surface (A12)  Loamy Mucky Mineral (S1) (LRR O, S)  Soil Cumbro (Reduced Vertic (F18) (MLRA 150A)  Mari (F10) (LRR U)  Depte (Reduced Vertic (F18) (MLRA 150B)  Soil Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No			_						
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Histol Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Muck Presence (A8) (LRR V)  Loamy Mucky Mineral (F1) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Orchric (F11) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR P, S, S)  Delta Orchric (F13) (LRR P, T, U)  Depleted Orchric (F13) (LRR P, T, U)  Depleted Orchric (F13) (LRR P, T, U)  Depleted Below Dark Surface (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S)  Detta Orchric (F17) (MLRA 151)  Depleted Dark Surface (F13) (LRR P, T, U)  Depleted Dark Surface (A15)  Depleted Dark Surface (A16) (MLRA 150A)  Depleted Orchric (F17) (MLRA 151)  Thick Dark Surface (A16) (MLRA 150A)  Depleted Orchric (F17) (MLRA 151)  Depleted Dark Surface (A16) (MLRA 150A)  Depleted Orchric (F17) (MLRA 151)  Thick Dark Surface (A16) (MLRA 150A)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Poelted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Thick Dark Surface (A16) (MLRA 150A)  Delta Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Sandy Redox (S5)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No	¹Type: C=	Concentration D=Dept	etion RM	=Reduced Matrix I	CS=Cove	red or Coated S	Sand Grains	2Location: PL=Po	re Lining. M≖Matrix.
Histol (A1)									
Loamy Mucky Mineral (F1) (LRR O) Hydrogen Suffide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A7) Stratified Layers (A6) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A7) Stratified Layers (A6) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A7) Stratified Layers (A6) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A6) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Stratified Layers (A7) Depleted Bolow Dark Surface (F6) Muck Presence (A8) (LRR P, T, U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR T, U)  Marl (F10) (LRR U) Other (Explain in Remarks)  Depleted Below Dark Surface (A11) Iron-Manganese Masses (F12) (LRR O, P,T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Delta Orchric (F17) (MLRA 150A) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present? Yes ✓ No  No					Poly	value Below Su	rface (S8) (LRR	(S, T, U)	
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Edward Surface (F6)  Organic Bodies (A6) (LRR P, T, U)  Edward Surface (F6)  Fed Murky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Redox Derpressions (F8)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7)  Depleted Matrix (F2)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Lore Redox Depressions (F8)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Depleted Derk (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No	_	, ,					. , ,		2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Edward Surface (F6)  Organic Bodies (A6) (LRR P, T, U)  Edward Surface (F6)  Fed Murky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Redox Derpressions (F8)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7)  Depleted Matrix (F2)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Lore Redox Depressions (F8)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Depleted Derk (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No	_								Reduced Vertic (F18) (outside MLRA 150A, B)
Organic Bodies (A6) (LRR P, T, U)  — Redox Dark Surface (F6)  — S cm Mucky Mineral (A7) (LRR P, T, U)  — Muck Presence (A8) (LRR U)  — Lepleted Dark Surface (F7)  — Redox Depressions (F8)  — Very Shallow Dark Surface (TF12) (LRR T, U)  — Lom Muck (A9) (LRR P, T)  — Marl (F10) (LRR U)  — Depleted Below Dark Surface (A11)  — Thick Dark Surface (A12)  — Coast Prairie Redox (A16) (MLRA 150A)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sandy Redox (S5)  — Sandy Redox (S5)  — Delta Orchric (F18) (MLRA 150A, 150B)  — Sandy Redox (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  — Type: — Depth (inches):  — Hydric Soil Present?  — Yes ✓ No	Hydro	ogen Sulfide (A4)							Piedmont Floodplain Soils (F19) (LRR P, S, T)
									Anomalous Bright Loamy Soils (F20)
✓ Muck Presence (A8) (LRR U)	Orga	nic Bodies (A6) (LRR P	P, T, U)		Redo	ox Dark Surface	(F6)		(MLRA 153B)
	5 cm	Mucky Mineral (A7) (LI	RR P,T,U)	<b>)</b>	Depl	eted Dark Surfa	ice (F7)		Red Parent Material (TF2)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depleted Orchric (F11) (MLRA 151)  Lron-Manganese Masses (F12) (LRR O, P,T)  JIndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Pelta Orchric (F13) (MLRA 151)  problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes  No	Mucl	Presence (A8) (LRR I	U)		Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Pestrictive Layer (If observed):  Type:  Depth (inches):  Iron-Manganese Masses (F12) (LRR O, P,T)  JINDIAN (SIR P, T, U)  Alnoidcators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Peduced Vertic (F13) (MLRA 151)  Predmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No  No  Iron-Manganese Masses (F12) (LRR O, P,T)  Andicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Peduced Vertic (F18) (MLRA 150A, 150B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)  — Umbric Surface (F13) (LRR P, T, U)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sandy Gleyed Matrix (S4)  — Sandy Redox (S5)  — Stripped Matrix (S6)  — Delta Orchric (F17) (MLRA 151)  — Reduced Vertic (F18) (MLRA 150A, 150B)  — Piedmont Floodplain Soils (F19) (MLRA 149A)  — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  — Type: — Depth (inches):  — Hydric Soil Present?  — Yes  — No — No — No — No — Hydric Soil Present?  — No — Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  — Hydric Soil Present?  — No — No — No — No — No — No — No — N	Deple	eted Below Dark Surfac	æ (A11)		Depl	eted Orchric (F	11) (MLRA 151)	)	
Coast Prairie Redox (A16) (MLRA 150A)	Thick	Dark Surface (A12)			Iron-	Manganese Ma	sses (F12) (LR	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
	Coas	t Prairie Redox (A16) (I	MLRA 15	DA)				)	hydrology must be present, unless disturbed or
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes ✓ No	_		LRR O, S	•					problematic.
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):									
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No							, ,,	•	
Restrictive Layer (If observed):   Type:   Depth (inches): Hydric Soil Present? Yes ✓ No		, ,			Anor	nalous Bright L	oamy Soils (F20	)) (MLRA 149A, 1530	C, 153D)
Type:  Depth (inches): Hydric Soil Present? Yes ✓ No									
Depth (inches): Hydric Soil Present? Yes ✓ No	Restrictiv		•						
	ŀ	•••		<del></del>				Hydric Soil Prese	nt? Yes ✓ No .
	Remarks:							1,	
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	İ								
	ĺ								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date: 10/7/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: BV
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 19 27S 19E	
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, con-	vex, none): <u>none</u>	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.119840	Long: <u>-82.</u> 4	36964	Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification	Freshwater Pond
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Yes/_No
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	YesNo	Is the Sampled Area v	vithin a Wetland?	YesNo
Wetland Hydrology Present?	Yes No	]		
Remarks:				
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	
Surface Water (A1)	Water-Stained Leaves (	'B9)		getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	20)	Drainage Pa	-
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	
Drift Deposits (B3)	Presence of Reduced Ir			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i		Geomorphic	
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Shallow Aqu	
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutral	
Field Observations:		· · · · · · · · · · · · · · · · · · ·		
Surface Water Present?	Yes No	_ Depth (inches):		
Water Table Present?	YesNo			
Saturation Present?	Yes No		Wetland Hydrology	
(includes capillary fringe)		- , , , ,	Present?	Yes _ <no< td=""></no<>
Describe Recorded Data (stream gauge, monitor Remarks:	ing well, aerial photos, previous	s inspections), if available:		

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	BV
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	•	•		Number of Dominant Species	(4)
2.			-	That Are OBL, FACW, or FAC: $\frac{4}{}$	(A)
3.				Total Number of Dominant	<u>,_,</u>
4.	,			Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.		•		Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:		- 10ta 00.0		OBL species x1=	
1. Salix spp.	20	yes	FACW	FACW species x2=	
Sapium sebiferum	10	yes	FAC	FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	
5.			-		(B)
6.					(-,
7.				Prevalance Index = B/A =	
<u> </u>	30	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	1	- 10(a) 0010	;1	✓ Dominance Test is 50%	
	/ 20		E 4 (C) 4/		
Sambucus canadensis	30	yes	FACW	Prevalence Index is ≤3.0¹	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Expla	in)
3.				<b>.</b>	
4.				Indicators of hydric soil and wetland hydrology mu	ıst
5.				be present, unless disturbed or problematic.	
6.		·		Definitions of Vegetation Strata:	
7.					
	30	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (7	7.6
Ludwigia peruviana	10	yes	OBL	cm) or larger in diameter at breast height (DBH).	
2. Bidens pilosa	2	no	FACW	Sapling- Woody plants, excluding woody vines,	
3.				approximately 20 ft (6m) or more in height and less th	ıan 3
4.				in. (7.6 cm) DBH.	
5.			-	Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woody	v
9.				plants, except woody vines, less than approximately 3	
10.				m) in height.	,
11.				Woody vine- All woody vines, regardless of height.	
12.	. ——			Troody vine 7 in 1100dy vines, regulates of neighbor	
12.	12	= Total Cove		1	
Mandy Vino Stratum (Blot size:	۱۲	- Total Cove	;F		
Woody Vine Stratum (Plot size:	/				
1.				-	
2.				ļ	
3.					
4.				Hydrophytic	
5.				Vegetation Present? YesNo	<u> </u>
	0	= Total Cove	r		
Remarks: (If observed, list morpho	ological adapta	tions below).			
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	

Propried Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Description: (Descrip	ling Point:
Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks  10 YR 2/1  18 10 YR 6/1  10 YR 5/3: 10 YR  42 5/2  80 10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6/2  10 YR 6	
10 YR 2/1 8 10 YR 6/1 9 10 YR 5/3; 10 YR 42 5/2 80 10 YR 6/2 80 10 YR 6/2 81 10 YR 6/2 82 83 brown and graysish brown fine sand light brownish gray fine sand 84 10 YR 6/2 85 brown and graysish brown fine sand light brownish gray fine sand 86 10 YR 6/2 87 brown and graysish brown fine sand light brownish gray fine sand 88 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 80 lo YR 6/2 80 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 81 light brownish gray fine sand 82 light brownish gray fine sand 84 light brownish gray fine sand 85 light brownish gray fine sand 86 light brownish gray fine sand 86 light brownish gray fine sand 87 light brownish gray fine sand 87 light brownish gray fine sand 88 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine sand 81 light brownish gray fine sand 81 light brownish gray fine sand 81 light brownish gray fine sand 82 light brownish gray fine sand 84 light brownish gray fine sand 84 light brownish gray fine sand 84 light brownish gray fine sand 85 light brownish gray fine sand 86 light brownish gray fine sand 86 light brownish gray fine sand 86 light brownish gray fine sand 86 light brownish gray fine sand 87 light brownish gray fine sand 87 light brownish gray fine sand 88 light brownish gray fine sand 88 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 89 light brownish gray fine sand 80 light brownish gray fine sand 80 light brownish gray fine s	
10 YR 6/1; 10 YR 5/2; 10 YR	3
10 YR 6/1 10 YR 5/3: 10 YR 12 5/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/2 10 10 YR 6/10 YR 7, U) 10 10 YR 6/10 YR 7, U) 10 10 YR 6/10 YR 7, U) 10 10 YR 6/10 YR 7, U) 10 10 YR 6/10 YR 7, U) 10 10 YR 6/10 YR 7, U) 10 10 YR 6/10 YR 7, U) 10 10 YR 6/10 YR 7, U) 10 10 YR 6/10 YR 7,	
10 YR 5/3; 10 YR 5/2  10 YR 6/2  brown and grayish brown fine sand light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  brown and grayish brown fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray fine sand  light brownish gray factor  light brownish gray fine sand  light brownish gray fact	
S/2	
Book   10 YR 6/2	and
pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    Coation: PL=Pore Lining, M=Matrix.	
Indicators: Histol (A1) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F3) Depleted Derok Cape (A9) Lor Muck (A9) (LRR P, T, U) Mark (F10) (LRR P, T) Depleted Below Dark Surface (A11) Thin Dark Surface (A12) Loamy Gleyed Matrix (F3) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Orchric (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR P, T, U) Depleted Orchric (F13) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F13) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Orchric (F13) (MLRA 150A) Sandy Redox (S5) Depleted Orchric (F13) (MLRA 150A) Sandy Redox (S5) Depleted Orchric (F13) (MLRA 150A) Sandy Redox (S5) Deric Common Sight Loamy Soils (F20) (MLRA 149A) Strictive Layer (If observed): Type: Depth (inches):  Indicators for Problematic Hydric S 1 cm Muck (A9) (LRR S, T, U) 1 cm Muck (A9) (LRR S, T, U) 2 cm Muck (A9) (LRR O, P, T) Reduced Vertic (F18) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Iron-Manganese Masses (F12) (LRR O, P, T) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Delta Orchric (F17) (MLRA 150A) Stripped Matrix (S4) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Strictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present? Yes No	
Indicators: Histol (A1) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O, 1cm Muck (A9) (LRR P, T, U)  To Muck (A9) (LRR P, T, U)  Polyvalue Below Surface (S8) (LRR S, T, U)  Loamy Mucky Mineral (F1) (LRR O)  Anomalous Bright Loamy Soils (F19)  Mard (F10) (LRR U)  Depleted Dark Surface (A12)  Loamy Mard (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Piedmont Floodplain Soils (F19)  Mard (F10) (LRR U)  Depleted Dark Surface (F7)  Mard (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Mark Surface (S7) (LRR P, S, T, U)  Wertictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No_	
Indicators: Histol (A1) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F3) Depleted Derok Cape (A9) Lor Muck (A9) (LRR P, T, U) Mark (F10) (LRR P, T) Depleted Below Dark Surface (A11) Thin Dark Surface (A12) Loamy Gleyed Matrix (F3) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A12) Depleted Orchric (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR P, T, U) Depleted Orchric (F13) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F13) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Orchric (F13) (MLRA 150A) Sandy Redox (S5) Depleted Orchric (F13) (MLRA 150A) Sandy Redox (S5) Depleted Orchric (F13) (MLRA 150A) Sandy Redox (S5) Deric Common Sight Loamy Soils (F20) (MLRA 149A) Strictive Layer (If observed): Type: Depth (inches):  Indicators for Problematic Hydric S 1 cm Muck (A9) (LRR S, T, U) 1 cm Muck (A9) (LRR S, T, U) 2 cm Muck (A9) (LRR O, P, T) Reduced Vertic (F18) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Iron-Manganese Masses (F12) (LRR O, P, T) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Delta Orchric (F17) (MLRA 150A) Stripped Matrix (S4) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Strictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present? Yes No	
Histol (A1)	
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Harrix (F3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A3) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black Histic (A5) Black	c Soils 3:
Black Histic (A3)	
Hydrogen Sulfide (A4)	
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Form Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR U) Muck Presence (A8) (LRR U)  I cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Determined Muck (P17) (MLRA 150A) Determined Muck (P18) (MLRA 150A) Determined Muck (P18) (MLRA 150B) Sandy Redox (S5) Determined Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Determined Mucky Mineral (S6) Determined Mucky Mineral (S7) (LRR P, S, T, U) Strictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present?  Anomalous Bright Loamy Soils (F2) No	e MLRA 150A, B)
	9) (LRR P, S, T)
	s (F20)
	•
	F12) (LRR T. UI
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  trictive Layer (If observed):  Type:  Depth (inches):  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  JIndicators of hydrophytic vegetation in hydrology must be present, unless districted in hydrology must be present, unless districted in hydrology must be present, unless districted (F17) (MLRA 151)  Pethod Tenant Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No	, (, 0)
Thick Dark Surface (A12)	
Coast Prairie Redox (A16) (MLRA 150A)	
Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disproblematic.  Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17) (MLRA 151) problematic.  Sandy Redox (S5)Reduced Vertic (F18) (MLRA 150A, 150B)	an and wattand
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  trictive Layer (If observed):  Type:  Depth (inches):  Detta Orchric (F17) (MLRA 151)  Pedauced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No	
Sandy Micky Millera (31) LRR 0, 3)	disturbed or
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type: Depth (inches): Hydric Soil Present? Yes No	
Dark Surface (S7) (LRR P, S, T, U)  strictive Layer (If observed):	
Strictive Layer (If observed):   Type:   Depth (inches):	
Type:	
Depth (inches): Hydric Soil Present? Yes 🗸 No	
marks:	·

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/7/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: BW
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 20 27S 19E	
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	Slope (%);
Subregion (LRR or MLRA): LRR U	Lat: 28,119860	) Long: <u>-82.4</u>	34570	Datum: WGS84
Soil Map Unit Name: Myakka fine sand			_NWI classification:	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances	
	or Hydrology		(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes✓No		•	
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	rithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes No	]		
Remarks:		•		
HVDDOLOOV				
HYDROLOGY				
Wetland Hydrology Indicators:				ors (minimum of two required)
Primary Indicators (minimum of one is required; of			Surface Soil	, ,
Surface Water (A1)	Water-Stained Leaves (	B9)		etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	•
Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim Li	, ,
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burn	
Drift Deposits (B3)	Presence of Reduced Ir	, ,		sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic	` '
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	, ,
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)
Field Observations:	V Z	Double (look as) 004		
Surface Water Present?	Yes No	Depth (inches): 0-24	-	
Water Table Present?	Yes No	Depth (inches): 0	Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	
(includes capillary fringe)		1	Present?	Yes No
Describe Recorded Data (stream gauge, monitori	ing well, aenal photos, previous	inspections), if available:		
Remarks:				

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	BW
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		орсоюз:	Otatus	Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
4.	·	· · · · · · · · · · · · · · · · · · ·		Species Across All Strata:	(B)
5.	·	<del></del>		<b>†</b> '	
6.	· ——			Percent of Dominant Species 100.00	(A/B)
7.				That Are OBL, FACW, or FAC:  Prevalance Index worksheet:	
1.				4	
Sapling Stratum (Plot size:	)	= Total Cove	<b>!</b> F	Total % Cover of: Multiply by: OBL species x1=	
1. Salix spp.	5	yes	FACW	FACW species x2=	_
2.				FAC species x3=	
3.				FACU species x4=	-
4.				UPL species x5=	-
5.				Column Totals: (A)	_ (B)
6.				(,	<b>-</b> `-'
7.	· ——			Prevalance Index = B/A =	
<u></u> .	5	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	<del>. '</del>			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.				1 replemente riyerophytic vegetation (Exp	,,
4.	_			Indicators of hydric soil and wetland hydrology n	nuet
5.				be present, unless disturbed or problematic.	iiust
6.				Definitions of Vegetation Strata:	
7.	· ——				
	0	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in.	(7.6
Ludwigia octovalvis	30	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Diodia virginiana	30	yes	FACW	Sapling- Woody plants, excluding woody vines,	
Bacopa caroliniana	20	yes	OBL	approximately 20 ft (6m) or more in height and less	than 3
Aster elliotii	10	no	OBL	in. (7.6 cm) DBH.	
<ol><li>Andropogon virginicus</li></ol>	5	no	FAC	Shrub- Woody plants, excluding woody vines,	
Sagittaria graminea	3	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Rhexia spp.	2	no	FACW	Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes woo	ody
9.				plants, except woody vines, less than approximately	y 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.					
	100	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1.					
2.				1	
3.	-		44.		
4.		<del></del>		Hydrophytic	
5.		<del></del>	<del></del>	Vegetation Present? Yes <u>√</u> No_	
		= Total Cove	er	1	<del></del>
Remarks: (If observed, list morph				<del>1</del>	
Percent cover estimates based or	-		roader cor	mmunity.	

County/soil	: Hillsborough- Myaki	ка						Sampling Point:
rofile Des	scription: (Describe	to the dep	th needed to doc	ument the	indicator or o	onfirm the abs	sence of indicators.)	
Depth	Matrix			Redox F	eatures			
inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks
)-5	10 YR 3/1							very dark gray fine sand
-20	10 YR 6/1							gray fine sand
0-25	N 2/0							black fine sand
5-30	5 YR 3/3							dark reddish brown fine sand
		- —						
vne: C=C	Concentration, D=Dep	oletion PM:		S=Covere	od or Coated S	and Grains	<sup>2</sup> Location: PL=Pore	Lining M=Matrix
	il Indicators:		- reddddd ffidirix, e	70 001010	od or obdice o	and Oramo.		ndicators for Problematic Hydric Soils 3:
Histol (			•	Polyva	alue Below Surf	face (S8) (LRR \$		1 cm Muck (a9) (LRR O)
	Epidon (A2)					9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)	'' -	Reduced Vertic (F18) (outside MLRA 150A, B)
_					Gleved Matrix		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	gen Sulfide (A4)				ted Matrix (F3)	· (1°2)	-	
	ed Layers (A5) ic Bodies (A6) (LRR I	рти			(Park Surface	(F6)	-	Anomalous Bright Loamy Soils (F20)
	. , ,					, ,		(MLRA 153B)
_	Mucky Mineral (A7) (L				ted Dark Surfa	• •	-	Red Parent Material (TF2)
	Presence (A8) (LRR	U)			Depressions	,F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)Other (Explain in Remarks)
_	Muck (A9) (LRR P,T)	(044)			F10) (LRR U) lod Orebric (F1	1) (MLRA 151)		Other (Explain in Remarks)
	ed Below Dark Surface	ce (ATT)			•			
Thick I	Dark Surface (A12)				-	sses (F12) (LRR		Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 150	)A)	Umbri	c Surface (F13	) (LRR P, T, U)	•••	ydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (	LRR O, S)		Delta	Orchric (F17) (	MLRA 151)	р	roblematic.
Sandy	Gleyed Matrix (S4)			Reduc	ed Vertic (F18	) (MLRA 150A,	150B)	
	Redox (S5)			Piedm	ont Floodplain	Soils (F19) (MLI	RA 149A)	
	ed Matrix (S6)				•		(MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P,	S, T, U)	•			, , ,		·
strictive	Layer (If observed	):		•				
-	Туре:							
1	Depth (inches):						Hydric Soil Present	? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/7/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: BX			
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 20 27S 19E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): <u>none</u>	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28,119862</u>	2 Long: <u>-82.4</u>	32003	Datum: WGS84	
Soil Map Unit Name: Zolfo fine sand			_NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	normal? Yes_ ✓ No	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>			ransects, impoi	tant features, etc.	
Hydrophytic Vegetation Present?	Yes No		·		
Hydric Soil Present?	Yes✓ No	Is the Sampled Area v	vithin a Wetland?	YesNo	
Wetland Hydrology Present?	YesNo				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:	·		Secondary Indicato	rs (minimum of two required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil (	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Veg	etated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	erns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Lir	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season V	Vater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burro	ows (C8)	
Drift Deposits (B3)	Presence of Reduced In	ron (C4)	Saturation Vis	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i		Geomorphic I		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aquit	ard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral		
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 0-60			
Water Table Present?	Yes ✓ No				
Saturation Present?	Yes ✓ No		Wetland Hydrology		
(includes capillary fringe)		_	Present?	Yes No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	s inspections), if available:	1	····	
		•			
Remarks:					
Tronding.					
		:			

VEGETATION - Use scientific nar	mes of plants				Sampling Point:	BX
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:	
Tree Stratum (Plot size:)	Cover	Species?	Status	<u></u> <u>.</u>		
1.				Number of Dominant Spe		(A)
2.				That Are OBL, FACW, or	FAG. –	V 7
3.				Total Number of Dominar	n n	(B)
4.				Species Across All Strata	•	` ,
5.				Percent of Dominant Spe		(A/B)
6.				That Are OBL, FACW, or	FAC:	
7.				Prevalance Index works		
O Hara Otalia a (Distaina)	, 0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	_
1.				FACW species	x2=	_
2.				FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	<b>–</b> , <u>,,,</u> ,
5.				Column Totals:	(A)	_(B)
6.				5		
7.		= Total Covo		Prevalance Index = I		
Charle Stratum (Blot size:	0	= Total Cove	r	Hydrophytic Vegetation  ✓ Dominance Test is		
Shrub Stratum (Plot size:	<del>.     '</del>					
1. 2.				Prevalence Index		-!-:-\
3.				Problematic hyurd	phytic Vegetation <sup>1</sup> (Exp	olairi)
4.				10 - Parata and Baydein and a	Constitution of the colonial and a	
5.	. ——			Indicators of hydric soil a		nust
5. 6.	. ———			be present, unless disturt  Definitions of Vegetatio		
7.				Delinitions of Fegetatio	II Stiata.	
1.		= Total Cove	<u> </u>	Tree- Woody plants, exclud	dina waadu uinge	
Herb Stratum (Plot size:)	•	- 10tai 00vc		approximately 20 ft (6m) or		776
Ludwigia octovalvis	1	yes	OBL	cm) or larger in diameter at		(,,,
Cyperus haspan	· <u>'</u>	yes	OBL	Sapling- Woody plants, ex	= ' '	
Centella asiatica	· — <u> </u>	yes	FACW	approximately 20 ft (6m) or		than 3
Phyla nodiflora	<u> </u>	yes	FACW	in. (7.6 cm) DBH.		
Panicum repens	<u> </u>	yes	FACW	Shrub- Woody plants, excl	udina woody vines.	
6. Ludwigia repens	<u> </u>	yes	OBL	approximately 3 to 20 ft (1	•	
7.	•			Herb- All herbaceous (non	· -	
8			· · · · · · · · · · · · · · · · · · ·	herbaceous vines, regardle		
8. 9.				plants, except woody vines		
10.				m) in height.		
11.				Woody vine- All woody vin	es, regardless of height.	
12.				•	, -	
	6	= Total Cover	r	1		
Woody Vine Stratum (Plot size:	)					
1.						
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present?	Yes <u>√</u> No	
		= Total Cove	·	1 -		

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region- Interim Version

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix (Inches) Color (moist) % Color (moist) % Type Loc*  Texture Remarks  2.3 10 YR 3/1  3.15 10 YR 5/2 YR 4/4  3.15 10 YR 5/2 YR 4/4  3.15 10 YR 7/7  4.16 Common medium distinct mottles common fine distinct mottles common fine distinct mottles common fine distinct mottles common fine distinct mottles common fine distinct mottles light gray fine sand grayish brown fine sand  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thydric Soil Indicators:
Color (moist)   %   Color (moist)   %   Type   Loc*   Texture   Remarks
10 YR 3/1
10 YR 5/2
15-51 10 YR 7/2 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6 YR 6/6
15-51   10 YR 7/2   YR 6/6   distinct mottles   light gray fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish brown fine sand   grayish factors of poblematic   hydrologish fine sand   hydrologish fine sand   hydrology must be present, unless disturbed or problematic   hydrology must be present, unless disturbed or problematic   hyd
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thick (A1) (LRR C)  Thin Dark Surface (S9) (LRR S, T, U)  Loamy Mucky Mineral (A2) (LRR P, T, U)  Depleted Matrix (F3)  Loamy Gleyed Matrix (F2)  Loamy Gleyed Matrix (F2)  Pedmont Floodplain Soils (F19) (LRR P, T, U)  Depleted Pedront Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Thick Dark Surface (A12)  Loamy Gleyed Matrix (S6)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:
Hydric Soil Indicators:  Histol (A1)  Polyvalue Below Surface (S8) (LRR S, T, U)  Histic Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Peleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Peleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Loamy Gleyed Matrix (F1) (LRR O)  Marl (F10) (LRR U)  Depleted Dark Surface (F12) (LRR T, U)  Marl (F10) (LRR D)  Marl (F10) (LRR D)  Marl (F10) (LRR D)  John Kurface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, T, U)  Peleton Tiock Dark Surface (S1)  Loamy Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Polyted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Medox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Indicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O, P)  Piedmont Floodplain Soils (F20) (LRR O, P, T)  Indicators for Problematic Hydric Soils 3:  1 cm Muck (a9) (LRR O, P, T)  Piedmont Floodplain Soils (F18) (MLRA 150A)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
Hydric Soil Indicators:  Histol (A1)  Polyvalue Below Surface (S8) (LRR S, T, U)  Histic Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Pepleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Polyted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, S)  Delted Orchric (F13) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR P, S, S)  Delted Orchric (F13) (MLRA 150A)  Delted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S)  Piedmont Floodplain Soils (F19) (LRR O, P, T)  Jene Marl (S1) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR P, S)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:
Hydric Soil Indicators:  Histol (A1)  Polyvalue Below Surface (S8) (LRR S, T, U)  Histic Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Pepleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Polyted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S, S)  Delted Orchric (F13) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR P, S, S)  Delted Orchric (F13) (MLRA 150A)  Delted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR P, S)  Piedmont Floodplain Soils (F19) (LRR O, P, T)  Jene Marl (S1) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR P, S)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:
Depth (inches): Hydric Soil Present? Yes _ ✓ No  Remarks:

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date: 10/7/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: BZ
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 20 27S 19E	
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.119674	Long: <u>-82.4</u>	27810	Datum: WGS84
Soil Map Unit Name: Myakka fine sand			_NWI classification:	Shrub Wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s
	or Hydrology		(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes✓ No			
Hydric Soil Present?	YesNo	Is the Sampled Area w	vithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes No			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:				rs (minimum of two required)
Primary Indicators (minimum of one is required; c			Surface Soil (	• •
Surface Water (A1)	Water-Stained Leaves (I	39)		etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	erns (B10)
Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir	nes (B16)
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season V	Vater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burre	ows (C8)
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic F	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	·
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?		Depth (inches): 0-12	-	
Water Table Present?		Depth (inches): 0	Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	
(includes capillary fringe)			Present?	Yes <u>✓ No</u>
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:		
Remarks:		· · · · · · · · · · · · · · · · · · ·		-
•				

	Sampling F	oint:	BZ
Indicator	Dominance Test Worksheet:		
Status			
	Number of Dominant Species	5	<b>/</b> //
	That Are OBL, FACW, or FAC:	<u>5</u>	(A)
,	Total Number of Dominant	7	
	Species Across All Strata:	<u>7</u>	(B)
	Percent of Dominant Species		
	That Are OBL, FACW, or FAC:	<u>71.43</u>	(A/B)
. —	Prevalance Index worksheet:		
er		ultiply by:	
<b>.</b>	OBL species x1=	**************************************	
FACW	FACW species x2=	*	_
OBL	FAC species x3=		_
OBL	FACU species x4=		_
	UPL species x5=	<u> </u>	_
. —	Column Totals: (A)		— (B)
	(/ \/		<b>—</b> (D)
	Prevalance Index = B/A =		
er	Hydrophytic Vegetation Indicators:		
Ci	✓ Dominance Test is 50%		
EA (C) A (			
FACW_	Prevalence Index is ≤3.0 <sup>1</sup>		-1-:-1
	Problematic Hydrophytic Veget	ation (Ex	piain)
	4.		
	Indicators of hydric soil and wetland h		nust
	be present, unless disturbed or proble	matic.	
	Definitions of Vegetation Strata:		
er	Tree- Woody plants, excluding woody vii	nes,	
	approximately 20 ft (6m) or more in heigh	ht and 3 in.	. (7.6
OBL	cm) or larger in diameter at breast heigh	t (DBH).	
FACU	Sapling- Woody plants, excluding wood	y vines,	
FACU	approximately 20 ft (6m) or more in heigh		than 3
FACW	in. (7.6 cm) DBH.		
	Shrub- Woody plants, excluding woody	vines,	
• —	approximately 3 to 20 ft (1 to 6 m) in heigh		
	Herb- All herbaceous (non-woody)plants	e includina	ì
	herbaceous vines, regardless of size. In		
	plants, except woody vines, less than ap		
	m) in height.	p. commune.	, (.
- —	Woody vine- All woody vines, regardles	e of hojaht	
	Twoody ville- All woody villes, regardles	s or neight.	•
	4		
er			
	_		
	1		
	Hydrophytic		
	Vegetation Present? Yes	No	
er	1		
	ver broader co	Vegetation Present? Yes <u>√</u>	Vegetation Present? YesNo ver

Depth   Matrix   Redox Features	Profile De	scription: (Describe	to the dep	th needed to doc	ument th	ne indicator or	confirm the at	sence of indicators.	)
10 YR 3/1	Depth	Matrix			Redox	Features			
1	(inches)	Color (moist)	- %	Color (moist)	- %	Type	Loc²	Texture	Remarks
Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete   Discrete	0-5	10 YR 3/1							very dark gray fine sand
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.	5-20	10 YR 6/1		<del></del>			• ——		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Thistol (A1)  Flistol (A1)  Flistol (A2)  Flistol (A2)  Flistol (A2)  Flistol (A3)  Flistol (A3)  Flistol (A3)  Flistol (A3)  Flistol (A3)  Flistol (A3)  Flistol (A3)  Flistol (A3)  Flistol (A3)  Flistol (A4)  Flistol (A3)  Flistol (A4)  Flistol (A3)  Flistol (A4)  Flistol (A3)  Flistol (A4)  Flistol (A3)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flistol (A2)  Flistol (A4)  Flistol (A2)  Flistol (A2)  Flistol (A3)  Flight (A4)  Flistol (A3)  Flight (A4)  Flistol (A4)  Flistol (A4)  Flistol (A3)  Flight (A4)  Flistol (A4)  Flistol (A4)  Flistol (A3)  Flight (A4)  Flistol (A4)  Flistol (A4)  Flistol (A4)  Flight (A4)  Flistol (A4)  Flistol (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4)  Flight (A4	20-25	N 2/0							black fine sand
Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Corpanic Bodies (A6)  Corpanic Bodies (A6)  Mucky Mineral (A7) (LRR P, T, U)  Depleted Delwo Dark Surface (A11)  Tom Muck (A9) (LRR O)  Loamy Mucky Mineral (A7) (LRR P, T, U)  Depleted Delwo Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S6)  Dark Surface (A12)  Delta Orchric (F13) (MLRA 150B)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S9) (LRR S, T, U)  1 cm Muck (A9) (LRR P, T)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Dark Surface (F1)  Loamy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S6)  Dark Surface (F10)  Dark Surface (F10) (MLRA 150A)  Dark Surface (F10) (MLRA 150A)  Mumbric Surface (F10) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Sandy Redox (S5)  Pledmont Floodplain Soils (F19) (MLRA 150A)  Dark Surface (A12)  Marl (F10) (LRR U)  Depleted Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (MLRA 150A, 150B)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (MLRA 150A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)	25-30	5 YR 3/3			_				dark reddish brown fine sand
Hydric Soil Indicators:  Histol (A1)  Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Corpanic Bodies (A6)  Corpanic Bodies (A6)  Mucky Mineral (A7) (LRR P, T, U)  Depleted Delwo Dark Surface (A11)  Tom Muck (A9) (LRR O)  Loamy Mucky Mineral (A7) (LRR P, T, U)  Depleted Delwo Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S6)  Dark Surface (A12)  Delta Orchric (F13) (MLRA 150B)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S9) (LRR S, T, U)  1 cm Muck (A9) (LRR P, T)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Dark Surface (F1)  Loamy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S6)  Dark Surface (F10)  Dark Surface (F10) (MLRA 150A)  Dark Surface (F10) (MLRA 150A)  Mumbric Surface (F10) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Sandy Redox (S5)  Pledmont Floodplain Soils (F19) (MLRA 150A)  Dark Surface (A12)  Marl (F10) (LRR U)  Depleted Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (MLRA 150A, 150B)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (MLRA 150A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)					_		· ——		
Hydric Soil Indicators:	Type: C=	Concentration D=Den	etion RM	Reduced Matrix (	CS=Cove	red or Coated	Sand Grains	21 ocation: PL=Por	e Lining M=Matrix
Histol (A1)				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F3) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Depleted Dark Surface (F7) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bardy Gleyed Matrix (S4) Sandy Redox (S5) Beloted Dark Surface (F7) Depleted Dark Surface (F13) (LRR O, P, T) Depleted Dark Surface (F11) (MLRA 151) Thick Dark Surface (A16) Depleted Dark Surface (F13) (LRR O, P, T) Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Thick Dark Surface (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches):  Hydric Soil Present? Yes No					Polv	value Below Su	ırface (S8) (LRF		
Black Histic (A3)									
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P,T)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P,T)  Depleted Dark Surface (F8)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7)  Sandy Redox (S7)  Delted Dark Surface (F11) (MLRA 150A)  Umbric Surface (F12) (LRR O, P,T)  Sandy Redox (S7)  Redox Depressions (F8)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type: Depth (inches):  Hydric Soil Present?  Yes  No  Anomalous Bright Loamy Soils (F20)  Anomalous Bright Loamy Soils (F20)  (MLRA 150A)  Anomalous Bright Loamy Soils (F20)  Piedmont Floodplain Soils (F20)  Hydric Soil Present?  Yes  No									
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Feedox Dark Surface (F6) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U)  Redox Depressions (F8) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)  Other (Explain in Remarks)  John Marl (F10) (LRR D, P,T) John Manganese Masses (F12) (LRR O, P,T) John Manganese Masses (F12) (LRR O, P,T)  Depleted Orchric (F13) (LRR P, T, U) John Marl (F10) (LRR D, P,T) John Marl (F10) (LRR D, P,T) John Marl (F10) (LRR D, P,T) John Marl (F10) (LRR D, P,T) John Marl (F10) (MLRA 150A, 150B) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present?  Yes No								•	
Organic Bodies (A6) (LRR P, T, U)  Sem Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  It cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, T, U)  Redox Dark Surface (F6)  Mart (F10) (LRR U)  Depleted Dark Surface (F7)  Redox Dark Surface (F7)  Mart (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Junctic Surface (F13) (LRR P, T, U)  Depleted Orchric (F17) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Sendy Mucky Mineral (S1) (LRR O, S)  Sendy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No   (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Very Shallow Dark Surface (TF12) (LRR T, U)  Junctic Striped (TF12) (LRR T, U)  No  Other (Explain in Remarks)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Problematic.  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No									
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (MLRA 150A, 150B)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Lron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (MLRA 151)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-									(MLRA 153B)
1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR P, T, U)  Jeron-Manganese Masses (F12) (LRR P, T, U)  Jeron-Manganese Masses (F12) (LRR P, T, U)  Jeron-Manganese Masses (F12) (LRR P, T, U)  Jeron-Manganese Masses (F12) (LRR P, T, U)  Jeron-Manganese Masses (F12) (LRR P, T, U)  Notrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No  No	5 cm l	Mucky Mineral (A7) (L	RR P,T,U)		Depl	eted Dark Surf	ace (F7)		Red Parent Material (TF2)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Depth (inches):  Depth dinches):  Depth dinchesi:  Depth dinchesi:  Depth dinchesi:  Iron-Manganese Masses (F12) (LRR O, P, T)  JINDICA (F11) (MLRA 151)  SINDICA (F12) (MLRA 151)  Problematic.  Problematic.  SINDICA (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes  No	<u>✓</u> Muck	Presence (A8) (LRR	U)				. ,		
Thick Dark Surface (A12)  Liron-Manganese Masses (F12) (LRR O, P,T)  Joindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No  Liron-Manganese Masses (F12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)  Joint Algorithms (P12) (LRR O, P, T)	1 cm l	Muck (A9) (LRR P,T)							Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)  Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No			e (A11)			-		•	
Sandy Mucky Mineral (S1) (LRR O, S)		, ,				-			<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes  No		, , ,		A)				•	
Sandy Redox (S5)			LRR O, S)		_		,		problematic.
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):									
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):		, ,			_	•	. ,,	•	
Restrictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No			II		Anor	naious Bright L	oamy Soils (F2U	)) (MLRA 149A, 153C	s, 153D)
Type:			· · ·					т	
		Type:							
		Depth (inches):						Hydric Soil Presen	it? Yes ✓ No .
	Remarks:								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Date:	10/7/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	CA
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range			
Landform (hillslope, terrace, etc.): N/A	<b>1</b>	Local relief (concave, conv	vex, none): none	Slope	e (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.118638	Long: <u>-82.4</u>	20697	Datum	n: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification	: Freshwater Emerger	nt Wetland
Are climatic / hydrologic conditions on the site typ	sical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Rei	marks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		No ✓
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in Rem	ıarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	ortant features, e	etc.
Hydrophytic Vegetation Present?	Yes ✓ No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes/No	
Wetland Hydrology Present?	Yes ✓ No	]			
Remarks:		•			
			•		
IIVDDOLOOV					
HYDROLOGY					
Wetland Hydrology Indicators:				ors (minimum of two i	required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil	• •	
Surface Water (A1)	Water-Stained Leaves (I	B9)		getated Concave Surf	face (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	(R U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)	
Drift Deposits (B3)	Presence of Reduced Ire	on (C4)	Saturation V	isible on Aerial Image	ery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	itard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		_		
Water Table Present?	Yes No	Depth (inches):	-		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓ No</u> _	
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous	inspections), if available:		. ,	
Remarks:					-
					•

VEGETATION - Use scientific nan	100 or planto				Sampling Point:	
	Absolute %	Dominant	Indicator	Dominance Test Worksh		CA
Tree Stratum (Plot size:)	Cover	Species?	Status	Dominance rest from	500.	
	0010.	ороско.	Otatao	Number of Dominant Spec	ies	
1. 2. 3.			. ———	That Are OBL, FACW, or F		(A)
3				Total Number of Dominant		
4.			·	Species Across All Strata:	14	(B)
5.			• ———	Percent of Dominant Spec	ies	
6.				That Are OBL, FACW, or F		(A/B)
7.				Prevalance Index worksh		
		= Total Cov	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	_)			OBL species	x1=	
Liquidambar styraciflua	5	yes	FAC	FACW species	x2=	_
Quercus laurifolia	5	yes	FACW	FAC species	x3=	_
3. Taxodium distichum	5	yes	OBL	FACU species	x4=	
				UPL species	x5=	_
<ul><li>4.</li><li>5.</li><li>6.</li></ul>				Column Totals:	(A)	— (В)
6.				1		_ ` '
7.				Prevalance Index = B	/A =	
	15	= Total Cov	er	Hydrophytic Vegetation I		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is	50%	
Baccharis glomeruliflora	15	yes	FACW	Prevalence Index is	s ≤3.0 <sup>1</sup>	
2. Sambucus canadensis	5	yes	FACW	Problematic Hydrop	hytic Vegetation <sup>1</sup> (Exp	plain)
Myrica cerifera	5	yes	FAC			
4. 5.				<sup>1</sup> Indicators of hydric soil an	id wetland hydrology n	nust
5.			· —	be present, unless disturbe		
6.				Definitions of Vegetation	Strata:	
7.						
	25	= Total Cov	er	Tree- Woody plants, excludi	•	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or r		. (7.6
Thelypteris spp.	10	yes	FACW	cm) or larger in diameter at t	oreast height (DBH).	
Andropogon glomeratus	10	yes	FACW	Sapling- Woody plants, exc		
Juncus effusus	10	yes	FACW	approximately 20 ft (6m) or r	nore in height and less	than 3
Eupatorium capillifolium	10	yes	FACU	in. (7.6 cm) DBH.		
5. Thalia geniculata	10	yes	OBL	Shrub- Woody plants, exclu		
6. Eclipta prostrata	10	yes	FACW	approximately 3 to 20 ft (1 to		
7. Sesbania spp.	10	yes	FAC	Herb- All herbaceous (non-v		
8. Phyla nodiflora	5	no	FACW	herbaceous vines, regardles		•
9. Commelina diffusa	5	no	FACW	plants, except woody vines, in height.	less than approximately	y 3 π (1
10. Diodia virginiana	5	no	FACW	1 ′		
11.				Woody vine- All woody vine	s, regardless of neight.	
12.		T-4-1 C-11	-			
AAA JUNES CASSAUS (District	, 85	= Total Cov	er			
Woody Vine Stratum (Plot size:	)		E4011			
1. Rubus spp.	10	yes	FACU			
2. 3.						
3.				ļ., , , , ,		
4.				Hydrophytic		
5.				Vegetation Present?	Yes ✓ No	

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region-Interim Version

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

ofile De	scription: (Describe t	o the dep	th needed to doc	ument ti	he indicator or c	onfirm the abs	sence of indicators.)		
pth	Matrix				Features		,		
ches)	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture		Remarks
•	10 YR 2/1							black fine sand	
8	10 YR 6/1		<del></del>				<del></del>	gray fine sand	
	10 YR 5/3; 10 YR							g.dy into odila	
12	5/2							brown and grav	ish brown fine sand
30	10 YR 6/2		<del> </del>		-			light brownish g	
	10 11 0/2				<del></del>	<del></del>	<del></del>	nght brownish g	ray tille sailu
		_							
e: C=0	Concentration, D=Deple	tion RM=	Reduced Matrix (	S=Cove	ered or Coated Sa	and Grains	<sup>2</sup> Location: PL=Pore	Liping M=Matrix	
	il Indicators:	, (101), 1 (14)	reduced Matrix, e	0-0010	rea or Goalea G	and Ordino,			blematic Hydric Soils 3:
Histor				Poly	value Below Surf	ace (S8) (LRR		1 cm Muck (at	•
	Epidon (A2)				Dark Surface (S		· · · · •	2 cm Muck (A	
	Histic (A3)								
	` '				my Mucky Minera	. , , ,	-		ic (F18) (outside MLRA 150A, B
	gen Sulfide (A4)				my Gleyed Matrix	(FZ)	-		odplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)	T 110			leted Matrix (F3)	(FC)	-		ight Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	i, U)			ox Dark Surface			(MLRA 153E	
5 cm l	Mucky Mineral (A7) (LF	R P,T,U)		Dep	leted Dark Surfac	ce (F7)	_	Red Parent M	aterial (TF2)
	Presence (A8) (LRR U			Red	ox Depressions (	F8)		Very Shallow	Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	,			(F10) (LRR U)	,	-	Other (Explain	
Conto	ed Below Dark Surface	. / ^ 1 1 \		Den	leted Orchric (F1	1) (MI PA 151)			
		(A11)	•						
Inick	Dark Surface (A12)				-Manganese Mas			Indicators of hydro	ophytic vegetation and wetland
Coast	Prairie Redox (A16) (N	1LRA 150	A) .	Umb	oric Surface (F13	) (LRR P, T, U)	ŀ	nydrology must be	present, unless disturbed or
	Mucky Mineral (S1) (L	RR O, S)		_	a Orchric (F17) (	•		problematic.	•
Sandy	Gleyed Matrix (S4)			Red	uced Vertic (F18	(MLRA 150A,	150B)		
	Redox (S5)		•		lmont Floodplain				
	ed Matrix (S6)				•		(MLRA 149A, 153C,	153D)	
	Surface (S7) (LRR P, S	, T, U)							· · · · · · · · · · · · · · · · · · ·
	E Layer (If observed):								
	Туре:								
	Depth (inches):						Hydric Soil Present	t? Yes	No
					,				.,

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	Sampling Date: 10/7/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: CB
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	20 27S 19E	
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.118297	Long: <u>-82.4</u>	18098	Datum: WGS84
Soil Map Unit Name: Myakka fine sand			_NWI classification:	NL
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit			ansects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	YesNo			
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	YesNo
Wetland Hydrology Present?	Yes No			
Remarks: Black mucky soil				
HYDROLOGY				1
Wetland Hydrology Indicators:				ors (minimum of two required)
Primary Indicators (minimum of one is required; of			Surface Soil (	` '
Surface Water (A1)	Water-Stained Leaves (E	39)		etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	· · ·
Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim Lir	` '
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	<del></del> ,	Nater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres of		Crayfish Burre	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No			
Water Table Present?	Yes No		Wetland	
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	
(includes capillary fringe)			Present?	Yes No
Describe Recorded Data (stream gauge, monitor	ng well, aerial photos, previous	inspections), if available:		
Remarks:			-	
·				

VEGETATION - Use scientific nar	mes of plants			Sam	npling Point:	СВ
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.		5,555,557		Number of Dominant Species	_ •	
2.				That Are OBL, FACW, or FAC:	<u>7</u>	(A)
3.				Total Number of Dominant		
4.				Species Across All Strata:	<u>7</u>	(B)
5.				Percent of Dominant Species		
6.	· <del></del>			That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.			-	Prevalance Index worksheet:		-
	0	= Total Cove	<u> </u>	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	- Total Cove	•	OBL species	x1=	
1.	/			FACW species	x2=	_
2.				FAC species	x3=	_
3.			-	FACU species	x3	_
4.				UPL species	 x5=	_
5.				Column Totals:	(A)	- <sub>(B)</sub>
6.				Column Totals.	- <sup>(A)</sup>	— <sup>(B)</sup>
7.				Prevalance Index = B/A =		
<i>t</i> .		= Total Cove	<u></u>	Hydrophytic Vegetation Indicate	atore:	
Shrub Stratum (Plot size:	,	- Total Cove	1	✓ Dominance Test is 50%		
				Prevalence Index is ≤3.0		
1.				<u> </u>		-1-:-\
<u>2.</u> 3.				Problematic Hydrophytic	vegetation (Exp	Jiain)
4.				11		
5.				Indicators of hydric soil and we		nust
6.			<del></del>	be present, unless disturbed or Definitions of Vegetation Stra		
7.		***************************************		Definitions of Vegetation Stra	ıla:	
1.		- Total Cause		<u> </u>		
Horb Stratum (Plot cizo: \	0	= Total Cove	:r	Tree- Woody plants, excluding we		(7.C
Herb Stratum (Plot size:)	2		EAC	approximately 20 ft (6m) or more cm) or larger in diameter at breas		(7.6
Sesbania spp.		yes	FAC	1		
Commelina diffusa	2	yes	FACW	Sapling- Woody plants, excluding		4h 2
Cyperus haspan	2	yes	OBL	approximately 20 ft (6m) or more in. (7.6 cm) DBH.	in neight and less	tnan 3
Andropogon glomeratus	2	yes	FACW	4		
Tripsacum dactyloides     First side tile and	2	yes	FAC	Shrub- Woody plants, excluding approximately 3 to 20 ft (1 to 6 m)		
<ol> <li>Fimbristylis spp.</li> <li>Asclepias sp.</li> </ol>	2	yes	FACW		-	
·	2	yes	FACW	Herb- All herbaceous (non-woody	,,,	
8. 9.				herbaceous vines, regardless of s		-
				plants, except woody vines, less to m) in height.	.nan approximately	y 5 IL (1
10.				<b>」</b>		
11.				Woody vine- All woody vines, reg	jardiess of neight.	
12.				4		
	. 14	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.		<del> </del>		4		
2.						
3.	·			4		
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	
	0	= Total Cove	r			
Remarks: (If observed, list morph						
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.		

Profile De	scription: (Describe	to the de	oth needed to doc	ument th	e indicator or	confirm the ab	sence of indicators	5.)
Depth	Matrix			Redox	Features			
inches)	Color (moist)	%	Color (moist)	%	Type	Loc2	Texture	Remarks
<b>-</b> 5	10 YR 3/1							very dark gray fine sand
-20	10 YR 6/1							gray fine sand
0-25	N 2/0							black fine sand
25-30	5 YR 3/3	=		_				dark reddish brown fine sand
				_				
Type: C=	Concentration, D=Dep	letion, RM	=Reduced Matrix. (	CS=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL≂Po	ore Lining, M=Matrix.
lydric Sc	il Indicators:	,						Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Poly	value Below Su	rface (S8) (LRR	(S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (	S9) (LRR S, T,	U)	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loan	ny Mucky Mine	al (F1) (LRR O)	)	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR I	P, T, U)			ox Dark Surface	, ,		(MLRA 153B)
5 cm	Mucky Mineral (A7) (L	RR P,T,U)	)	Depl	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
✓ Muck	Presence (A8) (LRR	U)		Redo	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
Deple	ted Below Dark Surface	ce (A11)		Depl	eted Orchric (F	11) (MLRA 151	)	
Thick	Dark Surface (A12)			Iron-	Manganese Ma	sses (F12) (LR	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coas	Prairie Redox (A16) (	MLRA 150	DA)	Umb	ric Surface (F1	3) (LRR P, T, U	)	hydrology must be present, unless disturbed or
Sand	Mucky Mineral (S1) (	LRR O, S	)	Delta	a Orchric (F17)	(MLRA 151)		problematic.
Sand	Gleyed Matrix (S4)			Redu	uced Vertic (F1	B) (MLRA 150A	, 150B)	•
Sand	Redox (S5)			Pied:	mont Floodplair	n Soils (F19) (M	LRA 149A)	
Stripp	ed Matrix (\$6)			Anor	malous Bright L	oamy Soils (F20	)) (MLRA 149A, 153	C, 153D)
	Surface (S7) (LRR P,						<del></del>	
Restrictiv	e Layer (If observed) Type:	):						
	Depth (inches):						Hydric Soil Prese	ent? Yes <u>✓ No</u> .
Remarks:								

Applicant/Owner   Progress Energy Florida   Inc.   State   FL   Sampling Point   CCa	Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Date	e: 10/8/09
Landform (hilislope, terrace, etc.): NIA Local relief (concave, convex, none): none Slope (%): Subregion (LRR or MIRA) LRB Lat: 28.117936 Long: 82.415417 Datum: WGS84 Soil Mare: Myakka fine sand New Image of the sand Soil Map Unit Name: Myakka fine sand Or Hydrology Significantly disturbed? NWI classification: NI NWI classification: NI (If no, explain in Remarks) Are climatic hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks) Are Vegetation Soil Or Hydrology Significantly disturbed? Are circumstances normal? Yes No (If no, explain in Remarks) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No Significantly disturbed? No Surface Soil Cracks (Bi) Sufface Water (A1) Surface Soil Present? Yes No Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) Sparsety Vegetated Concave Surface (B8) Surface Water (A1) Water-Stained Leaves (B9) Sparsety Vegetated Concave Surface (B8) Surface Water (B1) Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2) Sediment Deposits (B3) Presence of Reduced Iron (C4) Saturation (C3) Aqual Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) FAC Neutral Test (D5) FAC Neutral Test (D5) FAC Neutral Test (D5) FAC Neutral Test (D5) Field Observations:  Water Table Present? Yes No Depth (inches): Ohlpricipy	Applicant/Owner: Progress Energy Florida, Inc.		State:Ft		Sampling Poin	t: <u>CCa</u>
Subregion (LRR or MLRA): LRR U Lat: 28.117936 Long: 82.415417 Datum: WGS84  Soil Map Unit Name: Myakka fine sand Are climatic / hydrologic conditions on the site hybical for this time of year?  Yes	Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: 20 27S 19E		
Soil Map Unit Name: Myakka fine sand Are clare direction in the site typical for this time of year?  Are long that of hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  Are Vegetation Present?  Are Vegetation Present?  Yes No Hydrology Indicators:  Remarks:    Secondary Indicators (minimum of two required) Primary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B3) Presence of Reduced Iron (C4) Sediment (Deposits (B3) Presence of Reduced Iron (C4) Sediment (Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Field Observations:  Surface Water (Pseent? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Water Table Present? Yes No Depth (inches):  Wetland Hydrology (Minches):  Wetland Hydrology (Minches):  Wetland Hydrology (Minches):  Wetland Hydrology (Minches):  Wetland Hydrology (Minches):  Wetland Hydrology (Minches):  Wetland Hydrology (Minches):  Wetland Hydrology (Minches):  Wetland Hydrology (Minches):  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?  Wetland Hydrology (Methods) Present?	Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	vex, none): none		Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes No Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary No Summary	Subregion (LRR or MLRA): LRR U	Lat: 28.117936	Long:82,	415417	[	Datum: WGS84
Are VegetationSoil or Hydrologysignificantly disturbed? Are circumstances normal? YesNo	Soil Map Unit Name: Myakka fine sand			_NWI classification	n: <u>NL</u>	
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks)  SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No   Is the Sampled Area within a Wetland? Yes No   No    Wetland Hydrology Present? Yes No   Is the Sampled Area within a Wetland? Yes No   No    Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)  Frimary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface (B8)  High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)  Water Marks (B1) Presents (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfis Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  FAC Neutral Test (D5)  FAC Neutral Test (D5)  Wetland Hydrology  Wetland Hydrology  Wetland Hydrology	Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes	_ No	_ (If no, explain i	n Remarks)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  Hydroc Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Hydroc Remarks:  Secondary Indicators (minimum of two required)  Hydroc Remarks:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oridized Rhizospheres on Living Roots (C3)  Crayfish Burrows (C8)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  For Deposition (D2)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland  Hydrology  Wetland  Hydrology	Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal?	Yes <u>No ✓</u>
Hydric Soil Present? Hydric Soil Present? Hydric Soil Present? Wetand Hydrology Present?  Wetand Hydrology Resent?  Wetand Hydrology Indicators:  Primary Indicators (minimum of two required) Surface Water (A1) Water Table (A2) Hydrology (B1) Water Marks (B1) Drift Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Iron Deposits (B5)  Marks Water Table (A2) Drift Deposits (B5) Thin Muck Surface (C7) Iron Deposits (B5) Drift Deposits (B5) Thin Muck Surface (C7) Iron Deposits (B5)  Water Table Present?  Yes No Depth (inches): Use the Sampled Area within a Wetland? Yes No  Is the Sampled Area within a Wetland? Yes No  Is the Sampled Area within a Wetland? Yes	Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in	Remarks)
HYDROLOGY  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Water Stained Leaves (B9)  Surface Soil Cracks (B6)  Filiph Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B5) (LRR U)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Iron Deposits (B5)  Thin Muck Surface (C7)  Sulface Water Present?  Yes No Depth (inches):  Wetland  Wetland? Yes No No Depth (inches):  Wetland  Wetland? Yes No No No No No No No No No No No No No	SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations,	transects, impo	ortant feature	es, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Sparsely Vegetated Concave Surface (B8)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Water Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Iron Deposits (B5)  Iron Medicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Iron Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland Hydrology	Hydrophytic Vegetation Present?	Yes No	]			
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Vater Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposits (B5)  Iron Deposit	Hydric Soil Present?	YesNo	Is the Sampled Area	within a Wetland?	Yes/	No
HYDROLOGY  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  In Muck Surface (C7)  In undation Visible on Aerial Imagery (B7)  Water Table (B7)  Other (Explain in Remarks)  Secondary Indicators (minimum of two required)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  For Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Depth (inches):  Wetland  Hydrology  Wetland  Hydrology	Wetland Hydrology Present?	Yes No				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)	Remarks:					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)		,				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)		·				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)						
Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)      Water-Stained Leaves (B9)      Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)      Aquatic Fauna (B13)      Drainage Patterns (B10)         ✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)         Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)         Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)         Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes No Depth (inches):	HYDROLOGY					
Surface Water (A1)	Wetland Hydrology Indicators:	•	•	Secondary Indicat	tors (minimum of	two required)
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)	Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)	
✓ Saturation (A3)	Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concave	e Surface (B8)
Water Marks (B1)	High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)	
Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery (C9)  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present?	✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	ines (B16)	
Drift Deposits (B3)	Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C	2)
Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2) Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNo/_Depth (inches): Water Table Present? YesNo/_Depth (inches):  Saturation Present? YesNoDepth (inches): Hetland Hydrology	Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bu	rrows (C8)	
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  / Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNo/_Depth (inches): Water Table Present? YesNo/Depth (inches): Saturation Present? Yes/NoDepth (inches):/Hydrology	Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	Saturation \	/isible on Aerial I	magery (C9)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? YesNo/_Depth (inches): Water Table Present? YesNo/Depth (inches): Saturation Present? Yes/NoDepth (inches): Hetand Hydrology	Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)	
Field Observations:           Surface Water Present?         Yes No Depth (inches):           Water Table Present?         Yes No Depth (inches):           Saturation Present?         Yes No Depth (inches):    Wetland  Hydrology	Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	uitard (D3)	
Surface Water Present?         Yes No Depth (inches):         Water Table Present?         Yes No Depth (inches):         Wetland Hydrology	✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutra	l Test (D5)	
Water Table Present?  Yes No Depth (inches):  Saturation Present?  Yes No Depth (inches):0  Hydrology	Field Observations:					
Saturation Present? Yes No Depth (inches): Uwetland Hydrology	Surface Water Present?			_		
Saturation Present? Yes No Depth (inches): 0 Hydrology	Water Table Present?	Yes No	_ Depth (inches):	_		
	Saturation Present?	Yes No	Depth (inches): 0			
	(includes capillary fringe)				Yes <u>✓</u>	No
			•			
	Remarks:					
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						
Remarks:						

<b>VEGETATION</b> - Use scientific nar	nes of plants			Sampling Point:	Cca
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Taxodium distichum	5	yes	OBL	Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>(D)</b>
4.			-	Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	5	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	. 0.0 0070		OBL species x1=	
Liquidambar styraciflua	10	yes	FAC	FACW species x2=	_
2. Salix caroliniana	10	yes	OBL	FAC species x3=	_
Acer rubrum	5	no	OBL	FACU species x4=	_
Quercus laurifolia	5	no	FACW	UPL species x5=	_
5.				Column Totals: (A)	— <sub>(B)</sub>
6.				(//)	— (D)
7.	<del></del>			Prevalance Index = B/A =	
7.	30	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	- 10101 0010	•1	✓ Dominance Test is 50%	
l	/ 	VOC	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
		yes	FACVV	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	(nioin)
2. 3.				Problematic Hydrophytic Vegetation (E)	.piairi)
4.				11. 12. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14	
				Indicators of hydric soil and wetland hydrology	must
5. 6.				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:	
· · · · · · · · · · · · · · · · · · ·		****		Definitions of Vegetation Strata:	
7.				<u>L</u>	
Harle Christian (Diet sine)	10	= Total Cove	er	Tree- Woody plants, excluding woody vines,	- /7.0
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 ir	1. (7.6
Sesbania spp.	10	yes	FAC	cm) or larger in diameter at breast height (DBH).	
Asclepias sp.	10	yes	FACW	Sapling- Woody plants, excluding woody vines,	
Fimbristylis spp.	10	yes	FACW	approximately 20 ft (6m) or more in height and less	s than 3
Eupatorium capillifolium	10	yes	FACU	in. (7.6 cm) DBH.	
5. Juncus marginatus	10	yes	FACW	Shrub- Woody plants, excluding woody vines,	
6. Rhynchospora inundata	10	yes	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Paspalum monostachyum	10	yes	FACW	Herb- All herbaceous (non-woody)plants, including	
Andropogon glomeratus	10	yes	FACW	herbaceous vines, regardless of size. Includes wo	
9. Hyptis alata	5	no	OBL	plants, except woody vines, less than approximate	ly 3 ft (1
10. Pluchea rosea	5	no	FACW	m) in height.	
11.				Woody vine- All woody vines, regardless of heigh	t.
12.					
	90	= Total Cove	er.		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.	· · · · · ·				
4.				Hydrophytic	
5.				Vegetation Present? YesNo	
		= Total Cove	 er		
Remarks: (If observed, list morpho				1	
Percent cover estimates based or			roader cor	mmunity.	

SOIL Profile De	escription: (Describe	to the de	oth needed to doo	ument t	he indicator or	confirm the abo	sence of indicators				pling Point:	Cc
	escription: (Describe Matrix	to the del	our needed to doc		ne moicator or x Features	Commin nie abs	serice of indicators.)					
Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture			Rema	rks	
0-5	10 YR 3/1							very dark gray	fine sar	nd		
5-20	10 YR 6/1							gray fine sand		-		
20-25	N 2/0							black fine sand				
25-30	5 YR 3/3						-	dark reddish br	own fin	e sand		
Type: C=	Concentration, D=Dep	letion, RM	=Reduced Matrix.	CS=Cove	ered or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix				
	oil Indicators:							Indicators for Pro		tic Hy	dric Soils 3:	
Histol	I (A1)			Poly	value Below Su	rface (S8) (LRR	S, T, U)	1 cm Muck (a	9) (LR	RO)		
Histic	Epidon (A2)			Thir	n Dark Surface (	S9) (LRR S, T, L	J)	2 cm Muck (A	(10) (LI	RRS)		
Black	Histic (A3)			Loa	my Mucky Miner	ral (F1) (LRR O)		Reduced Ver	ic (F18	) (outs	ide MLRA 15	0A, B)
	ogen Sulfide (A4)			Loa	my Gleyed Matr	ix (F2)		Piedmont Flo	odplain	Soils (	F19) (LRR P.	S, T)
Strati	fied Layers (A5)			Dep	leted Matrix (F3	) ` ´	•	Anomalous B				•
Orgai	nic Bodies (A6) (LRR I	P, T, U)		Red	lox Dark Surface	e (F6)	•	(MLRA 153		, .	()	
5 cm	Mucky Mineral (A7) (L	DDDTII	•	Dec	leted Dark Surfa	ace (F7)		Red Parent M		(TF2)		
	Presence (A8) (LRR		,		lox Depressions			Very Shallow			/TE12\ /I <b>DD</b> :	T 11)
	Muck (A9) (LRR P,T)	Ο,			i (F10) (LRR U)			Other (Explain			(11 12) (210)	., 0,
	eted Below Dark Surface	ce (A11)				11) (MLRA 151)						
Thick	Dark Surface (A12)	, ,		Iron	-Manganese Ma	sses (F12) (LRF	R O, P,T)	3				
	• ,	381 DA 151	241		•	3) (LRR P, T, U)		Indicators of hydr				
	t Prairie Redox (A16) (		•	_	ta Orchric (F17)	, , , , ,		hydrology must be problematic.	prese	nt, unie	ss disturbed o	or
	y Mucky Mineral (S1) (	LKK 0, 5	}	_				problemane.				
	y Gleyed Matrix (S4)					8) (MLRA 150A,						
	y Redox (S5)					n Soils (F19) (ML						
	oed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20)	) (MLRA 149A, 153C	, 153D)				
	Surface (S7) (LRR P, re Layer (If observed)						· · · · · · · · · · · · · · · · · · ·					
Restrictiv	Type:	<b>)</b> .										
	Depth (inches):						Hydric Soil Presen	t? Yes	1	No		
Remarks:			<del> </del>				Invalic Soil Flesell	tr 1es	<u> </u>	_ 140	<del></del> -	
remarks.												
		-										

Project/Site: Levy Nuclear Plant - Transmission L	ines		City/County: Hi	llsboroug	h	Sampling Date:	10/8/09
Applicant/Owner: Progress Energy Florida, Inc.			State	:FL_		Sampling Point:_	CD
Investigator(s): Justin Styer, Nate Goddard			Section, Township	, Range:	20 27S 19E		
Landform (hillslope, terrace, etc.): N/A			Local relief (concar	ve, conve	x, none): none	Slo	pe (%):
Subregion (LRR or MLRA): LRR U	La	at: 28.117710	Long	:82.41	3251	Dat	um: WGS84
Soil Map Unit Name: Basinger fine sand					NWI classification:	Freshwater Emero	gent Wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of	f vear?	Yes		No		
Are Vegetation, Soil		•			Are circumstances		No ✓
Are Vegetation, Soil,					(If needed, explain		emarks)
SUMMARY OF FINDINGS - Attach sit					•	-	•
Hydrophytic Vegetation Present?		0	<b>3</b> F		, , , , , ,		,
Hydric Soil Present?		0	is the Sampled	Area wit	hin a Wetland?	Yes✓_No	
Wetland Hydrology Present?	Yes_ ✓ No		-				
Remarks: Deep creek crosses east side of wetland							
HYDROLOGY							
Wetland Hydrology Indicators:				;	Secondary Indicato	rs (minimum of tw	o required)
Primary Indicators (minimum of one is required; c	heck all that apply	<i>(</i> )			Surface Soil (	Cracks (B6)	
✓ Surface Water (A1)		– ined Leaves (B	9)			etated Concave S	urface (B8)
High Water Table (A2)	Aquatic Fa	•	•		Drainage Patt	terns (B10)	. ,
✓ Saturation (A3)		sits (B15) (LRF	R U)		Moss Trim Lir	nes (B16)	
Water Marks (B1)		Sulfide Odor (0			Dry-Season V	Vater Table (C2)	
Sediment Deposits (B2)		·	n Living Roots (C3	)	Crayfish Burro		
Drift Deposits (B3)		of Reduced Iro				sible on Aerial Ima	gery (C9)
Algal Mat or Crust (B4)			Tilled Soils (C6)	•	Geomorphic F		
Iron Deposits (B5)		Surface (C7)	` '		 Shallow Aquit	, ,	
✓ Inundation Visible on Aerial Imagery (B7)		lain in Remark	s)	•	FAC Neutral		
Field Observations:	,		<u> </u>				
Surface Water Present?	YesNo	o	Depth (inches):(	0-96			
Water Table Present?				0			
Saturation Present?	Yes No			n 1	Wetland Hydrology		
  (includes capillary fringe)					Present?	Yes ✓ No	
Describe Recorded Data (stream gauge, monitori Remarks:	ng well, aerial pho	otos, previous i	nspections), if avai	lable:			

VEGETATION - Use scientific nar	mes of plants			San	npling Point:	<u>CD</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status	-		
1.				Number of Dominant Species	11	(4)
2.				That Are OBL, FACW, or FAC:	11	(A)
3.				Total Number of Dominant	40	(D)
4.				Species Across All Strata:	<u>12</u>	(B)
5.	,			Percent of Dominant Species	24.27	
6.	,			That Are OBL, FACW, or FAC	<u>91.67</u>	(A/B)
7.	,			Prevalance Index worksheet:		
		= Total Cove	. ———— er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Salix caroliniana		yes	OBL	FACW species		_
2. Acer rubrum	5	no	OBL	FAC species	x3=	-
Liquidambar styraciflua	5	no	FAC	FACU species	x4=	-
Quercus laurifolia	5	no	FACW	UPL species	x5=	_
5.				Column Totals:	(A)	- (B)
6.					_(',')	<b>-</b> (2)
7.				Prevalance Index = B/A =		
	30	= Total Cove	er	Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.	<del>,-</del> '			Prevalence Index is ≤3.		
2.				Problematic Hydrophytic		olain)
3.				1 Toblematio Hydrophyti	5 Vegetation (Exp	, and
4.				Indicators of hydric soil and w	otland hydrology n	ou ot
5.	,			be present, unless disturbed or		iiusi
6.				Definitions of Vegetation Str		
7.				John Marie of Vogotation out		
· · · · · · · · · · · · · · · · · · ·	0	= Total Cove		Tree- Woody plants, excluding w	uoody vinos	
Herb Stratum (Plot size:)	J	- 10141 0010	<b>.</b> ,	approximately 20 ft (6m) or more		(7.6
Thalia geniculata	10	yes	OBL	cm) or larger in diameter at brea		(
Cyperus haspan	10	yes	OBL	Sapling- Woody plants, excluding		
Panicum hemitomon	10	yes	OBL	approximately 20 ft (6m) or more		than 3
Eupatorium capillifolium	10	yes	FACU	in. (7.6 cm) DBH.	noight and loop	
Asclepias sp.	10	yes	FACW	Shrub- Woody plants, excluding	woody vines	
6. Setaria geniculata	10	yes	FAC	approximately 3 to 20 ft (1 to 6 m		
7. Andropogon glomeratus	10		FACW	<del>-</del>	-	
Sesbania spp.	10	yes	FAC	Herb- All herbaceous (non-wood herbaceous vines, regardless of		ndv.
Polygonum punctatum	10	yes	FACW	plants, except woody vines, less		
10. Ludwigia peruviana			OBL	m) in height.	man approximatory	, 0 (1
11. Andropogon virginicus	10	yes yes	FAC	Woody vine- All woody vines, re	aardless of height	
12.		yes	170	Troody Ville- All Woody Villes, 16	gardiess of fielght.	
12.	110	= Total Cove		4		
Mandy Vina Stratum (Blat size:	110	- Total Cove	ei			
Woody Vine Stratum (Plot size:	)			·		
1.				4		
2.			. —		<u> </u>	
3.				·		
<u>4.</u> 5.			-	Hydrophytic	- / N-	
5.		- Total Cav		Vegetation Present? Yes	sNo	<del></del>
Demander (If the smith list or such	0	= Total Cove	er	<u>l</u>		
Remarks: (If observed, list morph Percent cover estimates based or			oroador co	mmunitu		

SOIL								Sampling Point:C
	escription: (Describe t	to the dep	th needed to doc			confirm the ab	sence of indicators	.)
Depth	Matrix				Features			
(inches)	Color (moist)	<u> </u>	Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							
28-42	5/2							brown and grayish brown fine sand
42-80	10 YR 6/2	_						light brownish gray fine sand
Tvpe: C=	Concentration, D=Depl	etion. RM:	=Reduced Matrix.	CS=Cove	red or Coated	Sand Grains.	<sup>2</sup> Location; PL=Po	re Lining, M=Matrix.
	oil Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	I (A1)			Poly	value Below Sι	ırface (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (	S9) (LRR S, T, U	J)	2 cm Muck (A10) (LRR S)
_	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				ny Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR P				ox Dark Surfac	` '		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)				<del></del>	eted Dark Surf			Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)				Redo	ox Depressions	i (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)				(F10) (LRR U)			Other (Explain in Remarks)
Deple	eted Below Dark Surfac	e (A11)			•	11) (MLRA 151)		
Thick	Dark Surface (A12)				•	asses (F12) (LRF		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
_	t Prairie Redox (A16) (I		•			3) (LRR P, T, U)	1	hydrology must be present, unless disturbed or problematic.
	y Mucky Mineral (S1) (L	LRR O, S)			a Orchric (F17)	•		problematic.
	y Gleyed Matrix (S4)				•	8) (MLRA 150A,		
	y Redox (S5) oed Matrix (S6)					n Soils (F19) (ML	_RA 149A) ) (MLRA 149A, 153(	1630)
	Surface (S7) (LRR P, S	S T III			naious bright L	oarry Sons (1.20	) (MERA 145A, 1550	o, 1330)
	ve Layer (If observed):							
	Туре:		-					
	Depth (inches):			<del> </del>			Hydric Soil Prese	nt? Yes <u>√</u> No
Remarks:								
								•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ghSampling	Date: 10/8/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	Sampling	Point: CE	
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	20 27S 19E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	ex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.11707</u>	71 Long: <u>-82.408099</u> Datum: <u>WGS84</u>			
Soil Map Unit Name: Basinger fine sand			NWI classification: Shrub We	etland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	No (If no, exp	olain in Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances normal?	Yes <u>No ✓</u>	
	or Hydrology		(If needed, explain any answe	ers in Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, important fea	atures, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland? Yes	No	
Wetland Hydrology Present?	YesNo				
Remarks:		<u> </u>		,	
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minim	um of two required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil Cracks (Bi		
✓ Surface Water (A1)	Water-Stained Leaves (	'B9)	Sparsely Vegetated Co		
High Water Table (A2)	Aquatic Fauna (B13)	(50)	Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	DD IN	Moss Trim Lines (B16)	·)	
· '	, , , ,	•		In (CO)	
Water Marks (B1)	Hydrogen Sulfide Odor	` '	Dry-Season Water Tab	ie (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced Ir		Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aquitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral Test (D5)		
Field Observations:					
Surface Water Present?	Yes No				
Water Table Present?	Yes No		) # ( - A		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present? Yes <u>✓</u>	No	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	s inspections), if available:			
Remarks:					
Tremarks.					
1					

<b>VEGETATION</b> - Use scientific nar	nes of plants			Sampling Point:	CE
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>(5)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance index worksheet:	
		= Total Cove		Total % Cover of: Multiply by	r
Sapling Stratum (Plot size:	)	70.0.0070	•	OBL species x1=	<del>-</del>
Salix caroliniana		yes	OBL	FACW species x2=	—
Quercus laurifolia	15	yes	FACW	FAC species x3=	_
Pinus elliottii	5	no	FACW	FACU species x4=	_
4.				UPL species x5=	
5.				Column Totals: (A)	—— <sub>(B)</sub>
6.				(11)	— (D)
7.				Prevalance Index = B/A =	
1.	45	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	1	- 10tai 00vc	,ı	✓ Dominance Test is 50%	
Baccharis glomeruliflora	_ <i>,</i> 20		FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.		yes	FACVV	Problematic Hydrophytic Vegetation <sup>1</sup> (E	- - (nioin)
				Problematic hydrophytic vegetation (E	:xpiairi)
3.				1	
4.				Indicators of hydric soil and wetland hydrology	y must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
	20	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3	in. (7.6
Juncus megacephalus	20	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Rhynchospora inundata	20	yes	OBL	Sapling- Woody plants, excluding woody vines,	
Rhynchospora microcarpa	20	yes	FACW	approximately 20 ft (6m) or more in height and le	ss than 3
4. Thalia geniculata	15	no	OBL	in. (7.6 cm) DBH.	
5. Juncus marginatus	15	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Andropogon virginicus	10	no	FAC	approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, includir	
8.				herbaceous vines, regardless of size. Includes w	
9.				plants, except woody vines, less than approximat	ely 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of heig	ht.
12.					
	100	= Total Cove	er		
Wo <u>ody Vine Stratum (Plot size:</u>	)				
1.					
2.	·				
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	
	0	= Total Cove	er		
Remarks: (If observed, list morpho	ological adapta	tions below).			
Percent cover estimates based on	meandering s	urvey of the b	roader cor	nmunity.	

thes) Color (moist) % Color (moist) % Type* Loc* Texture Remarks  10 YR 2/1 8 10 YR 6/1 10 YR 5/3; 10 YR 22 5/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6/2 80 10 YR 6	ronie De Jepth	scription: (Describe to	, me aeptr	i needed to docu		commin me absen	ce of indicators.)		
10 YR 6/3   10 YR 6/3   10 YR 5/3; 10 YR   2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25	nches)	Matrix Color (moist)	<del>%</del> -	Color (moist)	Redox Features  % Type	Loc²	Texture		Remarks
10 YR 6/3   10 YR 6/3   10 YR 5/3; 10 YR   2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25/2   25	7	10 VP 2/1						black fine sand	
10 YR 5/3; 10 YR 5/2   brown and grayish brown fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   l	28								
S/2   Brown and grayish brown fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight browniah gray fine sand   Ight browniah gray	20			,				gray line sanu	
Eight brownish gray fine sand	42							brown and gray	ish brown fine sand
pe: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.    Coation: PL=Pore Lining, M=Matrix.   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils 3:   Indicators for Problematic Hydric Soils Present?			— -						
Indicators: Histo (A1) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)  To Muck (A9) (LRR P, T, U) Stratified Layers (A5)  Sembla Mucky Mineral (A7) (LRR P, T, U)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  Marl (F10) (LRR U)  To Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Blow Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  Marl (F10) (LRR U)  Depleted Dark Surface (F1)  Marl (F10) (LRR U)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Umbric Surface (F13) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Strictive Layer (If observed):  Type: Depth (inches):  Hydric Soil Present?  Yes No	-00	10 110 0/2						iigiit biowiiisii g	ray fine sand
Indicators: Histo (A1) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)  To Muck (A9) (LRR P, T, U) Stratified Layers (A5)  Sembla Mucky Mineral (A7) (LRR P, T, U)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  Marl (F10) (LRR U)  To Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Blow Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  Marl (F10) (LRR U)  Depleted Dark Surface (F1)  Marl (F10) (LRR U)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Umbric Surface (F13) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Strictive Layer (If observed):  Type: Depth (inches):  Hydric Soil Present?  Yes No			— -				· · · · · ·		
Indicators: Histo (A1) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)  To Muck (A9) (LRR P, T, U) Stratified Layers (A5)  Sembla Mucky Mineral (A7) (LRR P, T, U)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  Marl (F10) (LRR U)  To Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Blow Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  Marl (F10) (LRR U)  Depleted Dark Surface (F1)  Marl (F10) (LRR U)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Umbric Surface (F13) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Strictive Layer (If observed):  Type: Depth (inches):  Hydric Soil Present?  Yes No									
Indicators: Histo (A1) Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)  To Muck (A9) (LRR P, T, U) Stratified Layers (A5)  Sembla Mucky Mineral (A7) (LRR P, T, U)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  Marl (F10) (LRR U)  To Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F6)  Marl (F10) (LRR U)  Depleted Blow Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  Marl (F10) (LRR U)  Depleted Dark Surface (F1)  Marl (F10) (LRR U)  Depleted Dark Surface (A11)  Thick Dark Surface (A12)  Umbric Surface (F13) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Strictive Layer (If observed):  Type: Depth (inches):  Hydric Soil Present?  Yes No	we. C=	Concentration D=Denle	tion RM=R	Reduced Matrix C	S=Covered or Coated	Sand Grains 2	Location: PL =Pore	Lining M=Matrix	
Histol (A1)			uon, 1 um - 1	toddocd matrix, o	o outcied or outled	Odria Ordinio.			
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Piedmont Floodplain Soils (F19) (LRR P, S, T) Organic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6) Cyranic Bodies (A6					Polyvalue Below S	urface (S8) (LRR S. 1			
				_					
Loamy Gleyed Matrix (F2)				_			_		
Stratified Layers (A5) Corganic Bodies (A6) (LRR P, T, U) Sort Mucky Mineral (A7) (LRR P,T,U) Located Peleted Dark Surface (F6)  — Redox Dark Surface (F6) — Red Parent Material (TF2) — Redox Dark Surface (F7) — Red Parent Material (TF2) — Redox Depressions (F8) — Very Shallow Dark Surface (TF12) (LRR T, U) — I cm Muck (A9) (LRR P,T) — Marl (F10) (LRR U) — Depleted Below Dark Surface (A11) — Thick Dark Surface (A12) — Loron-Manganese Masses (F12) (LRR O, P,T) — Sandy Mucky Mineral (S1) (LRR O, S) — Sandy Mucky Mineral (S1) (LRR O, S) — Sandy Gleyed Matrix (S4) — Sandy Redox (S5) — Piedmont Floodplain Soils (F19) (MLRA 149A) — Stripped Matrix (S6) — Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed): — Type: — Depth (inches): — Hydric Soil Present? Yes ✓ No				_			-		
Organic Bodies (A6) (LRR P, T, U)				_			-		
			T, U)	_			-		
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Depleted Selow Dark Surface (A12)  Lron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jeron-Manganese Masses (F12) (LRR O, P,T)  Jelta Orchric (F13) (LRR P, T, U)  Mart (F10) (LRR D, P,T)  Jelta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Seripped Matrix (S6)  Delta Orchric (F17) (MLRA 150A, 150B)  Sandy Redox (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No				_	<del></del>				•
	_			-		, ,	-		' '
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Strictive Layer (If observed):  Type:  Depth (inches):  Depleted Orchric (F11) (MLRA 151)  Lron-Manganese Masses (F12) (LRR O, P,T)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F17) (MLRA 151)  Problematic.  Problematic.  Problematic.  Jella Orchric (F18) (MLRA 150A, 150B)  Sendy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Park Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No  No  Loand Wetland Nydrology must be present, unless disturbed or problematic.  Problematic.  Jella Orchric (F13) (MLRA 150A, 150B)  Mydrology must be present, unless disturbed or problematic.  Problematic.  Jella Orchric (F13) (MLRA 150A, 150B)  Mydrology must be present, unless disturbed or problematic.  Mydrology must be present, unless disturbed or problematic.  Problematic.  Jella Orchric (F13) (LRR P, T, U)  Mydrology must be present, unless disturbed or problematic.  Jella Orchric (F13) (LRR P, T, U)  Mydrology must be present, unless disturbed or problematic.  Jella Orchric (F13) (LRR P, T, U)  Mydrology must be present, unless disturbed or problematic.  Jella Orchric (F13) (LRR P, T, U)  Mydrology must be present, unless disturbed or problematic.  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchric (F13) (LRR P, T, U)  Jella Orchri			)	-	<del></del>		-		
Thick Dark Surface (A12)	_1 cm	Muck (A9) (LRR P,T)		_	Marl (F10) (LRR U	)	-	Other (Explair	in Remarks)
Iron-Manganese Masses (F12) (LRR O, P,T) Coast Prairie Redox (A16) (MLRA 150A) Delta Orchric (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 150A, 150B) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 150A, 150B) Sandy Redox (S5) Delta Orchric (F18) (MLRA 150A, 150B) Sandy Redox (S5) Delta Orchric (F19) (MLRA 150A, 150B) Sandy Redox (S5) Delta Orchric (F19) (MLRA 150A, 150B) Sandy Redox (S5) Delta Orchric (F19) (MLRA 150A, 150B) Reduced Vertic (F18) (MLRA 149A) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Strictive Layer (If observed):	Deple	ted Below Dark Surface	(A11)	_	Depleted Orchric (	F11) (MLRA 151)			
Coast Prairie Redox (A16) (MLRA 150A)			,		Iron-Manganese M	asses (F12) (LRR O.	P.T) 3		
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sendy Redox (S5)  Stripped Matrix (S6)  Delta Orchric (F17) (MLRA 151)  Problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Strictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No					_ •	, ,,	1		
	_Coast	Praine Redox (A16) (N	ILKA 15UA	) –					present, unless disturbed or
	_Sandy	Mucky Mineral (S1) (L	RR O, S)	_	Delta Orchric (F17)	) (MLRA 151)	Р	robiematic.	
Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)  strictive Layer (If observed):	Sandy	Gleyed Matrix (S4)		_	Reduced Vertic (F	18) (MLRA 150A, 150	OB)		
Dark Surface (S7) (LRR P, S, T, U)  Strictive Layer (If observed):	Sandy	Redox (S5)		_	Piedmont Floodpla	in Soils (F19) (MLRA	149A)		
Strictive Layer (If observed):   Type:	Stripp	ed Matrix (S6)		_	Anomalous Bright	Loamy Soils (F20) (M	ILRA 149A, 153C,	153D)	
Strictive Layer (If observed):   Type:	Dark :	Surface (S7) (LRR P. S	, T, U)						
Type:									
Depth (inches): Hydric Soil Present? Yes ✓ No		Type:							
marks:						H <sub>3</sub>	dric Soil Present	? Yes	No
	marks:								
			•						

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Date:	10/8/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	CF
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range			
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	vex, none): none	SI	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.115996	Long: -82.903577 Datum:			atum: WGS84
Soil Map Unit Name: Winder fine sand			_NWI classification:	Freshwater Eme	rgent Wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances		es <u>No </u> ✓
	or Hydrology	naturally problematic?	(If needed, explain	any answers in F	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features	s, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	YesNo	is the Sampled Area w	ithin a Wetland?	Yes✓ No	o
Wetland Hydrology Present?	Yes No	]			
Remarks:	7				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of t	wo required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	Vegetated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (		Dry-Season \	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	•	Crayfish Burr	-	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)Saturation Visible on Aerial Imag			agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in				
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqui		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral Test (D5)		
Field Observations:	· <del>T</del>	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
Surface Water Present?	Yes✓ No	Depth (inches): 0-6			
Water Table Present?		Depth (inches): 0			
Saturation Present?	Yes✓ No	Depth (inches): 0	Wetland		
(includes capillary fringe)		. , , , , ,	Hydrology Present?	Yes ✓ No	n
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	1		<u> </u>
	, , , , , , , , , , , , , ,	<b>,</b>			
Remarks:					

VEGETATION - Use scientific na	mes of plants			S	ampling Point:	CF
	Absolute %	Dominant	Indicator	Dominance Test Workshee	t:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	-			Number of Dominant Species	3 10	ر۸۱
2.				That Are OBL, FACW, or FA	C: <u>10</u>	(A)
3.				Total Number of Dominant	40	(D)
4.				Species Across All Strata:	<u>10</u>	(B)
5.	-			Percent of Dominant Species	400.00	
6.				That Are OBL, FACW, or FA		(A/B)
7.				Prevalance Index workshee		
		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Quercus laurifolia	5	yes	FACW	FACW species	x2=	
2. Salix caroliniana	5	yes	OBL	FAC species	x3=	_
3. Liquidambar styraciflua	5	yes	FAC	FACU species	x4=	_
4. Acer rubrum	5	yes	OBL	UPL species	x5=	_
5.				Column Totals:	(A)	– (B)
6.	·					<b>-</b> `-'
7.				Prevalance Index = B/A	=	
	20	= Total Cove	er	Hydrophytic Vegetation Ind		
Shrub Stratum (Plot size:	)	, , , , , , , , , , , , , , , , , , , ,	•	✓ Dominance Test is 50		
1.				Prevalence Index is ≤		
2.				Problematic Hydrophy		olain)
3.				1 Toblemano Hydrophy	tio vegetation (Exp	,,,,,,
4.				Indicators of hydric soil and	wetland hydrology n	nuet
5.	-			be present, unless disturbed		iusi
6.		***************************************		Definitions of Vegetation S		
7.	-			1		
· · ·		= Total Cove		Tree- Woody plants, excluding	woody vines	
Herb Stratum (Plot size:)	Ū	1014, 0010	, ·	approximately 20 ft (6m) or mo		(7.6
Panicum repens	15	yes	FACW	cm) or larger in diameter at bre		(
Hyptis alata	15	yes	OBL	Sapling- Woody plants, exclud		
Juncus megacephalus	15	yes	OBL	approximately 20 ft (6m) or mo		than 3
Rhynchospora inundata	15	yes	OBL	in. (7.6 cm) DBH.		
Rhynchospora microcarpa	15	yes	FACW	Shrub- Woody plants, excludir	na woody vines	
Andropogon glomeratus	15	yes	FACW	approximately 3 to 20 ft (1 to 6		
7. Xyris elliotti	10	no	OBL	Herb- All herbaceous (non-wo	,	
8.				herbaceous vines, regardless		ndv
9.				plants, except woody vines, les		
10.				m) in height.	.,	,
11.	<del></del>			Woody vine- All woody vines,	regardless of height.	
12.				1		
	100	= Total Cove	er	1		
Woody Vine Stratum (Plot size:	)	70101 0010				
1.	/					
2.				1		
3.				<u> </u>		
	-					
<u>4.</u> 5.				Hydrophytic  Vegetation Present? Y	es ✓ No	
		= Total Cove		Treatment Liesents 1	110	<del>.</del>
Remarks: (If observed, list morph			··	<u> </u>		
Percent cover estimates based of	-		roader co	mmunity.		
		,		······································		

OIL								Sampling Point:		
	scription: (Describe t	o the de	pth needed to doc			or confirm the at	sence of indicators	.)		
epth	Matrix		0.1. ( 6	Redox Features  W Type¹ Loc²			T	Daniel de		
nches)	Color (moist)	%	Color (moist)		Type'	Loc	Texture	Remarks		
-4	10 YR 3/1							very dark gray fine sand		
-10	10 YR 5/2							grayish brown fine sand		
			10 YR 5/1; 10							
			YR 6/4; 10 YR				common, medium			
0-14	10 YR 4/2		6/6				distinct mottles	dark grayish brown sandy loam		
4-30	10 YR 6/1							gray sandy clay loam		
<u> </u>	2		D-du-dM-dd	00.0			21	Notes Manual		
	Concentration, D=Depli il Indicators:	etion, Riv	=Reduced Matrix,	US=Cove	red or Coated	Sand Grains.	"Location: PL=Pol	re Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :		
Histol				Poha	zalue Below S	urface (S8) (LRF	OS T IN	1 cm Muck (a9) (LRR O)		
						(S9) (LRR S, T,		2 cm Muck (A10) (LRR S)		
Histic Epidon (A2)Black Histic (A3)						eral (F1) (LRR O	•	Reduced Vertic (F18) (outside MLRA 150A, B)		
			ny Gleyed Ma		<b>'</b>	Piedmont Floodplain Soils (F19) (LRR P, S, T)				
			Depleted Matrix (F3)			Anomalous Bright Loamy Soils (F20)				
			ox Dark Surfa	ce (F6)		(MLRA 153B)				
5 cm Mucky Mineral (A7) (LRR P,T,U)			Depl	eted Dark Sur	face (F7)		Red Parent Material (TF2)			
		Redo	x Depression	ıs (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)				
1 cm l	1 cm Muck (A9) (LRR P,T)^		Marl	Marl (F10) (LRR U)			Other (Explain in Remarks)			
		- (844)				F11) (MLRA 151	,			
	ted Below Dark Surfac	e (A11)					•			
	Dark Surface (A12)			Umbric Surface (F13) (LRR P, T, U)				<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
Coast	Prairie Redox (A16) (	ILRA 15	0A)				)	hydrology must be present, unless disturbed or		
Sandy	Mucky Mineral (S1) (L	.RR O, S	)	Delta	Orchric (F17	) (MLRA 151)		problematic.		
Sandy	Gleyed Matrix (S4)			Redu	uced Vertic (F	18) (MLRA 150A	, 150B)			
Sandy	Redox (S5)				•	ain Soils (F19) <b>(M</b>	•			
Strippe	ed Matrix (S6)			Anor	nalous Bright	Loamy Soils (F20	)) (MLRA 149A, 1530	C, 153D)		
Dark S	Surface (S7) (LRR P, S	S, T, U)								
estrictive	E Layer (If observed):									
	Type:		<del></del>							
	Depth (inches):						Hydric Soil Preser	nt? Yes <u>✓ No</u> .		
emarks:										

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Date	e: <u>10/8/09</u>
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Poir	nt: CG
Investigator(s): <u>Justin Styer, Nate Goddard</u>		Section, Township, Range	e: 20 27S 19E	<del></del>	
Landform (hillslope, terrace, etc.): N/A	<u>\</u>	Local relief (concave, con	vex, none): none		Stope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.114061</u>	1Long: <u>-82.</u> 4	401268		Datum: WGS84
Soil Map Unit Name: Myakka fine sand			NWI classification	n: <u>NA</u>	
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes	No	_ (If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal?	Yes <u>No ✓</u>
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers ir	ı Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ing point locations, t	transects, impo	ortant featur	es, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	YesNo	Is the Sampled Area v	within a Wetland?	Yes	No
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum o	f two required)
Primary Indicators (minimum of one is required; of	check all that apply)		l Cracks (B6)	THE LOGALITY	
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve		re Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	,50)	Drainage Pa	-	0 00
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR III	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor	•	·	Water Table (C	2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bu	•	2)
Drift Deposits (B3)	Presence of Reduced In				Imagery (C9)
Algał Mat or Crust (B4)	Recent Iron Reduction is				magery (Co,
Iron Deposits (B5)	Thin Muck Surface (C7)	` ,			
✓ Inundation Visible on Aerial Imagery (B7)		,		_Shallow Aquitard (D3)  FAC Neutral Test (D5)	
Field Observations:	Other (Explain in 100		77.07.00	11651 (155)	
Surface Water Present?	Yes No ✓	Depth (inches):			
Water Table Present?	Yes No		-		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)	140	_ Depth (mones)	- Hydrology Present?	Yes ✓	No
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous	s inspections), if available:	riesent.	163	NO
, , ,	, , ,	, , ,			
Damarko:					
Remarks:					

VEGETATION - Use scientific na	mes of plants	•		Sampling Point:	<u>CG</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2. 3.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>/</b> B\
4.	-			Species Across All Strata:	(B)
5.	•			Percent of Dominant Species	(1.00)
6.	•			That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multiply by:	1
Sapling Stratum (Plot size:	)			OBL species x1=	1
Acer rubrum	<sup>_</sup> 5	yes	OBL	FACW species x2=	<del></del>
2. Pinus elliottii	3	yes	FACW	FAC species x3=	
3. 4.	-			FACU species x4=	<del>-</del> 1
14.				UPL species x5=	—
5.				Column Totals: (A)	— <sub>(В)</sub>
6	- —				一'-′
5. 6. 7.				Prevalance Index = B/A =	ļ
	8	= Total Cove	·r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	1
Myrica cerifera	<del></del> / 5	ves	FAC	Prevalence Index is ≤3.0¹	1
2.	- ———		17.0	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	nlain)
3.				1 Tobicinatio Hydrophytio Vogotation (Ex	piairi,
Δ.				Indicators of hydric soil and wetland hydrology i	~uot
4. 5.				Indicators of hydric soil and wetland hydrology rebe present, unless disturbed or problematic.	Tiusi
6.		<del></del>		Definitions of Vegetation Strata:	
7.				Definitions of Vegetation Stram.	
1.	5	= Total Cove		T Meady plants avaluding woody vince	
Herb Stratum (Plot size:)	3	- Total Cove	ST.	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in.	<i>(</i> 7.6
	15	VOC	FACW	cm) or larger in diameter at breast height (DBH).	. (7.0
•	15	yes	FACW		
	15	yes	FACW	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less	than 3
	15	yes	OBL	in. (7.6 cm) DBH.	i liidii o
		yes			
	15	yes	FACW	Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
<ol> <li>Andropogon glomeratus</li> <li>7.</li> </ol>	15	yes	FACVV		
7.				Herb- All herbaceous (non-woody)plants, including	
8. 9.				herbaceous vines, regardless of size. Includes woo	
				plants, except woody vines, less than approximatel m) in height.	уэксі
10.	-				
11.				Woody vine- All woody vines, regardless of height.	•
12.					
	, 90	= Total Cove	:r		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.	<del></del>				
4.				Hydrophytic	
5.				Vegetation Present? YesNo	<del></del>
	0	= Total Cove	r		
Remarks: (If observed, list morph	-	•			
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	1

SOIL	il: Hillsborough- Myakk	la						Sampling Point:
Profile De	escription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the abs	sence of indicators.)	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc²	Texture	Remarks
0-5	10 YR 3/1							very dark gray fine sand
5-20	10 YR 6/1							gray fine sand
20-25	N 2/0			—				black fine sand
25-30	5 YR 3/3	- —						dark reddish brown fine sand
		- —						
	•	- —						
	Concentration, D=Dep	letion, RM	=Reduced Matrix, (	CS=Cover	red or Coated S	3and Grains.	<sup>2</sup> Location: PL=Pore	· · · · · · · · · · · · · · · · · · ·
	oil Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	• ,					rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					S9) (LRR S, T, L		2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)	·			eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
Orga	nic Bodies (A6) (LRR I	P, T, U)		Redo	ox Dark Surface	₃ (F6)		(MLRA 153B)
5 cm	Mucky Mineral (A7) (L	RR P,T,U)	i	Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR				ox Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
		Ο,			(F10) (LRR U)		-	Other (Explain in Remarks)
	Muck (A9) (LRR P,T)							Otter (Explain in Nothanko)
	eted Below Dark Surface	ce (A11)				11) (MLRA 151)		
Thick	Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A)			Iron-I	Manganese Ma	asses (F12) (LRF	RO, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coas				Umb	ric Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
			•		a Orchric (F17)	,, , , ,		problematic.
	Sandy Mucky Mineral (S1) (LRR O, S)				` '	•		problema
	y Gleyed Matrix (S4)				•	8) (MLRA 150A,	•	
	y Redox (S5)					n Soils (F19) (ML		4500)
	oed Matrix (S6)				nalous bright L	oamy Soils (F20)	) (MLRA 149A, 153C	, 153D)
	Surface (S7) (LRR P,							
Restrictiv	ve Layer (If observed)	):						
l	Type:						1	
<u> </u>	Depth (inches):						Hydric Soil Presen	nt? Yes <u>√ No</u> .
Remarks:								
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	Sampling Date: 10/8/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poi	nt: CH
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 27 27S 19E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U		Long: <u>-82.3</u>	99931		Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification:	Freshwater	Emergent Wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil	or Hydrology		Are circumstances		Yes <u>No ✓</u>
	or Hydrology		(If needed, explain	any answers i	n Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featu	res, etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Yes No	is the Sampled Area w	ithin a Wetland?	Yes	No
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum o	of two required)
Primary Indicators (minimum of one is required; c	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	etated Concav	e Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season V	Nater Table (C	:2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	ows (C8)	
Drift Deposits (B3)	Presence of Reduced In	ron (C4)Saturation Visible on Aerial Imager			Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	in Tilled Soils (C6)Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		tard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No	Depth (inches):			
Saturation Present?	Yes No	Depth (inches):0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u></u> ✓	No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			<u> </u>
Remarks:					
·					

VEGETATION - Use scientific nam					Sampling Point:	СН
T 0: (D) (: )	Absolute %	Dominant	Indicator	Dominance Test Worksho	eet:	
Tree Stratum (Plot size:)	Cover	Species?	Status	Number of Deminent Case		
1.				Number of Dominant Speci That Are OBL, FACW, or F		(A)
2.					AC.	
3.	<u> </u>			Total Number of Dominant	<u>8</u>	(B)
4.				Species Across All Strata:		
5.				Percent of Dominant Speci		(A/B)
6.				That Are OBL, FACW, or F		
7.		<del></del>		Prevalance Index worksh		
Sapling Stratum (Plot size:	)	= Total Cove	er	Total % Cover of: OBL species	Multiply by: x1=	
Quercus laurifolia	10	yes	FACW	FACW species	x2=	_
Acer rubrum	5	yes	OBL	FAC species	x3=	
3.				FACU species	x4=	
4.				UPL species	x5=	
5.				Column Totals:	(A)	— <sub>(B)</sub>
6.						(_)
7.				Prevalance Index = B/	A =	
	15	= Total Cove		Hydrophytic Vegetation I		
Shrub Stratum (Plot size:	)			✓ Dominance Test is \$		
Ilex cassine	5	yes	FACW	Prevalence Index is		
Ilex coriacea	10	ves	FACW	<u> </u>	hytic Vegetation <sup>1</sup> (Ex	nlain)
3.				, , , , , , , , , , , , , , , , , , , ,	, (=/.	, ,
4.				<sup>1</sup> Indicators of hydric soil an	d wetland hydrology	must
5.	<del></del>			be present, unless disturbe		must
6.				Definitions of Vegetation		
77.						
	15	= Total Cove		Tree- Woody plants, excludi	na woody vines	
Herb Stratum (Plot size:)	.0			approximately 20 ft (6m) or n		. (7.6
1. Amphicarpum muhlenbergianu	15	yes	FACW	cm) or larger in diameter at b		•
2. Solidago spp.	15	yes	FACU	Sapling- Woody plants, excl	uding woody vines	
Andropogon virginicus	15	yes	FAC	approximately 20 ft (6m) or n		s than 3
Woodwardia virginica	10	no	OBL	in. (7.6 cm) DBH.		
5. Eleocharis spp.	5	no	OBL	Shrub- Woody plants, exclud	ding woody vines.	
6. Xyris elliotti	5	no	OBL	approximately 3 to 20 ft (1 to		
7. Rhynchospora microcarpa	5	no	FACW	Herb- All herbaceous (non-w	_	
8.				herbaceous vines, regardles		-
9.				plants, except woody vines, I		
10.				m) in height.		
11.				Woody vine- All woody vine	s, regardless of height	t.
12.				, , , , , , , , , , , , , , , , , , , ,	.,	
1 666	70	= Total Cove	-r			
Woody Vine Stratum (Plot size:	)	10101 0011	<b>-</b> 1			
1. Rubus spp.	10	yes	FACU			
2.						
3.						
4.				Hydrophytic		
5.		·		Vegetation Present?	Yes ✓ No	
	10	= Total Cove		Togomion i losciiti		<u>.</u>
	10			L		

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

D-7 10 YR 2/1 7-28 10 YR 6/1 10 YR 5/3; 10 YR 28-42 5/2 42-80 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 YR 6/2 10 Y	Be Loc² Texture Remarks    black fine sand   gray fine sand	tures	Redox		Matrix Color (moist)  10 YR 2/1	Depth (inches) 0-7
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Rema  0-7 10 YR 2/1  7-28 10 YR 6/1  10 YR 5/3; 10 YR  28-42 5/2  42-80 10 YR 6/2  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Hatrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  This Day, Surface (S9) (LRR O, P, T)  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  Thick Dark Surface (A1)  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  This Dark Surface (A1)  Type: C=Concentration, D=Depleted Matrix, CS=Covered or Casted Sand Grains.  Type: C=Concentration, D=Depleted Matrix, CS=Depleted Matrix, CS=Depleted Matrix, CS=Depleted Matrix, CS=Depleted Matrix	black fine sand gray fine sand brown and grayish brown fine sand light brownish gray fine sand  **Location: PL=Pore Lining, M=Matrix.**			%	Color (moist) 10 YR 2/1	(inches) 0-7
D-7   10 YR 2/1	black fine sand gray fine sand  brown and grayish brown fine sand light brownish gray fine sand  atted Sand Grains.  black fine sand  brown and grayish brown fine sand  light brownish gray fine sand		ion (moist) 70		10 YR 2/1	0-7
7-28 10 YR 6/1 10 YR 5/3; 10 YR 28-42 5/2 42-80 10 YR 6/2  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Darr Surface (S8) (LRR S, T, U)  Polyvalue Below Surface (S8) (LRR S, T, U)  This Dark Surface (S8) (LRR S, T, U)  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (A10) (LRR C)  Thin Dark Surface (S8) (LRR S, T, U)  Polyvalue Below Surface (F6)  (MLRA 153B)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Polyther Grain Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	gray fine sand  brown and grayish brown fine sand light brownish gray fine sand  atted Sand Grains.  gray fine sand					
7-28 10 YR 6/1 10 YR 5/3; 10 YR 28-42 5/2 42-80 10 YR 6/2  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Type: C=Concentration, D=Depleted Darr Surface (S8) (LRR S, T, U)  Polyvalue Below Surface (S8) (LRR S, T, U)  This Dark Surface (S8) (LRR S, T, U)  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (A10) (LRR C)  Thin Dark Surface (S8) (LRR S, T, U)  Polyvalue Below Surface (F6)  (MLRA 153B)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Polyther Grain Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	brown and grayish brown fine sand light brownish gray fine sand				10 YR 6/1	
28-42 5/2   brown and grayish brown fine light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray fine sand   light brownish gray f	light brownish gray fine sand  pated Sand Grains.  **Location: PL=Pore Lining, M=Matrix.**					7-28
Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Indicators   Indicators   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicators for Problematic Hy   Indicato	light brownish gray fine sand  pated Sand Grains.  **Location: PL=Pore Lining, M=Matrix.**				10 YR 5/3; 10 YR	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Hydric Soil Indicators: Histol (A1) Histol (A2) Histol Epidon (A2) Histol Epidon (A2) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR O) Stripted Below Surface (S9) (LRR S, T, U) Histol (A3) Loamy Mucky Mineral (F1) (LRR O) Epeleted Matrix (F2) Peleted Matrix (F3) Depleted Matrix (F3) Fedox Dark Surface (F6) Mart (F10) (LRR P, T, U) Peleted Dark Surface (F7) Red Parent Material (TF2) Whick Presence (A8) (LRR P, T, U) Peleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Piedmont Floodplain Soils (F19) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Piedmont Floodplain Soils (F19) (MLRA 151) Peleted Dark Surface (F7) Peleted Dark Surface (F7) Red Parent Material (TF2)  Umbric Surface (F13) (LRR O, P, T) Indicators of hydrophytic vegeta hydrolytic vegeta hydrolytic vegeta (F13) (LRR O, F) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Park Surface (S7) (LRR P, S, T, U) Pestrictive Layer (If observed):	nated Sand Grains.  **Location: PL=Pore Lining, M=Matrix.**					28-42
Hydric Soil Indicators: Histol (A1) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A2) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16) Histole Epidon (A16)					10 YR 6/2	42-80
Hydric Soil Indicators:  Histol (A1)  Histol (A2)  Elack Histic (A3)  Black Histic (A3)  Elack Histic (A3)  Elacy Mucky Mineral (F1) (LRR O)  Formula (LRR P, T, U)  Elacy Mucky Mineral (A7)  Elacy Mucky Mineral (A7)  Elacy Mucky Mineral (A7)  Elacy Muck (A9)  Elacy Matrix (F2)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F3)  Elacy Matrix (F6)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F2)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)  Elacy Matrix (F1)						
Histol (A1)		r Coated Sand Grains.	uced Matrix, CS=Cover	etion, RM=	Concentration, D=Depl	Type: C=0
Histic Epidon (A2)  Black Histic (A3)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Reduced Vertic (F18) (outs Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Mucky Mineral (A7) (LRR P, T, U)  From Mucky Mineral (A7) (LRR P, T, U)  Redox Dark Surface (F6)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (F3)  Detended Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  John Craft (F17) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (F3)  Marl (F10) (MLRA 150A)  Detended Orchric (F13) (LRR P, T, U)  Peleted Orchric (F17) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	Indicators for Problematic Hydric Soils 3:					•
Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Piedmont Floodplain Soils ( Anomalous Bright Loamy S  (MLRA 153B)  Fedox Dark Surface (F6)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T)  Depleted Derbed Dark Surface (F7)  Mart (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):					• •	
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Some Mineral (A7) (LRR P, T, U)  Muck Presence (A8) (LRR P, T)  Depleted Dark Surface (F7)  Mart (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (F2)  Piedmont Floodplain Soils ( Anomalous Bright Loamy S  (MLRA 153B)  Anomalous Bright Loamy S  (MLRA 153B)  Pepleted Dark Surface (F7)  Red Parent Material (TF2)  Pepleted Dark Surface (A8) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F20) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):						_
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)  Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F7) Red Parent Material (TF2) Redox Depressions (F8)  Very Shallow Dark Surface Other (Explain in Remarks)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):					, ,	
Organic Bodies (A6) (LRR P, T, U)  Sedox Dark Surface (F6)  (MLRA 153B)  Som Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Pepleted Dark Surface (F7)  Redox Depressions (F8)  Very Shallow Dark Surface  1 cm Muck (A9) (LRR P,T)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):						
5 cm Mucky Mineral (A7) (LRR P,T,U)				, T, U)		
✓ Muck Presence (A8) (LRR U)       Redox Depressions (F8)      Very Shallow Dark Surface         _ 1 cm Muck (A9) (LRR P,T)      Mart (F10) (LRR U)      Other (Explain in Remarks)         _ Depleted Below Dark Surface (A11)      Depleted Orchric (F11) (MLRA 151)         _ Thick Dark Surface (A12)      Iron-Manganese Masses (F12) (LRR O, P,T)       _³Indicators of hydrophytic vegete hydrology must be present, unle problematic.         _ Coast Prairie Redox (A16) (MLRA 150A)      Delta Orchric (F17) (MLRA 151)       problematic.         _ Sandy Mucky Mineral (S1) (LRR O, S)      Delta Orchric (F17) (MLRA 150A, 150B)      problematic.         _ Sandy Gleyed Matrix (S4)      Reduced Vertic (F18) (MLRA 150A, 150B)      predmont Floodplain Soils (F19) (MLRA 149A)         _ Stripped Matrix (S6)      Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)      Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	· · · · · · · · · · · · · · · · · · ·	Dark Surface (F7)	 Deple	RPTII	Mucky Mineral (A7) (LF	5 cm l
	ssions (F8) Very Shallow Dark Surface (TF12) (LRR T, U)	pressions (F8)	Redo			
Thick Dark Surface (A12)			_	-,	, , ,	
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):	nric (F11) (MLRA 151)	Orchric (F11) (MLRA 151)	Deple	e (A11)	ted Below Dark Surface	Deple
Coast Prairie Redox (A16) (MLRA 150A)  — Umbric Surface (F13) (LRR P, T, U)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sandy Gleyed Matrix (S4)  — Sandy Redox (S5)  — Stripped Matrix (S6)  — Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  — Umbric Surface (F13) (LRR P, T, U)  — problematic.  — Reduced Vertic (F18) (MLRA 150A, 150B)  — Piedmont Floodplain Soils (F19) (MLRA 149A)  — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	se Masses (F12) (LRR O, P,T)  3 Indicators of hydrophytic vegetation and wetland	ganese Masses (F12) (LRF	Iron-I		Dark Surface (A12)	Thick
Sandy Match (S4) Sandy Redox (S5) Siripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Park Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	ce (F13) (LRR P, T, U) hydrology must be present, unless disturbed or	urface (F13) (LRR P, T, U)	Umbr	VILRA 150	Prairie Redox (A16) (M	Coast
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	(F17) (MLRA 151) problematic.	hric (F17) (MLRA 151)	Delta	RR O, S)	Mucky Mineral (S1) (L	Sandy
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	ic (F18) (MLRA 150A, 150B)	Vertic (F18) (MLRA 150A,	Redu		Gleyed Matrix (S4)	Sandy
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):	, , , ,	, , , , ,			• • •	
Restrictive Layer (If observed):	ight Loamy Soils (F20) (MLRA 149A, 153C, 153D)	ıs Bright Loamy Soils (F20	Anom		ed Matrix (S6)	Stripp
			<del></del>		Type:	
Depth (inches): Hydric Soil Present? Yes ✓ No Remarks:	Hydric Soil Present? Yes ✓ No				Depth (inches):	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date: 10/8/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point:			
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: <u>27 27S 19E</u>		_
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28,111353	Long: <u>-82.3</u>	98380	Datum: WG	S84
Soil Map Unit Name: Myakka fine sand			_NWI classification	:Freshwater Emergent We	tland
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>√</u>	_ No	_ (If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal? YesN	o 🗸
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	te map showing sampli	ng point locations, t	ransects, impo	ortant features, etc.	
Hydrophytic Vegetation Present?	Yes✓ No				
Hydric Soil Present?	Yes No	is the Sampled Area v	vithin a Wetland?	Yes No	
Wetland Hydrology Present?	Yes No				
HYDROLOGY					
Wetland Hydrology Indicators:				tors (minimum of two required)	l
Primary Indicators (minimum of one is required; c		50)	Surface Soil		
✓ Surface Water (A1)	Water-Stained Leaves (	89)		getated Concave Surface (B8)	)
High Water Table (A2)	Aquatic Fauna (B13)			atterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim L	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres				
Drift Deposits (B3)	Presence of Reduced Ire				
Algal Mat or Crust (B4)	Recent Iron Reduction in				
Iron Deposits (B5)	Thin Muck Surface (C7)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutra	I Test (D5)	
Field Observations:	Vec / No	Death (inches): 0.6			
Surface Water Present?	Yes/ No	=			
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	Depth (inches):0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ing well periol photos, previous	inepactions) if available:	Present?	Yes No	
Describe Recorded Data (stream gauge, monitori	ing well, aerial priotos, previous	inspections), ii avaliable.		•	
Damada				•	
Remarks:					

VEGETATION - Use scientific nar	mes of plants				Sampling Point:	CI
	Absolute %	Dominant	Indicator	Dominance Test Worksh	eet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spec		(4)
2.				That Are OBL, FACW, or I	FAC: 5	(A)
3.				Total Number of Dominant	t "	(P)
4.				Species Across All Strata:	` <u>5</u>	(B)
5.				Percent of Dominant Spec	cies 400.00	(4/12)
6.				That Are OBL, FACW, or I		(A/B)
7.				Prevalance Index worksh		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Acer rubrum	<sup>-</sup> 5	yes	OBL	FACW species	x2=	_
2.	. ——			FAC species	x3=	_
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.	<del></del>			Column Totals:	(A)	— (B)
6.				-	v	_\_,
.7.	• ———			Prevalance Index = B	/A =	
		= Total Cove		Hydrophytic Vegetation		······································
Shrub Stratum (Plot size:	)	. 5.0, 550		✓ Dominance Test is		
Ilex cassine	<del>. '</del> ' 5	yes	FACW	Prevalence Index is		
Ilex glabra	10	ves	FACW	<del></del>	s ⊴3.0 ohytic Vegetation¹ (Exp	nlain)
3.		<u>yes</u>	TAUV	1 Toblematic Hydrop	onyao vogotation (EX)	J.G.11)
4.				Indicators of budgie and an	والمسامع المصالحات	40110
5.				<sup>1</sup> Indicators of hydric soil ar be present, unless disturbe		nust
6.				Definitions of Vegetation		
7.				Definitions of vegetation	. Juata.	
	15	= Total Cove		Troe Woody starts assisted	ina waadu winn	
Herb Stratum (Plot size:)	13	- Total Cove	<del>,</del> 1	Tree- Woody plants, exclud approximately 20 ft (6m) or		(7. <b>6</b>
•	20	100	OPI	cm) or larger in diameter at		0.17
Rhynchospora inundata     Andronospora visciniosa	30	yes	OBL	4 ·		
Andropogon virginicus     Dentadorio condeta	20	yes	FAC	Sapling- Woody plants, exc		than ?
Pontederia cordata     Woodwardia virginiae	15	no	OBL	approximately 20 ft (6m) or lin. (7.6 cm) DBH.	more in neight and less	uiali 3
Woodwardia virginica	10	no	OBL	4 ` ´		
5. Andropogon glomeratus	10	no	FACW	Shrub- Woody plants, exclu		
6. Xyris elliotti	5	no	OBL	approximately 3 to 20 ft (1 to		
7.				Herb- All herbaceous (non-		
8.				herbaceous vines, regardles		-
9.				plants, except woody vines, m) in height.	less than approximately	γऽπ (1
10.				<u>.</u>		
11.				Woody vine- All woody vine	es, regardless of height.	
12.				1		
	90	= Total Cove	er			
Woody Vine Stratum (Plot size:	)			1		
1.				]		
2.						
3.						
4.				Hydrophytic		
5.				Vegetation Present?	YesNo	<u>.</u>
	0	= Total Cove	er	]		
Remarks: (If observed, list morph	ological adapta	tions below).				
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.		

SOIL	il; Hillsborough- Myakk	\u									Sampli	ng Point:	С
Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the abs	ence of indicators.	)					
Depth	Matrix				Features	1	Ŧ				D		
(inches)	Color (moist)	%	Color (moist)		Type'	Loc2	Texture				Remarks		
0-5	10 YR 3/1							very da	rk gray f	īne sa	nd		
5-20	10 YR 6/1							gray fin					
20-25	N 2/0							black fir	ne sand				
25-30	5 YR 3/3			=				dark red	ddish bro	own fir	e sand		
Ŧ O	O		D-dd-Marking	00-0			21ti DID	- I <del>Island</del> N	- N d - 4-f				
	Concentration, D=Dep il Indicators:	ietion, RM	=Reduced Matrix,	US=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore				atic Hydric	Soile 3 ·	
Histol				Poly	value Below Sur	face (S8) (LRR			Muck (at			JOIIS .	
	Epidon (A2)					69) (LRR S, T, U			Muck (A				
	Histic (A3)					al (F1) (LRR O)	•				•	MLRA 150A,	B)
Hydro	gen Sulfide (A4)			Loan	ny Gleyed Matri	x (F2)		Piedm	ont Floo	odplain	Soils (F19)	(LRR P, S, 1	r) ·
	fied Layers (A5)				eted Matrix (F3)			Anom	alous Br	ight Lo	oamy Soils (	F20)	
Orgar	nic Bodies (A6) (LRR I	P, T, U)		Redo	ox Dark Surface	(F6)			RA 153E				
5 cm	Mucky Mineral (A7) (L	.RR P,T,U)		Depl	eted Dark Surfa	ice (F7)			arent M				
_✓_Muck	Presence (A8) (LRR	U)		Redo	ox Depressions	(F8)		Very S	Shallow I	Dark S	Surface (TF1	2) (LRR T, L	J)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)			Other	(Explain	ı in Re	marks)		
Deple	ted Below Dark Surface	ce (A11)		Depl	eted Orchric (F	11) (MLRA 151)							
	Dark Surface (A12)	· (, ,			•	sses (F12) (LRR	(O, P.T)	a					
	Prairie Redox (A16) (	MI DA 150	14)		-	3) (LRR P, T, U)					: vegetation nt, unless di	and wetland	
			•	_	•			problemati		prese	m, uniess ai	sturbed or	
	Mucky Mineral (S1) (	LRR O, S)			Orchric (F17)			problemati	О.				
	y Gleyed Matrix (S4)					B) (MLRA 150A, Soils (F19) (ML							
	y Redox (S5) ed Matrix (S6)				•	, ,,	(MLRA 149A, 153C	1530)					
	` '				naious Brigin Lo	Janny Jons (1 20)	(MEICH 145A, 1550	, 1000)					
	Surface (S7) (LRR P, re Layer (If observed)						T						
Restrictiv	Type:	):											
	Depth (inches):						Hydric Soil Presen	nt?	Yes	1	No		
Remarks:	Depart (morico).		<u>-</u>				inyana dan madan	···					
· · · · · · · · · · · · · · · · · · ·													
						•							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	Sampling Date: 10/12/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:Sampling Point:S				
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 27 27S 19E			
Landform (hillslope, terrace, etc.): N/A	·	Local relief (concave, conv	ex, none): none	Slope (%):		
Subregion (LRR or MLRA): LRR U		Long: <u>-82.3</u>	96804	Datum: WGS84		
Soil Map Unit Name: Myakka fine sand			_NWI classification:	Freshwater Emergent Wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? YesNo ✓		
	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)		
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.		
Hydrophytic Vegetation Present?	Yes✓ No					
Hydric Soil Present?	Yes No	is the Sampled Area w	ithin a Wetland?	Yes No		
Wetland Hydrology Present?	YesNo					
Remarks:						
HADBOLOGA						
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of two required)		
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil			
Surface Water (A1)	Water-Stained Leaves (	R9)		etated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	50,	Drainage Pat			
✓ Saturation (A3)	Marl Deposits (B15) (LR	R II)	Moss Trim Li			
Water Marks (B1)	Hydrogen Sulfide Odor (			Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	, ,	Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced Ire		Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction in					
Iron Deposits (B5)	Thin Muck Surface (C7)					
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	·ks)	FAC Neutral	• ,		
Field Observations:						
Surface Water Present?	Yes No	Depth (inches):				
Water Table Present?	Yes No			•		
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)			Present?	Yes <u>✓</u> No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				
Remarks:						

VEGETATION - Use scientific na	mes of plants				ampling Point:	CJ
	Absolute %	Dominant	Indicator	Dominance Test Workshee	t:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species		(A)
2.				That Are OBL, FACW, or FA	C:	(^)
3.				Total Number of Dominant	2	(B)
4.				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species	100.00	(A (D)
6.				That Are OBL, FACW, or FA	C: 100.00	(A/B)
7.				Prevalance index workshee	et:	
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.	_			FACW species	x2=	_
2.				FAC species	x3=	
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	(B)
6.				1		_ `
7.				Prevalance Index = B/A	=	
		= Total Cove	r	Hydrophytic Vegetation Ind	licators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50	%	
1.	•			Prevalence Index is ≤	3.0 <sup>1</sup>	
2.	-			Problematic Hydrophy	rtic Vegetation <sup>1</sup> (Exp	olain)
3.			<del></del>		• • • •	Í
4.				<sup>1</sup> Indicators of hydric soil and	wetland hydrology n	nust
5.	<del></del>			be present, unless disturbed		
6.				Definitions of Vegetation S		
7.				1		
		= Total Cove	r	Tree- Woody plants, excluding	woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or mo		(7.6
1. Panicum repens	40	yes	FACW	cm) or larger in diameter at bre	east height (DBH).	
Asclepias sp.	20	yes	FACW	Sapling- Woody plants, exclud	ling woody vines.	
Rhyncospora spp.	10	no	FACW	approximately 20 ft (6m) or mo		than 3
4. Centella asiatica	10	no	FACW	in. (7.6 cm) DBH.		
5. Diodia virginiana	5	no	FACW	Shrub- Woody plants, excludir	ng woody vines,	
6. Ludwigia peruviana	5	no	OBL	approximately 3 to 20 ft (1 to 6	m) in height.	
7. Thalia geniculata		no	OBL	Herb- All herbaceous (non-wo	ody)plants, including	
8.				herbaceous vines, regardless		ody
9.				plants, except woody vines, les		
10.				m) in height.		
11.				Woody vine- All woody vines,	regardless of height.	
12.				1		
	92	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.				Hydrophytic		
5.	-			1	es <u> </u>	
		= Total Cove	r	1	<u> </u>	
Remarks: (If observed, list morph	ological adapta					
Percent cover estimates based o			roader coi	mmunity.		

TOTHE DE	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the ab	sence of indicators	.)
Depth	Matrix			Redox	Features			
inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks
-5	10 YR 3/1							very dark gray fine sand
-20	10 YR 6/1							gray fine sand
0-25	N 2/0							black fine sand
5-30	5 YR 3/3							dark reddish brown fine sand
		_						
	Concentration, D=Depl	letion, RM:	=Reduced Matrix, (	CS=Cove	red or Coated S	Sand Grains.	*Location: PL=Poi	re Lining, M=Matrix.
•	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	• •					rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Épidon (A2)					S9) <b>(LRR S, T,</b> I		2 cm Muck (A10) (LRR S)
_	Histic (A3)					al (F1) (LRR O)	<b>)</b>	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P				ox Dark Surface eted Dark Surfa	` '		(MLRA 153B)Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P,T,U) Muck Presence (A8) (LRR U)				ox Depressions	` '		Very Shallow Dark Surface (TF12) (LRR T, U)	
1 cm Muck (A9) (LRR P,T)			(F10) (LRR U)	(/		Other (Explain in Remarks)		
	ed Below Dark Surfac	e (A11)		—— Depl	eted Orchric (F	11) (MLRA 151)	)	
	Dark Surface (A12)	(, , ,			•	sses (F12) (LRI	•	1
	Prairie Redox (A16) (I	MLRA 150	A)		-	3) (LRR P, T, U		<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
— Sandy	Mucky Mineral (S1) (I	LRR O, S)	·	Delta	Orchric (F17)	(MLRA 151)		problematic.
	Gleyed Matrix (S4)			Redi	iced Vertic (F18	B) (MLRA 150A,	150B)	
	Redox (S5)				•	Soils (F19) (MI	•	
Strippe	ed Matrix (S6)			Anor	nalous Bright Lo	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)
	Surface (S7) (LRR P, S							
	Layer (If observed):	:						
	Type: Depth (inches):		<del></del>				Hydric Soil Preser	nt? Yes ✓ No
Remarks:	Deput (inches).		<del></del>				Intalic 2011 Freset	nt? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ah	Sampling Date: 10/12/09	
Applicant/Owner: Progress Energy Florida, Inc.				Sampling Point: CK/CL	
Investigator(s): Justin Styer, Nate Goddard		•		· ·	
Landform (hillslope, terrace, etc.): N/A		, ,,		Slope (%):	
Subregion (LRR or MLRA): LRR U		·	· ·		
Soil Map Unit Name: Myakka fine sand			NWI classification:		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?		_	(If no, explain in Remarks)	
	or Hydrology		Are circumstances		
	or Hydrology			any answers in Remarks)	
SUMMARY OF FINDINGS - Attach sit				•	
Hydrophytic Vegetation Present?	Yes ✓ No			Turit Toutar Go, Gtor	
Hydric Soil Present?	Yes✓No	Is the Sampled Area w	ithin a Wetland?	YesNo	
Wetland Hydrology Present?	Yes✓No				
Remarks:		<u> </u>			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced In	on (C4)Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks) FAC Neutral Test (D5)			
Field Observations:					
Surface Water Present?	Yes No	_ Depth (inches):8-10	_		
Water Table Present?	Yes No	_ Depth (inches):0	L		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	·		
Remarks:	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
			•		

VEGETATION - Use scientific name	nes of plants			Sampling Point:	CK/CL
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(Δ)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	(A (D)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.			-	Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	· - · · · ·	•	OBL species x1=	
1.				FACW species x2=	_
2.	-	-		FAC species x3=	
2				FACU species x4=	<del></del>
J.				UPL species x5=	'
3. 4. 5. 6.					—, <sub>B</sub> ,
5.				Column Totals:(A)	(B)
6. 				B	
7.				Prevalance Index = B/A =	
	0	= Total Cove	:r	Hydrophytic Vegetation Indicators:	I
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	İ
1				Prevalence Index is ≤3.0 <sup>1</sup>	I
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	kplain)
3.					İ
4.				Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				1 - 1	
<u></u>		= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	<u> </u>	- 10101 0010	•	approximately 20 ft (6m) or more in height and 3 in	n (7.6
Asclepias sp.	35	yes	FACW	cm) or larger in diameter at breast height (DBH).	. (
Panicum repens	30	<del></del>	FACW	1	
Panicum repens     Panicum hemitomon	10	yes no	OBL	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and les	e than 3
		no		in. (7.6 cm) DBH.	Sulano
		no	FACW		
5. Thalia geniculata	5	no	OBL	Shrub- Woody plants, excluding woody vines,	
6. Ludwigia peruviana	5	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Rhynchospora microcarpa	2	no	FACW	Herb- All herbaceous (non-woody)plants, including	
Andropogon glomeratus	2	no	FACW	herbaceous vines, regardless of size. Includes wo	
Rhynchospora colorata	1	no	OBL	plants, except woody vines, less than approximate	ly 3 ft (1
10. Euthamia spp.	1	no	FAC	m) in height.	
11. Centella asiatica	11	no	FACW	Woody vine- All woody vines, regardless of heigh	t.
12. Eupatorium capillifolium	11	no	FACU	]	
	98	= Total Cove	r	1	
Woody Vine Stratum (Plot size:	)				
1.					
2				1	
2. 3.					
4.				Hydrophytic	
5.				Vegetation Present? YesNo	
J		= Total Cove	· ·	vegetation riesentr	<del></del>
Remarks: (If observed, list morpho				<u>.</u>	
Percent cover estimates based on			roader cor	mmunity	

Countyleoile	Hillsborough-	Marakka

ofile Description: (Describe to the depth needed opth Matrix		the absence of indicator	5.)
ches) Color (moist) % Color (r	Redox Features noist) % Type¹ Lo	oc <sup>2</sup> Texture	Remarks
10 YR 3/1			very dark gray fine sand
0 10 YR 6/1	<del></del>		gray fine sand
25 N 2/0			black fine sand
30 5 YR 3/3		<del></del>	dark reddish brown fine sand
			<del>-</del>
pe: C=Concentration, D=Depletion, RM=Reduced	Matrix, CS=Covered or Coated Sand Gra	ains. <sup>2</sup> Location: PL=P	ore Lining, M=Matrix.
dric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
_Histol (A1)	Polyvalue Below Surface (St	8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)	Thin Dark Surface (S9) (LRI		2 cm Muck (A10) (LRR S)
_Black Histic (A3)	Loamy Mucky Mineral (F1) (	LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B)
_Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
_Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
_Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
_Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLI	RA 151)	
_Thick Dark Surface (A12)	Iron-Manganese Masses (F	12) (LRR O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
_Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR	P, T, U)	hydrology must be present, unless disturbed or
_Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA	151)	problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLR	A 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F	F19) (MLRA 149A)	
_Stripped Matrix (S6)	Anomalous Bright Loamy Sc	oils (F20) (MLRA 149A, 15	3C, 153D)
Dark Surface (S7) (LRR P, S, T, U)			
estrictive Layer (If observed):			
Type:	_		
Depth (inches):		Hydric Soil Pres	ent? Yes <u>√</u> No
marks:			
marks:			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ugh	_Sampling Date:_	10/12/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point			CM		
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: <u>27 27S 19E</u>		***		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	vex, none): none	Slo	ope (%):		
Subregion (LRR or MLRA): LRR U	Lat: <u>28.106617</u>	Long: <u>-82.3</u>	392416	Da	tum: WGS84		
Soil Map Unit Name: Basinger fine sand			_NWI classification	: <u>NA</u>			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>√</u>	_ No	(If no, explain in	Remarks)		
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	s normal? Ye	s No 🗸		
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in R	emarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ng point locations, t	ransects, impo	rtant features	, etc.		
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland? Yes✓ No					
Wetland Hydrology Present?	Yes No						
Remarks:							
	•						
	· · ·						
HYDROLOGY		,					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	vo required)		
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil		to required)		
✓ Surface Water (A1)	Water-Stained Leaves (	R9)	· <del></del>	getated Concave S	Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	20,	Drainage Patterns (B10)				
✓ Saturation (A3)	Mart Deposits (B15) (LR	R II)		Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor (	·		Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres		'	h Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced Ire	<del>-</del> + + + + + + + + + + + + + + + + + + +			agery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	<del></del>			-37 (7		
Iron Deposits (B5)	Thin Muck Surface (C7)	` ,	-	nallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral				
Field Observations:		<u> </u>	T				
Surface Water Present?	Yes ✓ No	Depth (inches): 0-12	_		•		
Water Table Present?	Yes No		.}				
Saturation Present?	Yes_ ✓ No		Wetland Hydrology				
(includes capillary fringe)		•	Present?	Yes ✓ No	•		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:					
Remarks:	<del></del>						
· ·							

VEGETATION - Use scientific names of plants Sampling Point:CM					
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.		·		Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	(B)
<del>5</del> .				<b>d</b> '	
6.		<del></del>		Percent of Dominant Species That Are OBL, FACW, or FAC:  100.00	(A/B)
7.				Prevalance Index worksheet:	
7.		= Total Cove			
Sapling Stratum (Plot size:	,	- Total Cove	1	Total % Cover of: Multiply by: OBL species x1=	
Taxodium distichum	/ /10	Vec	OBL	FACW species x2=	-
		yes	OBL		-
2.				FAC species x3=	-
3.				FACU species x4=	_
4.				UPL species x5=	<b>–</b> "
5.				Column Totals:(A)	_ <sup>(B)</sup>
6.					
7.				Prevalance Index = B/A =	
	10	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1. Cephalanthus occidentalis	5	yes	OBL	Prevalence Index is ≤3.0 <sup>1</sup>	
2. Myrica cerifera	1	yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.					
4				Indicators of hydric soil and wetland hydrology r	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
<del>7</del> .				1	
	6	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) or more in height and 3 in.	(7.6
Pontederia cordata	25	yes	OBL	cm) or larger in diameter at breast height (DBH).	`
Panicum repens	25	yes	FACW	  Sapling- Woody plants, excluding woody vines,	
Rhynchospora colorata	10	no	OBL	approximately 20 ft (6m) or more in height and less	than 3
Andropogon glomeratus	5	no	FACW	in. (7.6 cm) DBH.	
5. Euthamia spp.	5	no	FAC	Shrub- Woody plants, excluding woody vines,	
Cladium jamaicense	5	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Utricularia spp.	5	no	OBL	Herb- All herbaceous (non-woody)plants, including	
8. Nuphar luteum	5	no	OBL	herbaceous vines, regardless of size. Includes woo	
9. Solidago spp.	2	no	FACU	plants, except woody vines, less than approximately	-
10. Woodwardia virginica	1	no	OBL	m) in height.	•
11. Setaria spp.	1	no	FAC	Woody vine- All woody vines, regardless of height.	
12. Xyris elliotti	1	no	OBL	1	1
12. Ayrıs cinetti	90	= Total Cove		1	
Woody Vine Stratum (Plot size:	,	Total Cove	•		
. <del></del>	/				
1.		<del></del>		1	
2.				<u> </u>	
3.				<b>.</b>	
4.		•	<u></u>	Hydrophytic	
5.				Vegetation Present? YesNo	<u>-</u>
	0	= Total Cove	r		
Remarks: (if observed, list morph	-				
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	

OIL								Sampling Point:
	scription: (Describe	to the dep	th needed to doc			confirm the ab	sence of indicator	s.)
epth	Matrix		0.1(		Features	Loc²	<b></b>	<b>D</b> t -
nches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc	Texture	Remarks
-7	10 YR 2/1							black fine sand
-28	10 YR 6/1							gray fine sand
	10 YR 5/3; 10 YR							
8-42	5/2							brown and grayish brown fine sand
2-80	10 YR 6/2							light brownish gray fine sand
			D				21	- I
	Concentration, D=Dep oil Indicators:	letion, RM	=Reduced Matrix, (	S=Cove	ered or Coated S	sand Grains.	-Location: PL=Po	ore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histol				Poly	value Relow Su	rface (S8) (LRR	S T III	1 cm Muck (a9) (LRR O)
	Epidon (A2)					S9) (LRR S, T, t		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
_	gen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				leted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
Orgar	nic Bodies (A6) (LRR I	P, T, U)		Red	ox Dark Surface	e (F6)		(MLRA 153B)
5 cm	Mucky Mineral (A7) (L	RR P,T,U)		Dер	leted Dark Surfa	ace (F7)		Red Parent Material (TF2)
✓ Muck	Presence (A8) (LRR	U)		Red	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm	Muck (A9) (LRR P,T)			Mar	(F10) (LRR U)			Other (Explain in Remarks)
 Denle	ted Below Dark Surface	'e (Δ11)		Dep	leted Orchric (F	11) (MLRA 151)		
	Dark Surface (A12)	,				sses (F12) (LRF		1
	Prairie Redox (A16) (	MI DA 150	141		· ·	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
	` ' '		•		•			hydrology must be present, unless disturbed or problematic.
	Mucky Mineral (S1) (	LRR O, S)			a Orchric (F17)	•	4550)	problematic.
	/ Gleyed Matrix (S4) / Redox (S5)					8) <b>(MLRA 150A,</b> n Soils (F19) <b>(ML</b>		
	ed Matrix (S6)				•		.KA 149A) ) (MLRA 149A, 153	C 153D)
	` '				maious bright Li	barry Sons (1 20	/ (MEIOR 143A, 100	o, 100D)
	Surface (S7) (LRR P,							
estrictiv	e Layer (If observed) Type:	ı <b>.</b>						
	Depth (inches):						Hydric Soil Prese	ent? Yes ✓ No .
emarks:	Depart (inches).	<del></del>					Tryane con ries	
Ciliains.								
	•							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	Sampling Date:10/12/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point: CN	
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: <u>27 27S 19E</u>		
Landform (hillslope, terrace, etc.): N/A	<del>\</del>	Local relief (concave, con	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.105476</u>	Long: <u>-82.</u>	391142		Datum: WGS84
Soil Map Unit Name: Myakka fine sand			_NWI classification	ı: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal?	Yes <u>No ✓</u>
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in	Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations,	transects, impo	ortant featur	es, etc.
Hydrophytic Vegetation Present?	Yes No			•	
Hydric Soil Present?	Yes No	Is the Sampled Area v	within a Wetland?	Yes	No
Wetland Hydrology Present?	Yes/No	]			
HADBOLOGA			-		<del></del>
HYDROLOGY Wetland Hydrology Indicators:	-	•	Secondary Indicat	tore (minimum o	f two required)
, .,			Secondary Indicat Surface Soil	•	(two required)
Primary Indicators (minimum of one is required; o	cneck all that apply) Water-Stained Leaves (	(DO)	Surface Soil	, ,	e Surface (B8)
✓ Surface Water (A1)	Nquatic Fauna (B13)	<sub>.</sub> Б9)	Sparsely ve	_	a Stillage (DO)
High Water Table (A2)	Aquatic Fauria (B13)Marl Deposits (B15) (LR	וו סכ	Moss Trim L		
✓ Saturation (A3)	Hydrogen Sulfide Odor (	•		Water Table (C	2)
Water Marks (B1)		•		·	2)
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Bur		
Drift Deposits (B3)	Presence of Reduced In Recent Iron Reduction in			/isible on Aerial   : Position (D2)	.magery (Ca)
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	, ,	
✓ Inundation Visible on Aerial Imagery (B7)	. ,		FAC Neutra		
Field Observations:	Other (Explain in Normal	185)	FAC Neura	I Test (Do)	
Surface Water Present?	Yes No	Depth (inches): 0-3			
Water Table Present?	Yes/ No		7		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)	100100		Hydrology Present?	Yes ✓	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	Fresent.	163_7	<u> </u>
Remarks:					
Remarks.					
1					

VEGETATION - Use scientific na					ling Point:	CN
Trans Christians (Dist sine)	Absolute %	Dominant Species 2	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	_ Cover	Species?	Status	North and Consider		
1.				Number of Dominant Species	<u>2</u> ·	(A)
2.				That Are OBL, FACW, or FAC:	_	
3.				Total Number of Dominant	<u>2</u>	(B)
4.				Species Across All Strata:	_	` ,
5.				Percent of Dominant Species	100.00	(A/B)
6.	_			That Are OBL, FACW, or FAC:		
7.				Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)				(1=	_
1.				FACW speciesx	(2=	_
2.				FAC speciesx	(3=	_
3.				FACU species ×	(4=	_
4.				UPL species ——— x	.5=	_
5.					A)	(B)
6.				<del></del> `	·	<b>-</b> ` ′
7.				Prevalance Index = B/A =		
		= Total Cove	r	Hydrophytic Vegetation Indicat	ors:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.	<del></del> ′			Prevalence Index is ≤3.0 <sup>1</sup>		
<del></del> 2.				Problematic Hydrophytic \	/egetation <sup>1</sup> (Exr	ılain)
3.				, robiemano rijaroprijao i	ogotation (Exp	,,,,,
4.				Indicators of hydric soil and wetle	and hydrology n	nuet
5.				be present, unless disturbed or p		lust
6.				Definitions of Vegetation Strata		
7.		<del></del>		Pommiono or Vogetation ottal	••	
1.		= Total Cove		Tree Woody plants, avaluding was	adu vinas	
Herb Stratum (Plot size:)	U	- Total Cove	4	Tree- Woody plants, excluding woo approximately 20 ft (6m) or more in		/7 G
	50		FACIAL	cm) or larger in diameter at breast I		(7.0
Panicum repens     Panicum repens		yes	FACW	1		
Pontederia cordata	30	yes	OBL	Sapling- Woody plants, excluding	•	46 2
Aster elliotii		no	OBL	approximately 20 ft (6m) or more in in. (7.6 cm) DBH.	neight and less	tnan 3
4. Ludwigia spp.	5	no	OBL	ł ` '		
5.	<del>-</del>			Shrub- Woody plants, excluding we		
6.				approximately 3 to 20 ft (1 to 6 m) i	n neight.	
7.	<del>-</del>			Herb- All herbaceous (non-woody)		
8.				herbaceous vines, regardless of siz		
9.				plants, except woody vines, less that	an approximately	/ 3 ft (1
10.				m) in height.		
<u>11.</u>				Woody vine- All woody vines, rega	rdless of height.	
12.						
	95	= Total Cove	r			
Woody Vine Stratum (Plot size:_	)					
1.	_					
2.				1		
3.						
<del>4</del> .				Hydrophytic		
<del>5</del> .				Vegetation Present? Yes _	✓ No	
<u>.                                    </u>		= Total Cove	<del></del>			
		tions below).				

Percent cover estimates based on meandering survey of the broader community.

SOIL Profile De	scription: (Describe	to the der	th needed to doc	ument th	e indicator or	confirm the abs	ence of indicators 1				npling Poi	nt:(
Depth	Matrix	ro me aet	in needed to doc		Features	oo are are	once of maicators.)					
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture			Remar	ks	
0-5	10 YR 3/1							very dark gray	īne san	d		
5-20	10 YR 6/1							gray fine sand				
20-25	N 2/0							black fine sand				
25-30	5 YR 3/3							dark reddish br	own fine	sand		
								-				
Type: C=	Concentration, D=Dep	letion RM:	Reduced Matrix	CS=Cover	ed or Coated S	Sand Grains	²Location: PL=Pore	Lining, M=Matrix				
Hydric So	il Indicators:	1000011, 11111	Troubout Matrix,	00 0010	ou or outlou t	Jana Granio.		ndicators for Pro		tic Hyd	Iric Soils	3:
Histol	(A1)			Polyv	value Below Su	rface (S8) (LRR:	S, T, U) _	1 cm Muck (a	9) (LRF	(0 ≀		
Histic	Epidon (A2)			Thin	Dark Surface (	S9) <b>(LRR S, T,</b> U		2 cm Muck (A	10) (LF	RS)		
Black	Histic (A3)			Loam	ny Mucky Miner	al (F1) (LRR O)	_	Reduced Vert	ic (F18)	(outsi	ide MLRA	150A, B)
Hydro	gen Sulfide (A4)			Loan	y Gleyed Matr	ix (F2)	_	Piedmont Flo	odplain	Soils (F	19) (LRF	₹ P, S, T)
	fied Layers (A5)				eted Matrix (F3			Anomalous B	ight Lo	amy So	ils (F20)	
Orgar	nic Bodies (A6) (LRR F	P, T, U)		Redo	x Dark Surface	e (F6)	•	(MLRA 1531	3)	•		
5 cm	Mucky Mineral (A7) (L	RR P.T.UI		Deple	eted Dark Surfa	ace (F7)		Red Parent M	aterial (	TF2)		
	Presence (A8) (LRR				x Depressions	, ,	-	Very Shallow			TF12) (LI	RR T. U)
	Muck (A9) (LRR P,T)	-,		Marl	(F10) (LRR U)	, ,	-	Other (Explain	in Ren	narks)		
	ted Below Dark Surfac	æ (A11)		Deple	eted Orchric (F	11) (MLRA 151)						
Thick	Dark Surface (A12)			Iron-l	Manganese Ma	sses (F12) (LRF	O, P,T)	h				
Coasi	Prairie Redox (A16) (	MI RA 150	)Δ)	 Umbi	ric Surface (F1	3) (LRR P, T, U)		Indicators of hydroydrology must be				
			· ·		Orchric (F17)	,, , , ,	•	roblematic.	preser	it, uriles	รร นเรเนเม	eu oi
	Mucky Mineral (S1) (	LKK (), S)	1				•					
	Gleyed Matrix (S4)					B) (MLRA 150A,						
	Redox (S5)					Soils (F19) (ML	.KA 149A) (MLRA 149A, 153C,	152D)				
	ed Matrix (S6)			Anon	naious bright L	oarny Sons (F20)	(WILKA 149A, 155C,	1930)				
	Surface (S7) (LRR P, e Layer (If observed)						1					
Kestrictiv	Type:	•										
	Depth (inches):						Hydric Soil Present	? Yes	1	No	_	
Remarks:	Deptit (inches).						inyune con i resem	103				
rtemarks.												
ı												
1												
1												

Project/Site: Levy Nuclear Plant - Transmission Li	nes		City/County: H	illsborou	gh	Sampling Dat	e: 10/12/09	
Applicant/Owner: Progress Energy Florida, Inc.			State: FL Samplin			Sampling Poi	nt: CO	
Investigator(s): Justin Styer, Nate Goddard			Section, Township	, Range:	27 27S 19E			
Landform (hillslope, terrace, etc.): N/A			Local relief (conca	ve, conv	ex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	L	at: <u>28,104376</u>	Long	j: <u>-82.38</u>	39900		Datum: WGS84	
Soil Map Unit Name: Basinger fine sand					NWI classification:	NA		
Are climatic / hydrologic conditions on the site typi	ical for this time o	of year?	Yes		. No	(If no, explain	in Remarks)	
Are Vegetation, Soil,	or Hydrology				Are circumstances		YesNo ✓	
Are Vegetation, Soil,					(If needed, explain	any answers i	n Remarks)	
SUMMARY OF FINDINGS - Attach sit					ansects, impo	rtant featu	res, etc.	
Hydrophytic Vegetation Present?	Yes <u>✓</u> N	0	•		•			
Hydric Soil Present?	Yes✓N	o	Is the Sampled	Area wi	ithin a Wetland?	Yes <u>√</u>	No	
Wetland Hydrology Present?	Yes✓N	o						
Remarks:		<del></del>						
HYDROLOGY								
Wetland Hydrology Indicators:					Secondary Indicato	rs (minimum c	of two required)	
Primary Indicators (minimum of one is required; cl	heck all that appl	λ)			Surface Soil (	Cracks (B6)		
Surface Water (A1)	Water-Sta	ined Leaves (B	9)		Sparsely Veg	etated Concav	ve Surface (B8)	
High Water Table (A2)	Aquatic Fa	auna (B13)			Drainage Pat	terns (B10)		
✓ Saturation (A3)	Marl Depo	sits (B15) (LRF	t U)		Moss Trim Lir	Trim Lines (В16)		
Water Marks (B1)	Hydrogen	Sulfide Odor (C	(1)		Dry-Season V	Vater Table (C	(2)	
Sediment Deposits (B2)	Oxidized F	Rhizospheres o	n Living Roots (C3	3)	Crayfish Burro	ows (C8)		
Drift Deposits (B3)	Presence	of Reduced Iron	n (C4)		Saturation Vis	sible on Aerial	Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iro	n Reduction in	Tilled Soils (C6)		Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck	Surface (C7)						
✓ Inundation Visible on Aerial Imagery (B7)	· · · · · · · · · · · · · · · · · · ·	olain in Remark	s)		FAC Neutral			
Field Observations:	,		·					
Surface Water Present?	Yes✓N	o I	Depth (inches):	0-6				
Water Table Present?	Yes <u>√</u> N		Depth (inches):	0				
Saturation Present?	YesN		Depth (inches):	0	Wetland			
(includes capillary fringe)					Hydrology Present?	Yes ✓	No	
Describe Recorded Data (stream gauge, monitorii	ng well, aerial ph	otos, previous i	nspections), if ava	ilable:				
, , , , , ,		,,						
D								
Remarks:								
		•						
,								
			•					
·								
							, ,	

VEGETATION - Use scientific nar	mes of plants			Samplin	g Point:	<u>CO</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	<u>6</u>	(A)
2.				That Are OBL, FACW, or FAC:	<u>o</u>	(^)
3.				Total Number of Dominant	6	(D)
4.				Species Across All Strata:	<u>6</u>	(B)
5.				Percent of Dominant Species	400.00	(4 (5)
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	, , , , , , , , , , , , , , , , , , , ,		OBL species x1=		
Salix caroliniana	15	yes	OBL	FACW species x2=		_
Acer rubrum	5	yes	OBL	FAC species x3=	=	_
3.				FACU species x4=	=	_
4.				UPL species x5=	=	_
5.	•			Column Totals: (A)		(B)
6.				(',		_ `-'
7.			-	Prevalance Index = B/A =		
	20	= Total Cove	er	Hydrophytic Vegetation Indicator	s:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Baccharis glomeruliflora	/ 	yes	FACW	Prevalence Index is ≤3.0¹		
Myrica cerifera	5	yes	FAC	Problematic Hydrophytic Ve	netation <sup>1</sup> (Evr	lain)
3.		<u>ycs</u>	170	1 Toblematic Trydrophytic Ve	getation (Exp	Jiairi)
4.	· <del></del>			Indicators of hydric soil and wetlan	d budrology r	nuct
5.			-	be present, unless disturbed or prol		nusi
6.				Definitions of Vegetation Strata:	Diematic.	
7.				benincions of vegetation octata.		
1.	15	= Total Cove	·	Trans 10/a a divinianta in avaludina vua a di		
Herb Stratum (Plot size:)	13	- Total Cove	<b>#1</b>	Tree- Woody plants, excluding woody approximately 20 ft (6m) or more in he		<i>(</i> 7.6
	<b>5</b> 0		OBL	cm) or larger in diameter at breast he		(7.0
Thalia geniculata	50	yes	OBL	<b>-</b>		
Ludwigia peruviana		yes	OBL	Sapling- Woody plants, excluding wo		than 3
3. Hyptis alata	5	no	OBL	approximately 20 ft (6m) or more in he in. (7.6 cm) DBH.	eignt and less	man 3
4. Rhynchospora inundata	5	no	OBL			
5. Andropogon glomeratus	5	no	FACW	Shrub- Woody plants, excluding woo approximately 3 to 20 ft (1 to 6 m) in h		
6. Centella asiatica	5	no	FACW	<del>-</del> '''	_	
7. Hydrocotyle spp.	5	no	OBL	Herb- All herbaceous (non-woody)pla		
8. 9.				herbaceous vines, regardless of size.		
				plants, except woody vines, less than m) in height.	approximater	y 3 IL (1
10.						
11.				Woody vine- All woody vines, regard	less of height.	
12.				1		
	95	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.				]		
2.						
3.						
4.				Hydrophytic		
5.	- <del></del>			Vegetation Present? Yes	<u>∕No</u>	<u>:</u>
	0	= Total Cove	er	1		
Remarks: (If observed, list morph	ological adapta	ations below).				
Percent cover estimates based or	n meandering s	survey of the b	roader co	mmunity.		

SOIL	·							Sampling Point:CC
Profile De	escription: (Describe 1	to the de	oth needed to doc	ument th	ne indicator o	r confirm the ab	sence of indicators.)	
Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1							gray fine sand
28-42	10 YR 5/3; 10 YR							brown and grayish brown fine sand
42-80	10 YR 6/2							light brownish gray fine sand
		=		=				
Type: C=	Concentration, D=Depl	etion, RM	=Reduced Matrix, 0	CS=Cove	red or Coated	Sand Grains.	Location: PL=Pore	Lining, M=Matrix.
	oil Indicators:							ndicators for Problematic Hydric Soils 3:
Histo	` '		,			urface (S8) (LRR		1 cm Muck (a9) (LRR O)
_	Epidon (A2)		,			(S9) (LRR S, T, 1		2 cm Muck (A10) (LRR S)
_	Histic (A3)			_		eral (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				ny Gleyed Mat		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)	T 10			leted Matrix (F:		-	Anomalous Bright Loamy Soils (F20)
	nic Bodies (A6) (LRR P Mucky Mineral (A7) (LF				ox Dark Surfac leted Dark Surf			(MLRA 153B) Red Parent Material (TF2)
	Presence (A8) (LRR L				ox Depression:		-	Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	••	•		(F10) (LRR U	. ,	-	Other (Explain in Remarks)
	eted Below Dark Surface	e (A11)				, F11) (MLRA 151)	- \	Outer (Explain in Condition)
	Dark Surface (A12)	· (, ,			,	asses (F12) (LR		31
Coas	t Prairie Redox (A16) (!	VILRA 150	DA)	Umb	oric Surface (F	13) (LRR P, T, U		·
Sand	y Mucky Mineral (S1) (L	.RR O, S)	١ .	Delta	a Orchric (F17)	(MLRA 151)		
Sand	y Gleyed Matrix (\$4)			Redi	uced Vertic (F1	18) (MLRA 150A	, 150B)	
Sand	y Redox (S5)			Pied	mont Floodpla	in Soils (F19) (MI	LRA 149A)	
Stripp	ed Matrix (S6)			Anor	malous Bright I	oamy Soils (F20	) (MLRA 149A, 153C,	, 153D)
	Surface (S7) (LRR P, S							
Restrictiv	e Layer (If observed):				-			
	Type:						l	
D	Depth (inches):						Hydric Soil Present	t? Yes <u>√</u> No
Remarks:								
1								
ł								
1								
i								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboros	_Sampling Date:	10/12/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	CP
Investigator(s): Justin Styer, Nate Goddard	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	Section, Township, Range	e: <u>27 27S 19E</u>		
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, con-	vex, none): <u>none</u>	SI	lope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.101880</u>	) Long:82.3	86267	D	atum: WGS84
Soil Map Unit Name: Immokalee fine sand			_NWI classification	i: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes✓	_ No	_ (If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstance:		es <u>No </u>
	or Hydrology		(If needed, explain	n any answers in F	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	ortant feature	s, etc.
Hydrophytic Vegetation Present?	Yes/_No				
Hydric Soil Present?	Yes No	s the Sampled Area v	vithin a Wetland?	Yes <u>√</u> N	o
Wetland Hydrology Present?	YesNo	]			
Remarks:		<b>3</b> ,			
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of t	wo required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	l Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	-	Dry-Season	Water Table (C2)	)
Sediment Deposits (B2)	Oxidized Rhizospheres	• •	Crayfish Bu	• ′	
Drift Deposits (B3)	Presence of Reduced In		-	isible on Aerial In	nagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in			Position (D2)	lagory (oc)
Iron Deposits (B5)	Thin Muck Surface (C7)				
<del></del>					
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutra	l Test (D5)	
Field Observations:	V-n / N-	Death (inchas): 0.2			
Surface Water Present?	Yes No		1		
Water Table Present?	Yes No	_ Depth (inches): 0	.    Wetland		
Saturation Present?	Yes No	_ Depth (inches): 0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> N	o
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			
Remarks:					
					•

VEGETATION - Use scientific na					mpling Point:	CP
Tara Charles (Dist since	Absolute %	Dominant Cassina?	Indicator	Dominance Test Worksheet	:	
Tree Stratum (Plot size:)	_ Cover	Species?	Status	Number of Dominant Species		
<u>1.</u> 2.		-		That Are OBL, FACW, or FAC		(A)
					<b>,</b> .	
3.		<del></del>		Total Number of Dominant	<u>5</u>	(B)
4.			·	Species Across All Strata:		
5.				Percent of Dominant Species	60.00	(A/B)
6.				That Are OBL, FACW, or FAC		
7.				Prevalance Index workshee		
0 1: 0: 4 (0:4 :	0	= Total Cov	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	<del></del> )			OBL species	x1=	_
Acer rubrum	15	yes	OBL	FACW species	x2=	
2.				FAC species	x3=	_
3.	_			FACU species	x4=	_
4.				UPL species	x5=	
5.				Column Totals:	(A)	(B)
6.				]		
7.				Prevalance Index = B/A =		
	15	= Total Cov	er	Hydrophytic Vegetation Indi		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Sambucus canadensis	15	yes	FACW	Prevalence Index is ≤3	.0 <sup>1</sup>	
2.				Problematic Hydrophyt	ic Vegetation <sup>1</sup> (Ex	plain)
3.						
4.				Indicators of hydric soil and v	vetland hydrology r	must
5.				be present, unless disturbed of	or problematic.	
6.				Definitions of Vegetation St	rata:	
7.						
	15	= Total Cov	er	Tree- Woody plants, excluding	woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or mor	e in height and 3 in.	. (7.6
1. Ludwigia peruviana	30	yes	OBL	cm) or larger in diameter at brea	ast height (DBH).	
2. Eupatorium capillifolium	10	yes	FACU	Sapling- Woody plants, excludi	ng woody vines,	
3.				approximately 20 ft (6m) or mor		than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding	g woody vines,	
6.				approximately 3 to 20 ft (1 to 6 r		
7.				Herb- All herbaceous (non-woo	dv)plants including	
8.				herbaceous vines, regardless o		
9.				plants, except woody vines, less		
10.				m) in height.		
11.				Woody vine- All woody vines, re	egardless of height.	
12.				1		
	40	= Total Cov	er	1		
Woody Vine Stratum (Plot size:_	)					
1. Rubus spp.	50	yes	FACU			
Paederia foetida	5	no	NL	1		
Vitus rotundifolia		no	FAC	<del> </del>		
4.	<del> </del>			Hydrophytic		
5.				1 * ' *	s √ No	
	60	= Total Cov	er			······································
Remarks: (If observed, list morp				L		

Percent cover estimates based on meandering survey of the broader community.

rofile Description: (De						Sampling Point:
	escribe to the de	pth needed to doc	ument the indicator or	confirm the abs	sence of indicators.)	
epth!	Matrix		Redox Features			
ches) Color (m	noist) %	Color (moist)		Loc²	Texture	Remarks
3 10 YR 3/1						very dark gray fine sand
36 10 YR 7/1		<del></del>				light gray fine sand
-46 10 YR 2/1						black fine sand
-52 5 YR 3/2						dark reddish brown fine sand
-52 5 TR 3/2						dark reduish brown line salid
<u>'                                    </u>		=Reduced Matrix, C	S=Covered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore	
dric Soil Indicators:						ndicators for Problematic Hydric Soils 3:
_Histol (A1)			Polyvalue Below Su	ırface (S8) (LRR	S, T, U) _	1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)			Thin Dark Surface (	S9) (LRR S, T, U	J) _	2 cm Muck (A10) (LRR S)
Black Histic (A3)			Loamy Mucky Mine	ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A	44)	•	Loamy Gleyed Matr	ix (F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A		,	Depleted Matrix (F3		-	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6		•	Redox Dark Surfac		-	(MLRA 153B)
5 cm Mucky Mineral		) .	Depleted Dark Surf		-	Red Parent Material (TF2)
Muck Presence (A8	3) (LRR U)		Redox Depressions	i (F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
 1 cm Muck (A9) <b>(</b> LF	RR P,T)		Marl (F10) (LRR U)	)	-	Other (Explain in Remarks)
_Depleted Below Dar	rk Surface (A11)		Depleted Orchric (F	11) (MLRA 151)		
Thick Dark Surface		•	Iron-Manganese Ma		O D T)	
_	• •	•				Indicators of hydrophytic vegetation and wetland
_Coast Prairie Redox	x (A16) (MLRA 15	0A) .	Umbric Surface (F1	3) (LRR P, T, U)	ŀ	hydrology must be present, unless disturbed or
Sandy Mucky Miner	ol (C1) /I DD () C	١	Delta Orchric (F17)	(MLRA 151)	ŗ	problematic.
		,		•	4505)	
Sandy Gleyed Matri	ix (S4)	-	Reduced Vertic (F1			
Sandy Redox (S5)		,	Piedmont Floodplai	, ,,	•	
Stripped Matrix (S6)	)		Anomalous Bright L	oamy Soils (F20).	) (MLRA 149A, 153C,	153D)
Dark Surface (S7) (	IRRPSTU					
estrictive Layer (If ob						
estrictive Layer (If ob	oserved):				Hydric Soil Present	?? Yes <u>✓</u> No
estrictive Layer (If ob Type: Depth (inches	oserved):				Hydric Soil Present	?? Yes <u>✓</u> No
strictive Layer (If ob Type: Depth (inches	oserved):				Hydric Soil Present	?? Yes <u>✓</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh Sampling Date: 10/12/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	. Sampling Point: CQ		
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: 35 27S 19E		
Landform (hillslope, terrace, etc.): N/A	·	Local relief (concave, con-	vex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.097987</u>	Long:82.3	81663	Datum: WGS8	34
Soil Map Unit Name: Immokalee fine sand			_NWI classification:	Freshwater Emergent Wetlar	nd
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	(If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes No v	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes/No	Is the Sampled Area v	vithin a Wetland?	Yes No	
Wetland Hydrology Present?	Yes/No	]			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:				ors (minimum of two required)	
Primary Indicators (minimum of one is required; of			Surface Soil (		
Surface Water (A1)	Water-Stained Leaves (i	B9)		etated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat		
Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim Lir	• •	
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season V	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burre	ows (C8)	
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	in Tilled Soils (C6)Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	· · · · · · · · · · · · · · · · · · ·			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:	Ala /				
Surface Water Present?	YesNo		-		
Water Table Present?	Yes No		- Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na well periol photos previous	inenections) if available:	Present?	Yes No	
Describe Necorded Data (stream gauge, monitori	ng well, aeliai photos, previous	mspections), it available.			
Remarks:					

VEGETATION - Use scientific na	mes of plants			Sampling Poir	nt: <u>CQ</u>
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
		орсоюз:	Olalas	Number of Dominant Species	
<u>1.</u> 2.				That Are OBL, FACW, or FAC:	<u>4</u> (A)
3.				Total Number of Dominant	
3. 4.				Species Across All Strata:	<u>5</u> (B)
	•			<b>f</b> `	
5.		<del></del>		Percent of Dominant Species	<u>30.00</u> (A/B)
6.				That Are OBL, FACW, or FAC:	
7.					
Sapling Stratum (Plot size:		= Total Cove	er	Total % Cover of: Multi OBL species x1=	ply by:
Sapium sebiferum	15	yes	FAC	FACW speciesx2=	
Salix caroliniana	10	yes	OBL	FAC species x3=	
3.				FACU species x4=	
4.				UPL species x5=	
5.				Column Totals: (A)	(B)
6.	·				
7.				Prevalance Index = B/A =	
	25	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	- 10(a) 0010	<b>-</b> 1	✓ Dominance Test is 50%	
. —	<del>.      /</del>			Prevalence Index is ≤3.0 <sup>1</sup>	
1.	-			<del></del>	1 (Tlain)
2.				Problematic Hydrophytic Vegetati	on (Explain)
3.				1	
4.				Indicators of hydric soil and wetland hyd	
5.				be present, unless disturbed or problema	atic.
6.				Definitions of Vegetation Strata:	
7.				1	
	0	= Total Cove	er	Tree- Woody plants, excluding woody vines	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height	
Panicum hemitomon	25	yes	OBL	cm) or larger in diameter at breast height ([	ЭВН).
Ludwigia peruviana	10	yes	OBL	Sapling- Woody plants, excluding woody v	ines,
<ol><li>Rhexia spp.</li></ol>	5	no	FACW	approximately 20 ft (6m) or more in height a	and less than 3
4.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vin	es,
6.				approximately 3 to 20 ft (1 to 6 m) in height	
7.				Herb- All herbaceous (non-woody)plants, in	ncludina
8.				herbaceous vines, regardless of size. Inclu	
9.				plants, except woody vines, less than appro	
10.	•			m) in height.	
11.				Woody vine- All woody vines, regardless of	of height.
12.				1 1 1	J
	40	= Total Cove		1	
Woody Vine Stratum (Plot size:	1	1010,000	<b>-</b> 1		
	20	V00	FACU		
1. Rubus spp.		yes	FACU	-	
2.	· <del></del>				
3.				4	
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u>	No
	20	= Total Cove	er		
Remarks: (If observed, list morph	-				
Percent cover estimates based or	n meandering s	survey of the b	proader co	mmunity.	

County/soil:	Hillshorough-	Immokalee

SOIL								Sampling Point:C		
Profile De	scription: (Describe	to the dep	th needed to doc	ument the	e indicator or	confirm the ab	sence of indicators.	)		
Depth	Matrix				Features			•		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks		
(mones)	Goldi (moist)	· ——	Odior (moist)		.,,,,,		TOXIGIO	Nomano		
0-8	10 YR 3/1							very dark gray fine sand		
8-36	10 YR 7/1							light gray fine sand		
36-46	10 YR 2/1							black fine sand		
46-52	5 YR 3/2							dark reddish brown fine sand		
¹Tvpe: C=0	Concentration, D=Dep	letion, RM=	Reduced Matrix. 0	S=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.		
	I Indicators:		,					Indicators for Problematic Hydric Soils 3:		
Histol				Poho	atua Ralow Su	rface (S8) (LRR		1 cm Muck (a9) (LRR O)		
_	Epidon (A2)					S9) (LRR S, T, I		2 cm Muck (A10) (LRR S)		
							•			
	Histic (A3)		,			al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)		
	gen Sulfide (A4)				y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	ed Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)		
Organ	ic Bodies (A6) (LRR F	P, T, U)		Redo	x Dark Surface	e (F6)		(MLRA 153B)		
5 cm l	Aucky Mineral (A7) (L	RR P.T.UI		Deple	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)		
_	Presence (A8) (LRR				x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)		
		0,			•					
1 cm I	fluck (A9) (LRR P,T)			Marl (	(F10) (LRR U)			Other (Explain in Remarks)		
Denlei	ed Below Dark Surfac	'e (Δ11)		Deple	ted Orchric (F	11) (MLRA 151)	1			
		~ (, , , , ,			•	sses (F12) (LRI				
	Dark Surface (A12)				•			<sup>3</sup> Indicators of hydrophytic vegetation and wetland		
Coast	Prairie Redox (A16) (	MLRA 150	A)	Umbr	ibric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbed or					
Condi	Mucky Mineral (S1) (I	100 A 61		Delta	Orchric (F17)	(MI PA 151)		problematic.		
		LKK U, 3)						,		
	Gleyed Matrix (S4)				•	B) (MLRA 150A,	•			
	Redox (S5)					n Soils (F19) (MI				
Stripp	ed Matrix (S6)			Anom	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)		
Dark 9	Surface (S7) (LRR P,	STID								
	Layer (If observed)						1			
		•								
	Туре:						l			
	Depth (inches):						Hydric Soil Preser	nt? Yes _ ✓ No		
Remarks:										
ł										
1										
ĺ										
1										
L										

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date	:10/12/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	_	Sampling Point	t: CR
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: <u>35 27S 19E</u>		
Landform (hillslope, terrace, etc.):N/A	4	Local relief (concave, con	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.092651	1Long: <u>-82.</u> 3	357666		Datum: <u>WGS84</u>
Soil Map Unit Name: Immokalee fine sand			_NWI classification	n: Freshwater E	Emergent Wetland
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain i	n Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstance		′es <u>No ✓</u>
	or Hydrology		(If needed, explai	in any answers in	Remarks)
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ing point locations, t	transects, imp	ortant feature	es, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	is the Sampled Area v	within a Wetland?	Yes✓N	lo
Wetland Hydrology Present?	Yes No				
Remarks:					
					l
			··· · · · · · · · · · · · · · · · · ·		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indica	ntors (minimum of	two required)
Primary Indicators (minimum of one is required; of	check all that apply)	Surface Soil Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	egetated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage P	atterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim	Lines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Seasor	n Water Table (C2	2)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bu		
Drift Deposits (B3)	Presence of Reduced Ir	fron (C4)Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction i			c Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)				
✓ Inundation Visible on Aerial Imagery (B7)		,	FAC Neutral Test (D5)		
Field Observations:			1		
Surface Water Present?	Yes No	Depth (inches): 0-36			
Water Table Present?	Yes No	_	_1		
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)			Hydrology Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	1		<u> </u>
, , , , , , , , , , , , , , , , , , , ,	<b>3</b>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
B			<del> </del>		
Remarks:					

VEGETATION - Use scientific nar	mes of plants			s	Sampling Point:	<u>CR</u>
	Absolute %	Dominant	Indicator	Dominance Test Workshee	et:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	·			Number of Dominant Specie	s ,	/A\
2.				That Are OBL, FACW, or FA		(A)
3.				Total Number of Dominant	4	(7)
4.				Species Across All Strata:	<u>4</u>	(B)
5.		-		Percent of Dominant Specie	\$ 100.00	(5)
6.				That Are OBL, FACW, or FA		(A/B)
7.				Prevalance Index workshe		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.	,			FACW species	x2=	<b>-</b>
2.				FAC species	x3=	-
3.				FACU species	x4=	-
4.		·		UPL species	x5=	-
5.				Column Totals:	(A)	- (В)
6.					(° 7	<b>-</b> `-'
7.		<del></del>		Prevalance Index = B/A	. <b>=</b>	
<u> </u>		= Total Cove	÷r	Hydrophytic Vegetation Inc		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50		
Baccharis halimifolia	' 10	yes	FAC	Prevalence Index is ≤		
Myrica cerifera	10	ves	FAC	Problematic Hydroph		olain)
Ilex cassine	5	yes	FACW	1 Toblemade Hydroph	yllo vogotation (Exp	,,aiii,
4.		<u>yes</u>	IACVV	Indicators of hydric soil and	watland hydrology n	ouet
5.	,			be present, unless disturbed		lust
6.				Definitions of Vegetation S		
7.					,trau.	
<del>  `                                   </del>	25	= Total Cove	or .	Tree- Woody plants, excluding	a woody vines	
Herb Stratum (Plot size:)	20	- 10121 0010	"	approximately 20 ft (6m) or mo		176
1. Nuphar luteum	70	yes	OBL	cm) or larger in diameter at bro		(,,,
Woodwardia virginica	2	no	OBL	Sapling- Woody plants, exclu		
3.			ODL	approximately 20 ft (6m) or mo		than 3
4.	· <del></del>			in. (7.6 cm) DBH.	To in noight and less	tirai. S
5.		· · · · · · · · · · · · · · · · · · ·		Shrub- Woody plants, excludi	na woody vines	
6.				approximately 3 to 20 ft (1 to 6		
7.				1		
8.				Herb- All herbaceous (non-wo herbaceous vines, regardless		dv
9.				plants, except woody vines, le		•
10.				m) in height.	30 than approximately	010,
11.				Woody vine- All woody vines,	recordings of height	
12.				Woody virie- All woody viries,	regardless of fielding	
12.	72	= Total Cove				
Wasdy Vina Stratum (Plot size:	12	= TOtal Cove	#I			
Woody Vine Stratum (Plot size:	/		ļ			
1.						
2.						
3.				l		
4.				Hydrophytic	faa / Na	
5.		- Total Caus		Vegetation Present?	′es <u> </u>	<del></del>
Demodra (If sheer and list marsh	0	= Total Cove	;r			
Remarks: (If observed, list morpho Percent cover estimates based on	-		roader cor	mmunity		

SOIL	il: Hillsborough- Immok	alee						Sampling Poir	nt:C
	scription: (Describe	to the de	oth needed to docu		or confirm the ab	sence of indicators.)			
Depth	Matrix			Redox Features		_			
(inches)	Color (moist)	%	Color (moist)		Loc²	Texture		Remarks	
0-8	10 YR 3/1						very dark gray	v fine sand	
8-36	10 YR 7/1					<del></del>	light gray fine		
36-46	10 YR 2/1			— —		<del></del>	black fine san		
46-52	5 YR 3/2							orown fine sand	
									<u> </u>
							-		
							-		
Type: C=	Concentration, D=Dept	etion, RM	=Reduced Matrix, C	S=Covered or Coat	ed Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matr	ix.	
	il Indicators:							roblematic Hydric Soils	s <sup>3</sup> :
Histol			_		Surface (S8) (LRR			(a9) (LRR O)	
	Epidon (A2)		-		ce (S9) <b>(LRR S, T, I</b>			(A10) (LRR S)	
	Histic (A3)		_		lineral (F1) (LRR O)			ertic (F18) (outside MLR/	
	gen Sulfide (A4)		-	Loamy Gleyed N		-		oodplain Soils (F19) (LRF	R P, S, T)
	ied Layers (A5)		-	Depleted Matrix				Bright Loamy Soils (F20)	
Orgar	nic Bodies (A6) (LRR F	P, T, U)	-	Redox Dark Sur	` '		(MLRA 15		
5 cm	Mucky Mineral (A7) (LI	RR P,T,U		Depleted Dark S	Surface (F7)	-	Red Parent	Material (TF2)	
Muck	Presence (A8) (LRR	U)	-	Redox Depressi	ons (F8)	-	Very Shallov	w Dark Surface (TF12) (L	RR T, U)
1 cm	Muck (A9) (LRR P,T)		_	Marl (F10) (LRF	l U)		Other (Expla	ain in Remarks)	
 Denle	ted Below Dark Surfac	·ρ (Δ11)		Depleted Orchri	c (F11) (MLRA 151)	1			
		~ (~~)	-		Masses (F12) (LRI	P			
Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A)							drophytic vegetation and v		
		UA) .		(F13) (LRR P, T, U)			oe present, unless disturb	ed or	
Sandy	/ Mucky Mineral (S1) (I	LRR O, S		Delta Orchric (F	17) (MLRA 151)	1	problematic.		
Sandy	Gleyed Matrix (S4)		_	Reduced Vertic	(F18) (MLRA 150A,	, 150B)			
Sand	Redox (S5)		-		ptain Soils (F19) <b>(MI</b>			•	
Stripp	ed Matrix (S6)		-	Anomalous Brig	ht Loamy Soils (F20	) (MLRA 149A, 153C	153D)		
Dark	Surface (S7) (LRR P,	S, T, U)							
Restrictiv	e Layer (If observed)	:				I			
	Туре:					1			
	Depth (inches):					Hydric Soil Presen	t? Yes	No	•
Remarks:									
				-					
						4			

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling D			e: <u>10/13/09</u>
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: CS	
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 35 27S 19E		
Landform (hillslope, terrace, etc.):N/A	·	Local relief (concave, conv	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.092203	Long: <u>-82.3</u>	55623		Datum: WGS84
Soil Map Unit Name: Myakka fine sand			_NWI classification:	_NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	Yes <u>No ✓</u>
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers i	n Remarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>			ransects, impo	rtant featui	es, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	Yes✓	No	
Wetland Hydrology Present?	Yes/No				
Remarks:		•			
					•
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum c	f two required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)	Water-Stained Leaves (E	B9)	Sparsely Veg	etated Concav	re Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	•	Dry-Season \	Nater Table (C	2)
Sediment Deposits (B2)	Oxidized Rhizospheres of	•	Crayfish Burn		-,
Drift Deposits (B3)	Presence of Reduced Iro		-	sible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in				
Iron Deposits (B5)	Thin Muck Surface (C7)	<del></del> , , , , , , , , , , , , , , , , , ,			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	• •	
Field Observations:		,	1770770000	1001 (00)	<u></u>
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No				
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)	110	, Dopin (mones)	Hydrology Present?	Yes _<	No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	i resenti	<u> </u>	
Describe Nessites Bala (elicalii gaage, ilicililoii	ing well, desital priotos, provious	mopeononoj, n avanasie.			
Remarks:					

VEGETATION - Use scientific na				<u>'</u>	ng Point:	CS
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	_ Cover	Species?	Status	1		
1.				Number of Dominant Species	2	(A)
2.				That Are OBL, FACW, or FAC:	=	(, ,)
3.				Total Number of Dominant	<u>2</u>	(B)
4.				Species Across All Strata:	=	(5)
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	100.00	(1410)
7.	·			Prevalance Index worksheet:		
	0	= Total Cove	r	<u>Total % Cover of:</u>	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1	=	
1.	•			FACW species x2	<u></u>	_
2.				FAC species x3	3=	
3.				FACU speciesx		
4.				UPL species x5		_
5.				Column Totals: (A		— (B)
6.					·/	_(
7.				Prevalance Index = B/A =		
	0	= Total Cove		Hydrophytic Vegetation Indicate	rs:	
Shrub Stratum (Plot size:	)	7010.0070	•	✓ Dominance Test is 50%		
1.	<del>-</del> -'			Prevalence Index is ≤3.0 <sup>1</sup>		
2.		<del></del>		Problematic Hydrophytic Ve	agetation <sup>1</sup> (Evr	nlain)
3.				Froblematic Hydrophytic V	egetation (Exp	piairi)
				1,		
4.				Indicators of hydric soil and wetla		nust
5. 6.	<del></del>			be present, unless disturbed or pre		
	<del></del>			Definitions of Vegetation Strata		
7.		<del></del>	<del></del>	<del></del>		
Hart Charles (Dish size	0	= Total Cove	r	Tree- Woody plants, excluding wood	•	( <del>-</del> -
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in		. (7.6
1. Panicum repens	60	yes	FACW	cm) or larger in diameter at breast h		
Pontederia cordata	30	yes	OBL	Sapling- Woody plants, excluding w	•	
Diodia virginiana	10	no	FACW	approximately 20 ft (6m) or more in	height and less	than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding wo		
6.				approximately 3 to 20 ft (1 to 6 m) in	height.	
7.				Herb- All herbaceous (non-woody)p	lants, including	
8.				herbaceous vines, regardless of size		
9.				plants, except woody vines, less tha	n approximatel	y 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, regar	dless of height.	
12.				1		
	100	= Total Cove	r			
Woody Vine Stratum (Plot size:	)			1		
1.						
2.				1		
3.	<del></del>					
4.				Hydrophytic		
5.	<del>-</del> . <del></del>			Vegetation Present? Yes _	<u>√No</u>	
<del></del>		= Total Cove		1.03000001110361101		<del>-</del>
Remarks: (If observed, list morph			•	1		

Percent cover estimates based on meandering survey of the broader community.

SOIL Profile D	escription: (Describe	to the de	oth needed to do	ument th	e indicator or	confirm the ab	sence of indicators	Sampling Point:	
Depth	Matrix		,		Features			,	
inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks	
<b>-</b> 5	10 YR 3/1							very dark gray fine sand	
-20	10 YR 6/1							gray fine sand	
0-25	N 2/0							black fine sand	
5-30	5 YR 3/3							dark reddish brown fine sand	
		_				· <del></del>			
Type: C=	Concentration, D=Dep	letion, RM	=Reduced Matrix,	CS=Cove	red or Coated	Sand Grains.	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.	
lydric S	oil Indicators:							Indicators for Problematic Hydric Soils 3:	
Histo	I (A1)					ırface (S8) (LRR		1 cm Muck (a9) (LRR O)	
	Epidon (A2)					S9) (LRR S, T,		2 cm Muck (A10) (LRR S)	
	: Histic (A3)					ral (F1) ( <b>LRR O</b> )	)	Reduced Vertic (F18) (outside MLRA 150A, B)	
	ogen Sulfide (A4)				ny Gleyed Mati			Piedmont Floodplain Soils (F19) (LRR P, S, T)	
	fied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)	
Orga	nic Bodies (A6) (LRR F	P, T, U)			ox Dark Surfac			(MLRA 153B)	
5 cm	Mucky Mineral (A7) (L	RR P,T,U	)	Depl	eted Dark Surf	ace (F7)		Red Parent Material (TF2)	
✓ Muck Presence (A8) (LRR U)Redox Depressions (F8)				(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)			
1 cm Muck (A9) (LRR P,T)Marl		(F10) (LRR U)	١		Other (Explain in Remarks)				
Deple	eted Below Dark Surface	æ (A11)		Depl	eted Orchric (F	11) (MLRA 151	)		
Thick	Dark Surface (A12)			Iron-	Manganese Ma	asses (F12) (LR	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland	
Coas	t Prairie Redox (A16) (	MLRA 15	0A)	Umbric Surface (F13) (LRR P, T, U)			)	hydrology must be present, unless disturbed or	
Sand	y Mucky Mineral (S1) (	LRR O, S	)	Delta	a Orchric (F17)	(MLRA 151)		problematic.	
Sand	y Gleyed Matrix (S4)			Red	uced Vertic (F1	8) (MLRA 150A	, 150B)		
Sand	y Redox (S5)			Pied	mont Floodplai	n Soils (F19) (M	LRA 149A)		
Strip	ped Matrix (S6)			Anor	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	C, 153D)	
	Surface (S7) (LRR P,								
Restrictiv	e Layer (If observed)	:				,			
	Type:						Undria Sail Draga	nt? Yes √ No	
Remarks:	Depth (inches):						Hydric Soil Prese	nt? Yes <u>✓ No</u>	
temaiks.									

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/13/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: CT
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range		
Landform (hillslope, terrace, etc.): N/A	4	Local relief (concave, conv	vex. none): none	Slope (%):
Subregion (LRR or MLRA): LRR U		·		Datum: WGS84
Soil Map Unit Name: Water		v	NWI classification	Riverine
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes _ ✓		(If no, explain in Remarks)
, ,	or Hydrology		Are circumstances	
	or Hydrology			any answers in Remarks)
SUMMARY OF FINDINGS - Attach si			•	•
Hydrophytic Vegetation Present?	Yes <u>√</u> No	T .	<del></del>	
Hydric Soil Present?	YesNo	Is the Sampled Area w	ithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes No			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required;	check all that apply)		Surface Soil	Cracks (B6)
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LI	RR U)	Moss Trim L	ines (B16)
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)
Drift Deposits (B3)	Presence of Reduced In	ron (C4)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	in Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No		1	
Water Table Present?	Yes No	Depth (inches): 0		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology	
(includes capillary fringe)			Present?	Yes No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:	•	
•				
Remarks:				

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	<u>CT</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	,			Number of Dominant Species 5	(Δ)
2.				That Are OBL, FACW, or FAC: 5	(A)
2. 3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
<b>4</b> . <b>5</b> .				Percent of Dominant Species	(A (D)
6.		<del>(and and and and and and and and and and </del>		That Are OBL, FACW, or FAC:	(A/B)
7.	F - 1			Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	I
Taxodium distichum	10	yes	OBL	FACW species x2=	<del></del>
Liquidambar styraciflua	10	yes	FAC	FAC species x3=	<del></del>
				FACU species x4=	<u> </u>
14.				UPL species x5=	
5				Column Totals: (A)	— (B)
3. 4. 5. 6.					— (- <i>'</i>
7.				Prevalance Index = B/A =	
<del>/·</del>		= Total Cove	·r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	1012. 20. 2	•	✓ Dominance Test is 50%	
Myrica cerifera	<del>-</del> ′ 5	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	į
		yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	(nielay
2. 3. 4.	. ———			1 Tobiethatic Hydrophytic Vegetation (E)	(plain)
Δ.				1	
<u>4.</u>				<sup>1</sup> Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic.	musi
5. 6.				Definitions of Vegetation Strata:	
7.				Demilions of Vegetation Strata.	
[/.		= Total Cove		- Nata-do-dayata analoding was do vines	
Herb Stratum (Plot size:)	J	= TOTAL COVE	.r	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in	. (7.6
	10		ODI	cm) or larger in diameter at breast height (DBH).	1. (7.0
Eichhornia sp.	10	yes	OBL		
Osmunda regalis     3.	5	yes	OBL	Sapling- Woody plants, excluding woody vines,	- 45-22 2
3.				approximately 20 ft (6m) or more in height and lesin. (7.6 cm) DBH.	s man s
4.				<b>.</b> ' '	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wo	
9.				plants, except woody vines, less than approximate	ly 3 π ( i
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of heigh	t.
12.					
	15	= Total Cove	r		
Woody Vine Stratum (Plot size:	<u></u> )				
1				]	
2.					
3.					
4.				Hydrophytic	
5.	· <del></del>			Vegetation Present? Yes <u>√</u> No_	<u> </u>
	0	= Total Cove	r	1 .	I
Remarks: (If observed, list morpho	ological adapta	tions below).			
Percent cover estimates based on	-	•	roader cor	mmunity.	

County/soil: Hillsborough- Water SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Redox Features Texture Remarks (inches) Color (moist) Color (moist) Type Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) \_1 cm Muck (a9) (LRR O) \_Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) \_Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F3) \_ Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Depleted Dark Surface (F7) Red Parent Material (TF2) \_5 cm Mucky Mineral (A7) (LRR P,T,U) ✓ Muck Presence (A8) (LRR U) Redox Depressions (F8) \_Very Shallow Dark Surface (TF12) (LRR T, U) \_1 cm Muck (A9) (LRR P,T) \_Marl (F10) (LRR U) Other (Explain in Remarks) \_Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T) Thick Dark Surface (A12) <sup>3</sup>Indicators of hydrophytic vegetation and wetland Coast Prairie Redox (A16) (MLRA 150A) \_Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbed or Delta Orchric (F17) (MLRA 151) problematic. Sandy Mucky Mineral (S1) (LRR O, S) Reduced Vertic (F18) (MLRA 150A, 150B) \_Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No Remarks:

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date: 10/13/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	Sampling Point: CU		
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: 31 27S 20E		
Landform (hillslope, terrace, etc.): N/A	·	Local relief (concave, con	vex, none): <u>none</u>		_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.087766	Long:82.0	349881		Datum: WGS84
Soil Map Unit Name: Chobee sandy loam			_NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explair	in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal?	Yes <u>No ✓</u>
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers i	in Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	rtant featu	res, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	is the Sampled Area v	vithin a Wetland?	Yes <u></u> ✓	No
Wetland Hydrology Present?	YesNo				
Remarks:					
IIVADAL GOV					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate		of two required)
Primary Indicators (minimum of one is required; o			Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)		
Surface Water (A1)	Water-Stained Leaves (I	B9)			ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	, ,	
Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim Li	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (0	
Sediment Deposits (B2)	Oxidized Rhizospheres of				
Drift Deposits (B3)	Presence of Reduced Iro				Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	-	comorphic Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	, ,	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:	No.				
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ing well periol photoe previous	inenactions) if available:	Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	mspections), ii available.			
Remarks:					
		•			
					i

VEGETATION - Use scientific nar	mes of plants			Sampling	g Point:	CU
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3. 4.				Total Number of Dominant Species Across All Strata:	<u>4</u>	(B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>75.00</u>	(A/B)
7.				Prevalance Index worksheet:		
		= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)		FACW	OBL species x1= FACW species x2=	-	_
Taxodium distichum	10	yes	OBL	FAC species x3=		-
	5	yes	FAC	FACU species x4=		-
, ,		no	FAC	UPL species x5=		_
4.	· <del></del>					- <sub>/D\</sub>
5.	· ———			Column Totals:(A)		_(B)
6. 7.				Dravalance Index - B/A -		
7.	35	= Total Cove	·	Prevalance Index = B/A = Hydrophytic Vegetation Indicator	···	
Shrub Stratum (Blot size:	١	- rotal Cove	11	✓ Dominance Test is 50%	3.	
Shrub Stratum (Plot size:	<del>. '</del>			Prevalence Index is ≤3.0 <sup>1</sup>		
1.	· ——			<del></del>		
2.	<del></del>	<del></del>		Problematic Hydrophytic Veg	getation (Exp	nain)
3.	· ——			1		
4.				Indicators of hydric soil and wetlan		nust
5.	·			be present, unless disturbed or prol	piematic.	
6.				Definitions of Vegetation Strata:		
7.				<u> </u>		
Herb Stratum (Plot size:)	0	= Total Cove		Tree- Woody plants, excluding woody approximately 20 ft (6m) or more in he	eight and 3 in.	(7.6
Eupatorium capillifolium	20	yes	FACU	cm) or larger in diameter at breast he	ignt (DBH).	
Woodwardia virginica     3.	5	yes	OBL	Sapling- Woody plants, excluding wo approximately 20 ft (6m) or more in he		than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding woo	dy vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in h	neight.	
7.				Herb- All herbaceous (non-woody)pla	ints. includina	
8.				herbaceous vines, regardless of size.		dy
9.				plants, except woody vines, less than		
10.				m) in height.		
11.				Woody vine- All woody vines, regard	less of height.	
12.				1		
	25	= Total Cove	er	1		
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.	-					
4.				Hydrophytic		
5.				Vegetation Present? Yes	<u>√No</u>	,
1		= Total Cove	r	1		
Remarks: (If observed, list morph						
Percent cover estimates based or			roader co	mmunity.		
		-		<del>▼</del>		

								Sampling Point:	
	scription: (Describe	to the de	pth needed to doc			confirm the at	sence of indicators	.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	%	Features Type	Loc²	Texture	Remarks	
D-16	10 YR 2/1		10 YR 5/1				few small pockets	black loamy fine sand	
16-33	10 YR 4/1		10 11( 0/1				1044 Small pockets	dark gray sandy clay loam	
	77 111 111						common fine		
33-49	10 YR 5/2		10 YR 6/4				mottles	grayish brown sandy clay loam	
			10 YR 5/6; 7.5				few fine distinct		
49-59	10 YR 7/1		YR 5/6				mottles	light gray loamy fine sand	
	Concentration, D=Dep	letion, RN	1=Reduced Matrix, (	CS=Cove	red or Coated	Sand Grains.	*Location: PL=Por	e Lining, M=Matrix.	
	il Indicators:			D-1	D.I O.	-f (00) (I DE		Indicators for Problematic Hydric Soils 3:	
Histol	(A1) Epidon (A2)					ırface (S8) (LRF S9) (LRR S, T,		1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S)	
	Histic (A3)					ral (F1) (LRR O		Reduced Vertic (F18) (outside MLRA 150A, B)	
	gen Sutfide (A4)				ny Gleved Matr		,	Piedmont Floodplain Soils (F19) (LRR P, S, T)	
	ied Layers (A5)				leted Matrix (F3			Anomalous Bright Loamy Soils (F20)	
Organ	ic Bodies (A6) (LRR I	P, T, U)		Red	ox Dark Surfac	e (F6)		(MLRA 153B)	
5 cm l	Mucky Mineral (A7) (L	RR P,T,U		Depl	leted Dark Surf	ace (F7)		Red Parent Material (TF2)	
	Presence (A8) (LRR				(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm l	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)	1		Other (Explain in Remarks)	
	ted Below Dark Surface	no (A11)				11) (MLRA 151	١	,	
	Dark Surface (A12)	æ (ATT)			•	asses (F12) (LR	•		
	` '				•			Indicators of hydrophytic vegetation and wetland	
Coast	Prairie Redox (A16) (	MLRA 15	60A)	_	•	3) (LRR P, T, U	)	hydrology must be present, unless disturbed or	
Sandy	Mucky Mineral (S1) (	LRR O, S		Delta	a Orchric (F17)	(MLRA 151)		problematic.	
	Gleyed Matrix (S4)			_	,	8) (MLRA 150A			
	Redox (S5)			_	•	n Soils (F19) (M	•		
Strippe	ed Matrix (S6)			Anoi	malous Bright L	oamy Soils (F20	)) (MLRA 149A, 1530	C, 153D)	
Dark S	Surface (S7) (LRR P,	S, T, U)							
	e Layer (if observed)	:							
	Туре:								
	Depth (inches):						Hydric Soil Preser	nt? Yes <u>√</u> No	
Remarks:	Deptir (inches).						Invaric Soil Presei	itr tes v No	
								•	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date:10	0/13/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: C	.V
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	6 28S 20E		
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, conv	ex, none): <u>none</u>	Slope (	%):
Subregion (LRR or MLRA): LRR U	Lat: 28.080732	2Long: <u>-82.3</u>	48278	Datum	WGS84
Soil Map Unit Name: St. John's fine sand				: Shrub wetland	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes	. No	_ (If no, explain in Rem	arks)
Are Vegetation, Soil,	or Hydrology				
	or Hydrology		(If needed, explain	n any answers in Rema	rks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	ortant features, et	tc
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	Yes✓No		
Wetland Hydrology Present?	Yes No				
Remarks:					
					l
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of two re	equired)
Primary Indicators (minimum of one is required; o	theck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)		getated Concave Surfa	ice (B8)
High Water Table (A2)	Aquatic Fauna (B13)	( <b>,</b>		atterns (B10)	` '
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR II)	Moss Trim L	, ,	
Water Marks (B1)	Hydrogen Sulfide Odor	•		Water Table (C2)	
· ′	Oxidized Rhizospheres		Crayfish Bu		
Sediment Deposits (B2)					/Ca)
Drift Deposits (B3)	Presence of Reduced In	, -		omorphic Position (D2)	
Algal Mat or Crust (B4)	Recent Iron Reduction in				
Iron Deposits (B5)	Thin Muck Surface (C7)	·			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutra	Test (D5)	
Field Observations:		5 -# 6b). 0.0			
Surface Water Present?	Yes No		1		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)			Present?	Yes <u>√</u> No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			
Remarks:					
·					

VEGETATION - Use scientific na	mes of plants			San	npling Point:	CV
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	<u>8</u>	(A)
2.				That Are OBL, FACW, or FAC:	×	(17)
3.				Total Number of Dominant	9	(B)
4.				Species Across All Strata:	2	(0)
5.				Percent of Dominant Species	88.89	(A/R)
6.				That Are OBL, FACW, or FAC:	00.03	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	_
Acer rubrum	10	yes	OBL	FACW species	x2=	_
Liquidambar styraciflua	10	yes	FAC	FAC species	x3=	_
3. Quercus laurifolia	5	yes	FACW	FACU species	x4=	<del>-</del> .
4.				UPL species	x5=	_
5.	_			Column Totals:	(A)	(B)
6.				1	-	<b>-</b> '
7.				Prevalance Index = B/A =		
	25	= Total Cove	er	Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Baccharis glomeruliflora	15	yes	FACW	Prevalence Index is ≤3.0	<b>J</b> 1	
2.				Problematic Hydrophytic		olain)
3.			-	<del></del>		•
4.				<sup>1</sup> Indicators of hydric soil and we	tland hydrology n	nust
5.	-			be present, unless disturbed or		iuo.
6.	-			Definitions of Vegetation Stra		
7.				1		
	15	= Total Cove	r	Tree- Woody plants, excluding w	oodv vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Eupatorium capillifolium	15	yes	FACU	cm) or larger in diameter at breas		•
Woodwardia virginica	15	yes	OBL	Sapling- Woody plants, excluding	a woodv vines.	
Osmunda cinnamomea	15	yes	FACW	approximately 20 ft (6m) or more		than 3
4. Andropogon virginicus	15	yes	FAC	in. (7.6 cm) DBH.	J	
5. Centella asiatica	15	yes	FACW	Shrub- Woody plants, excluding	woodv vines,	
6. Osmunda regalis	10	no	OBL	approximately 3 to 20 ft (1 to 6 m	•	
7.				Herb- All herbaceous (non-wood		
8.	•			herbaceous vines, regardless of		ndv
9.	. ——			plants, except woody vines, less		
10.		<del> </del>		m) in height.		,
11.				Woody vine- All woody vines, re	gardless of height.	
12.				, , , , , , , , , , , , , , , , , , , ,	,ura ag	
	85	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)		`			
11	/					
2.				1		
3.						
4.				  Hydrophytic		
5.	. ———			1	√ No	
<u> </u>	0	= Total Cove	r	vegetation riesent:		<del></del>
Remarks: (If observed, list morph			•			
Percent cover estimates hased or	-	•	roador cor	mmunity		

Color (moist) % Color (moist) % Type Loc Texture Remarks  10 YR 2/1  10 YR 3/2  10 YR 6/2  36 10 YR 2/1  Dependent of the sand Very dark grayish brown fine sand light brownish gray fine sand black fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very dark grayish brown fine sand Very Grayish brown fine sand Very Grayish brown fine sand Very Grayish brown fine sand Very Grayish brown fine sand Very Grayish brown fine sand Very Grayish brown fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sand Very Gray fine sa	,		ince of mulcators.)	
10 YR 3/2   very dark grayish brown fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand black fine sand light brownish gray fine sand black fine sand light brownish gray fine sand black fine sand light brownish gray fine sand black fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish gray fine sand light brownish			Texture	Remarks
10 YR 3/Z	3.2/4			block fine and
Ight brownish gray fine sand   Ight brownish gray fine sand   Ight brownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish gray fine sand   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prownish   Ight prown				
Discretified Layers (A5)   Depleted Matrix (F3)   Depleted Below Dark Surface (A8) (LRR P,T,U)   Depleted Below Dark Surface (A8) (LRR P,T,U)   Depleted Below Dark Surface (A8) (LRR P,T,U)   Depleted Below Dark Surface (A8) (LRR P,T,U)   Depleted Below Dark Surface (A8) (LRR P,T,U)   Depleted Below Dark Surface (A8) (LRR P,T,U)   Depleted Dark Surface (F1) (MLRA 151)   Depleted Below Dark Surface (A10) (MLRA 150A)   Depleted Matrix (F3)   Depleted Below Dark Surface (A10) (MLRA 150A)   Depleted Matrix (F3)   Depleted Matrix (F3)   Depleted Below Dark Surface (F1) (MLRA 151)   Depleted Dark Surface (A10) (MLRA 150A)   Depleted Matrix (F3)   Depleted Dark Surface (A10) (MLRA 150A)   Depleted Dark Surface (A11)   Depleted Dark Surface (A12)   Depleted Dark Surface (A12)   Depleted Dark Surface (A13) (LRR P, T, U)   Depleted Dark Surface (A15)   Depleted Dark Surface (A16) (MLRA 150A)   Depleted Dark Surface (A17)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18) (MLRA 150A)   Depleted Dark Surface (A18				
E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Deplete Lining, M=Matrix.  Indicators for Problematic Hydric Soils in Incidence (SB) (LRR S, T, U)  I cm Muck (A10) (LRR S)  Experiment Floodplain Soils (F10) (LRR S)  Experiment Floodplain Soils (F19) (LRR S)  Experiment Floodplain Soils (F19) (LRR S)  Experiment Floodplain Soils (F19) (LRR S)  Experiment Floodplain Soils (F19) (LRR S)  Experiment Floodplain Soils (F19) (LRR S)  Experiment Floodplain Soils (F19) (LRR S)  Experiment Floodplain Soils (F19) (LRR S)  Experiment Floodplain Soils (F19) (LRR S)  Experiment Floodplain Soils (F19) (LRR O, F1)  Experiment Floodplain Soils (F19) (LRR O, F1)  Experiment Floodplain Soils (F19) (LRR O, F1)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149A)  Experiment Floodplain Soils (F19) (MLRA 149				black fine sand very dark grayish brown fine sand light brownish gray fine sand black fine sand  Lining, M=Matrix. Indicators for Problematic Hydric Soils 3: 1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, 19- Piedmont Floodplain Soils (F19) (LRR P, S, T Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or roblematic.
Indicators: Instot (A1) Instot (A2) Instot (A2) Instot (A3) Istot (A3) Istot (A4) Istot (A4) Istot (A4) Istot (A4) Istot (A3) Istot (A4) Istot (A4) Istot (A4) Istot (A4) Istot (A4) Istot (A4) Istot (A4) Istot (A5) Istot (A4) Istot (A5) Istot (A4) Istot (A4) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot (A5) Istot				
Alth Matrix Redox Features  Native Matrix Redox Features  Native Redox Features  10 YR 2/1  10 YR 2/1  2 10 YR 3/2  2 10 YR 3/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 2/1  30 10 YR 2/1  30 10 YR 2/1  30 10 YR 6/2  30 10 YR 2/1  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2  30 10 YR 6/2				
Histol (A1)		rix, CS=Covered or Coated Sand Grains.		
Thin Dark Surface (S9) (LRR S, T, U)  Jack Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Jede Horder Below Dark Surface (A11)  Thick Dark Surface (A12)  Loamy Mucky Mineral (A12)  Depleted Dark Surface (F7)  Muck (A9) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck (A9) (LRR P, T)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Mari (F10) (LRR U)  Depleted Dark Surface (F7)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Jeron-Manganese Masses (F12) (LRR P, T, U)  Delta Orchric (F13) (MLRA 150A)  Delta Orchric (F17) (MLRA 150A)  Delta Orchric (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F20)  Muck Presence (A8) (LRR V, T, U)  Depleted Dark Surface (A12)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Orchric (F11) (MLRA 151)  Thick Dark Surface (A12)  Depleted Dark Surface (F13) (LRR O, P,T)  Jed Cast Prairie Redox (A16) (MLRA 150A)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F17) (MLRA 151)  Depleted Orchric (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Jandy Redox (S5)  Delta Orchric (F18) (MLRA 150A, 150B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No	ators:			· · · · · · · · · · · · · · · · · · ·
Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Loamy Mucky Mineral (F1) (LRR O)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Belta Orchric (F13) (outside MLRA  Piedmont Floodplain Soils (F19) (LRR  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LR  Other (Explain in Remarks)  Other (Explain in Remarks)  Depleted Below Dark Surface (A11)  Chick Dark Surface (A12)  Loany Mucky Mineral (S1) (LRR O, P,T)  Sandy Mucky Mineral (S1) (LRR O, S)  Delta Orchric (F13) (LRR P, T, U)  Problematic.  Sandy Gleyed Matrix (S4)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  rictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present? Yes ✓ No   No  Depta Matrix (S6)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)			, T, U) _	
Loarny Gleyed Matrix (F2) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Dark Surface (F6) Muck Mineral (A7) (LRR P,T,U) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) Coast Prairie Redox (A16) (MLRA 150A) Depleted Orchric (F13) (LRR P, T, U) Depleted Orchric (F13) (LRR P, T, U) Depleted Poly (LRR P, T, U) Depleted Orchric (F13) (LRR P, T, U) Depleted Poly (LRR P, T, U) Depleted Orchric (F11) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Depleted Orchric (F18) (MLRA 150A, 150B) Depleted Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Depleted Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Depleted Depleted Orchric (F18) (MLRA 149A, 153C, 153D) Depleted Orchric (F18) (MLRA 149A, 1			_	
Stratified Layers (A5)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Com Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Pepleted Below Dark Surface (A11)  Popleted Below Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Piedmont Floodplain Soils (F10) (MLRA 149A)  Pictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Red Parent Material (TF2)  (MLRA 151)  Pother (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and whydrology must be present, unless disturbe problematic.  Solution (F17) (MLRA 151)  Predmont Floodplain Soils (F10) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  rictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No	•		-	
Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  rictive Layer (If observed):  Type:  Depth (inches):  Type:  Depth (inches):  Mard (F10) (LRR Surface (F6)  (MLRA 153B)  Redox Dark Surface (F6)  (MLRA 153B)  Red Parent Material (TF2)  (MLRA 151B)  Redox Dark Surface (F12) (LRR U)  Depleted Dark Surface (F12) (LRR U)  Depleted Dark Surface (F11) (MLRA 151)  Image:  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P,T)  July (LRR O, P,T)  July (MLRA 150A, 150B)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Hydric Soil Present?  Yes ✓ No			-	Piedmont Floodplain Soils (F19) (LRR P, S, T
Depleted Dark Surface (F7)			_	
Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Wery Shallow Dark Surface (TF12) (LR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)  Reduced Vertic (F18) (MLRA 150B)  Bark Surface (S7) (LRR P, S, T, U)  Pictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No	es (A6) <b>(LRR P, T, U)</b>	Redox Dark Surface (F6)		(MLRA 153B)
1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Marl (F10) (LRR O, P,T)  JIndicators of hydrophytic vegetation and w hydrology must be present, unless disturbe problematic.  Reduced Vertic (F17) (MLRA 151)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No	Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)	_	Red Parent Material (TF2)
I cm Muck (A9) (LRR P,T)		Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U
Trick Dark Surface (A12)		Marl (F10) (LRR U)	_	Other (Explain in Remarks)
Thick Dark Surface (A12)	ow Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)		
Coast Prairie Redox (A16) (MLRA 150A)  — Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbe problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  — Delta Orchric (F17) (MLRA 151) problematic.  — Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  — Piedmont Floodplain Soils (F19) (MLRA 149A)  — Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed):  — Type: — Depth (inches): Hydric Soil Present? Yes✓ No			OPT) .	
Sandy Mucky Mineral (S1) (LRR O, S) Delta Orchric (F17) (MLRA 151) problematic.  Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  rictive Layer (If observed):  Type: Depth (inches): Hydric Soil Present? Yes✓ No	, ,			
Sandy Gleyed Matrix (S4)				
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  trictive Layer (If observed):			•	Toblematic.
Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)   Dark Surface (S7) (LRR P, S, T, U)   trictive Layer (If observed):   Type:   Depth (inches): Hydric Soil Present? Yes ✓ No				
Dark Surface (S7) (LRR P, S, T, U)         rictive Layer (If observed):         Type:				
trictive Layer (If observed):  Type:  Depth (inches): Hydric Soil Present? Yes ✓ No	ix (S6)	Anomalous Bright Loamy Soils (F20) (	MLRA 149A, 153C,	153D)
Type:				
Depth (inches): Hydric Soil Present? Yes ✓ No .	r (If observed):			
		l.		
aarks:	(inches):	<u> </u>	lydric Soil Present	? Yes <u>√</u> No
	r (If observed):	  -	lydric Soil Present	? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date: 10/13/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: CW
Investigator(s): Justin Styer, Nate Goddard				
Landform (hillslope, terrace, etc.):N/A				Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.077392	Long:82.3	347511	Datum: WGS84
Soil Map Unit Name: Immokalee fine sand			_NWI classification:	
Are climatic / hydrologic conditions on the site type	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology			and the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of th
	or Hydrology			any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit				
Hydrophytic Vegetation Present?	YesNo			
Hydric Soil Present?	Yes No	is the Sampled Area v	vithin a Wetland?	YesNo
Wetland Hydrology Present?	Yes No	]		
Remarks:				
<u>.</u>				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season \	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	ows (C8)
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic	Position (D2)
tron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	tard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral	` '
Field Observations:			1	
Surface Water Present?	Yes No	Depth (inches):		
Water Table Present?	Yes No		-[	
Saturation Present?			Wetland	
(includes capillary fringe)	.,,,		Hydrology Present?	Yes <u>✓ No</u>
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	Tresenc.	
	<del></del>	,,, ,,		
Remarks:				

VEGETATION - Use scientific nar	nes of plants				Sampling Point:	CW
	Absolute %	Dominant	Indicator	Dominance Test Worksh		
Tree Stratum (Plot size:)	Cover	Species?	Status	·		1
1.				Number of Dominant Spec		(1)
2.				That Are OBL, FACW, or I	FAC: 3	(A)
3.				Total Number of Dominant	t	(2)
4.				Species Across All Strata:	` <u>3</u>	(B)
5.				Percent of Dominant Spec	cies 100.00	(A (D)
6.				That Are OBL, FACW, or I		(A/B)
7.				Prevalance Index worksh		
	0	= Total Cove	<u></u>	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	_
Acer rubrum	15	yes	OBL	FACW species	x2=	_
2. Quercus laurifolia	15	yes	FACW	FAC species	x3=	
3. Taxodium distichum	5	no	OBL	FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	— (B)
6.				1 –	* * *	<u> </u>
7.			-	Prevalance Index = B	s/A =	
	35	= Total Cove	er	Hydrophytic Vegetation I		
Shrub Stratum (Plot size:	)			✓ Dominance Test is		ļ
1.				Prevalence Index is	s ≤3.0 <sup>1</sup>	-
2.		<del></del>		<del></del>	phytic Vegetation <sup>1</sup> (Exp	olain)
3.				<u> </u>		,
4.				<sup>1</sup> Indicators of hydric soil ar	nd wetland hydrology r	nust
5.				be present, unless disturbe		.,,,,,
6.				Definitions of Vegetation		
7.				1		
	0	= Total Cove	<u></u>	Tree- Woody plants, exclud	ling woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or		. (7.6
Woodwardia aereolata	10	yes	OBL	cm) or larger in diameter at		·
2.				Sapling- Woody plants, exc	cluding woody vines,	
3.	-		-	approximately 20 ft (6m) or		than 3
4.				in. (7.6 cm) DBH.	•	
5.			-	Shrub- Woody plants, exclu	uding woody vines,	
6.				approximately 3 to 20 ft (1 to		i
7.	-		····	Herb- All herbaceous (non-	woody)plants, including	ŀ
8.			(	herbaceous vines, regardles		
9.				plants, except woody vines,		•
10.				m) in height.		
11.				Woody vine- All woody vine	es, regardless of height.	
12.				1		
	10	= Total Cove	<u></u> ∍r	1		
Woody Vine Stratum (Plot size:	_)					
1.	······································					
2.				1		
3.						
4.				Hydrophytic		
5.	·			Vegetation Present?	Yes ✓ No	
		= Total Cove	er	1 0000000000000000000000000000000000000		<del></del>
Remarks: (If observed, list morpho			<u></u>			
Percent cover estimates based or	-		roader cor	mmunity.		

County/so SOIL	il; Hillsborough- Immol	kalee						Sampling Point: CW
	scription: (Describe	to the dep	th needed to doc	ument the	e indicator or	confirm the abs	sence of indicators.)	
Depth	Matrix			Redox	Features		•	
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0-8	10 YR 3/1							very dark gray fine sand
8-36	10 YR 7/1							light gray fine sand
36-46	10 YR 2/1							black fine sand
46-52	5 YR 3/2							dark reddish brown fine sand
							<del></del>	
	Concentration, D=Dep oil Indicators:	letion, RM	=Reduced Matrix, (	CS≃Cover	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histol				Pohor	alue Below Sur	face (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					69) (LRR S, T, L		2 cm Muck (A10) (LRR S)
	Histic (A3)				•	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				y Gleyed Matrix		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				eted Matrix (F3)	- (- –)	-	Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR I	P, T, U)		Redo	x Dark Surface	(F6)	-	(MLRA 153B)
5 cm	Mucky Mineral (A7) (L	RR P.T.U)		Deple	eted Dark Surfa	ce (F7)	_	Red Parent Material (TF2)
	Presence (A8) (LRR			Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)			Mari (	(F10) (LRR U)	` ,	_	Other (Explain in Remarks)
						1) (MLRA 151)	-	
	ted Below Dark Surface	œ (A11)			•			
	Dark Surface (A12)				-	sses (F12) (LRF		Indicators of hydrophytic vegetation and wetland
Coast	t Prairie Redox (A16) (	MLRA 150	OA) .	Umbr	ic Surface (F13	) (LRR P, T, U)	•	nydrology must be present, unless disturbed or
Sandy	y Mucky Mineral (S1) (	LRR O, S)		Delta	Orchric (F17) (	MLRA 151)	ţ	problematic.
Sandy	y Gleyed Matrix (S4)					) (MLRA 150A,		
	y Redox (S5)					Soils (F19) (ML		
Stripp	ed Matrix (S6)			Anom	nalous Bright Lo	amy Soils (F20)	) (MLRA 149A, 153C,	, 153D)
	Surface (S7) (LRR P,							
Restrictiv	e Layer (if observed)	):						
	Type:							
Remarks:	Depth (inches):		<del></del>				Hydric Soil Present	t?Yes✓No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date:_	10/13/09
Applicant/Owner: Progress Energy Florida, Inc.	State:FL	·	Sampling Point:	CX	
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: <u>6 28\$ 20E</u>		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	vex, none): <u>none</u>	SI	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.07770</u> 0	0Long: <u>-82.</u>	344936	Da	atum: WGS84
Soil Map Unit Name: Water			NWI classification	n: Freshwater Er	nergent Wetland
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal? Ye	es <u>No </u>
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in R	temarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ing point locations,	transects, impo	ortant features	s, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes <u>✓</u> No	·
Wetland Hydrology Present?	YesNo				
Remarks:				<del>.</del>	
HYDROLOGY	·				
Wetland Hydrology Indicators:				tors (minimum of t	wo required)
Primary Indicators (minimum of one is required; o	<del></del>	(50)	Surface Soi	, ,	a ( (Ba)
✓ Surface Water (A1)	Water-Stained Leaves (	(89)	Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)		
High Water Table (A2)	Aquatic Fauna (B13)				
✓ Saturation (A3)	Marl Deposits (B15) (LF		Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor			Water Table (C2)	•
Sediment Deposits (B2)	Oxidized Rhizospheres	. ,		Crayfish Burrows (C8)	
Drift Deposits (B3)	Presence of Reduced Ir	•		Saturation Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent fron Reduction i			Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	•	Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutra	i Test (D5)	
Field Observations:	V /	Donth (inches): 0.12			
Surface Water Present?	Yes No		-		
Water Table Present?	Yes ✓ No		Wetland		
Saturation Present?	Yes No	_ Depth (Inches):u	Hydrology		
(includes capillary fringe)	ing well again photographics	- in-nostions) if overlable.	Present?	Yes <u>/</u> No	<u> </u>
Describe Recorded Data (stream gauge, monitor	ing well, aerial priotos, previous	s inspections), if available:			
Remarks:					

VEGETATION - Use scientific na	mes of plants				Sampling Point: _	СХ
	Absolute %	Dominant	Indicator	Dominance Test Works	heet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	-			Number of Dominant Spe	cies	(4)
2.				That Are OBL, FACW, or	FAC: 3	(A)
3.	-			Total Number of Dominar	nt o	<b>(D)</b>
4.				Species Across All Strata	<u>3</u>	(B)
5.				Percent of Dominant Spe	cies	00 (4.6)
6.				That Are OBL, FACW, or		<u>00</u> (A/B)
7.				Prevalance Index works		
		= Total Cove	er	Total % Cover of:	<u>Multiply</u>	by:
Sapling Stratum (Plot size:	)			OBL species	x1=	
1.	<del>- ''''</del>			FACW species	x2=	
2.				FAC species	x3=	
3.				FACU species	x4=	
4.				UPL species	x5=	
5.	- ——			Column Totals:	(A)	(B)
6.				-		—— (B)
7.	· <del></del>			Prevalance Index = I	R/Δ =	
		= Total Cove		Hydrophytic Vegetation		·
Shrub Stratum (Plot size:	,	- Total Cove	21	✓ Dominance Test is		
	<del>-</del> '			Prevalence Index		
1. 2.	·			<del></del>	phytic Vegetation <sup>1</sup>	(Evolain)
				Problematic Hydro	priyuc vegetation	(Explain)
3.	•			1		
4.	·			<sup>1</sup> Indicators of hydric soil a	•	gy must
5.	• ———			be present, unless disturt		
6.	·. ———			Definitions of Vegetatio	n Strata:	
7.				<u>.</u>		
Herb Stratum (Plot size:)	0	= Total Cove	er	Tree- Woody plants, excludapproximately 20 ft (6m) or	more in height and	
Panicum repens	40	yes	FACW	cm) or larger in diameter at	t breast height (DBH	l).
<ol><li>Bacopa caroliniana</li></ol>	20	yes	OBL	Sapling- Woody plants, ex	cluding woody vines	i,
<ol><li>Eleocharis spp.</li></ol>	20	yes	OBL	approximately 20 ft (6m) or	more in height and	less than 3
Sesbania spp.	5	no	FAC	in. (7.6 cm) DBH.		
5. Juncus marginatus	5	no	FACW	Shrub- Woody plants, excl	luding woody vines,	
6. Carex spp.	5	no	FACW	approximately 3 to 20 ft (1	to 6 m) in height.	
7.				Herb- All herbaceous (non	-woody)plants, inclu-	ding
8.				herbaceous vines, regardle	ess of size. Includes	woody
9.	·			plants, except woody vines	, less than approxim	ately 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vin	es, regardless of he	ight.
12.						
	95	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.	<del></del> /					
2.						
3.						
4.				Hydrophytic		
5.	<del></del>	-		Vegetation Present?	Yes ✓ No	0
		= Total Cove	er .	1 - Semilon I lesenti		<del></del>
Remarks: (If observed, list morph				L		
Percent cover estimates hased of	-		rnader cor	mmunity		

IL			Sampling Point:
ofile Description: (Describe to the depth needed		nce of indicators	.)
oth Matrix	Redox Features	_	·
hes) Color (moist) % Color (mo	oist) % Type¹ Loc²	Texture	Remarks
	·		
<del></del>			
		2)	· . <del> </del>
e: C=Concentration, D=Depletion, RM=Reduced N	natrix, US=Covered or Coated Sand Grains.	-Location: PL=Poi	re Lining, M=Matrix.
ric Soil Indicators:	D.1 - 1 - D.1 - 0 - f (00) (1 DD 0	<b>T</b>	Indicators for Problematic Hydric Soils 3:
Histol (A1)	Polyvalue Below Surface (S8) (LRR S,	ι, υ)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S, T, U)		2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 151)		
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR C	), P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)		problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 15	SOR)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLR		
_Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (I		1630)
	Albitialous Bright Edainy Solis (1 20) (1	WILKA 145A, 1550	, 133 <i>D</i> j
_Dark Surface (S7) (LRR P, S, T, U)	·		
strictive Layer (If observed):			
Type:			
Depth (inches):	P	lydric Soil Prese	nt? Yes <u>√</u> No
narks:			

Project/Site: Levy Nuclear Plant - Transmission Li	ines	City/County: Hillsborough Sampling Date: 10/				
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: CY		
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	_6 28S 20E			
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, convex, none): none Slope (%):				
Subregion (LRR or MLRA): LRR U	Lat: 28.077717	Long:82.3	44433	Datum: WGS84		
Soil Map Unit Name: Basinger fine sand			NWI classification:			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	. No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology		Are circumstances			
	or Hydrology		(If needed, explain	any answers in Remarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>			ansects, impoi	tant features, etc.		
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes/ No	Is the Sampled Area within a Wetland? YesNo				
Wetland Hydrology Present?	Yes No					
Remarks:						
	•					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of two required)		
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil (	Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	etated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patt	erns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Lir	nes (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season V	Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burro	ows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic F	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	ard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)		
Field Observations:				•		
Surface Water Present?	Yes No					
Water Table Present?	Yes No	. Depth (inches):	Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	Yes No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				
Remarks:						
:						
	•					
	,					

VEGETATION - Use scientific na	mes of plants			Sampling	g Point:	CY
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:	<u>6</u>	(A)
3. 4.				Total Number of Dominant Species Across All Strata:	<u>6</u>	(B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:	100.00	(A/B)
7.	<del></del>			Prevalance Index worksheet:		
		= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	101010010		OBL speciesx1=	=	
Quercus laurifolia	10	yes	FACW	FACW speciesx2=	<u> </u>	_
Taxodium distichum	5	yes	OBL	FAC speciesx3=	<u> </u>	_
3.				FACU speciesx4=		
4.				UPL speciesx5=		_
5.	-			Column Totals: (A)		_(B)
6.						
7.				Prevalance Index = B/A =		
	15	= Total Cove	r	Hydrophytic Vegetation Indicator	s:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
Baccharis glomeruliflora	10	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>		
2. Myrica cerifera	5	yes	FAC	Problematic Hydrophytic Veg	getation <sup>1</sup> (Exp	plain)
3.						
4.	-			<sup>1</sup> Indicators of hydric soil and wetlan	d hydrology r	nust
5.				be present, unless disturbed or prob		
6.			-	Definitions of Vegetation Strata:		
7.	-			1		
	15	= Total Cove		Tree- Woody plants, excluding woody	vines	
Herb Stratum (Plot size:)	. •		•	approximately 20 ft (6m) or more in he		. (7.6
Woodwardia virginica	20	yes	OBL	cm) or larger in diameter at breast hei		
Andropogon virginicus	15	yes	FAC	Sapling- Woody plants, excluding wo		
3.			17.0	approximately 20 ft (6m) or more in he		than 3
4.				in. (7.6 cm) DBH.	ng ana looc	
5.				Shrub- Woody plants, excluding wood	dy vines	
6.				approximately 3 to 20 ft (1 to 6 m) in h	•	
7.				1	_	
8.				Herb- All herbaceous (non-woody)pla herbaceous vines, regardless of size.		
9.				plants, except woody vines, less than		
		<del></del>		m) in height.	·	<b>y</b> 5 11 (1
10.				1		
11.				Woody vine- All woody vines, regard	ess of neight.	•
12.				-		
Woody Vine Stratum (Plot size:_	35 )	= Total Cove	.r			
1.	_					
2.				1		
3.						
4.				Hydrophytic		
5.		<del></del>		Vegetation Present? Yes	✓ No	
	0	= Total Cove	r	1		
Remarks: (If observed, list morph						
Percent cover estimates based o			roader cor	mmunity.		
		,				

OIL Profile De	scription: (Describe t	a the der	th pooded to doe	umont th	o indicator or	confirm the sh	canca of indicator	Sampling Point:
epth	Matrix	o me des	nii needed to doc		Features	commin the ab	serice of malcator	3./
inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
1-7	10 YR 2/1							black fine sand
-28	10 YR 6/1							gray fine sand
8-42	10 YR 5/3; 10 YR 5/2							brown and grayish brown fine sand
2-80	10 YR 6/2							light brownish gray fine sand
2-00	10 11( 0/2				<del> </del>	<del></del>		ingrit brownsri gray line sand
Type: C=0	Concentration, D=Depl	etion, RM	Reduced Matrix,	CS=Cove	ed or Coated S	and Grains.	<sup>2</sup> Location: PL=P	ore Lining, M=Matrix.
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	(A1)			Poly	atue Below Sur	face (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (S	69) (LRR S, T, I	J)	2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				y Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)	<b>T</b> 115			eted Matrix (F3) x Dark Surface			Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P					• •		(MLRA 153B)
	Mucky Mineral (A7) (LF		1	— ·	eted Dark Surfa	. ,		Red Parent Material (TF2)
✓Muck	Presence (A8) (LRR L	J)		_	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm 1	Muck (A9) (LRR P,T)			Mari	(F10) (LRR U)			Other (Explain in Remarks)
Deplet	ted Below Dark Surfac	e (A11)		Depl	eted Orchric (F	11) (MLRA 151)	1	
Thick	Dark Surface (A12)	. ,		Iron-	Manganese Ma	sses (F12) (LRI	R O, P,T)	3
 Coast	Prairie Redox (A16) (I	/I RΔ 150	ιΔι	Umb	ric Surface (F13	3) (LRR P, T, U	1	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	, , ,		•		Orchric (F17)			problematic.
	Mucky Mineral (S1) (L	.KK (), (5)	1				450D)	F
	Gleyed Matrix (S4) Redox (S5)					8) <b>(MLRA 150A,</b> ı Soils (F19) <b>(M</b> l		
	ed Matrix (S6)					. , , ,	) (MLRA 149A, 15:	3C 153D)
	Surface (S7) (LRR P. S	T 110			naious brigin Le	Dainy Colla (1 20	) (MILION 140A, 10	55, 1552)
	e Layer (If observed):						T	
	Type:						1	
	Depth (inches):						Hydric Soil Pres	ent? Yes ✓ No .
Remarks:	Dopan (monoc).						1,	
						•		

Delia (O')		0.4 (0 4 1   1   1   1   1   1   1   1   1	L	C
Project/Site: Levy Nuclear Plant - Transmission L				_ Sampling Date: 10/13/09
Applicant/Owner: Progress Energy Florida, Inc.				Sampling Point: CZ
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range		
Landform (hillslope, terrace, etc.): N/A				Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.078084	Long: <u>-82.3</u>		
Soil Map Unit Name: Candler fine sand			_	Freshwater Pond
Are climatic / hydrologic conditions on the site typ	•			(If no, explain in Remarks)
	or Hydrology		Are circumstances	
	or Hydrology		•	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit		ng point locations, t	ransects, impo	ortant features, etc.
Hydrophytic Vegetation Present?	Yes✓No			
Hydric Soil Present?	Yes No	Is the Sampled Area v	ithin a Wetland?	YesNo
Wetland Hydrology Present? Remarks:	Yes No			
LIVEROL GOV				
HYDROLOGY	- "		Cdldia-4	(:-:
Wetland Hydrology Indicators:	b t 11 4b - t t - 2			ors (minimum of two required)
Primary Indicators (minimum of one is required; o		·Da\	Surface Soil	
✓ Surface Water (A1)	Water-Stained Leaves (	(89)		getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	
✓ Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim L	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rows (C8)
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction is	n Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	itard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No	_ Depth (inches): 0-24	4	
Water Table Present?	Yes No	Depth (inches): 0	l	
Saturation Present?	Yes ✓ No	Depth (inches): 0	Wetland Hydrology	
(includes capillary fringe)			Present?	Yes No
Describe Recorded Data (stream gauge, monitor	ng well, aerial photos, previous	s inspections), if available:	· · · · · · · · · · · · · · · · · · ·	
Remarks:				
				•
		•		
i				
i e e e e e e e e e e e e e e e e e e e				

VEGETATION - Use scientific nar	mes of plants			Sampling	g Point:	CZ
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	<u> </u>			Number of Dominant Species	1	(A)
2.				That Are OBL, FACW, or FAC:	1	(~)
3.				Total Number of Dominant	1	(D)
4.				Species Across All Strata:	<u>1</u>	(B)
5.				Percent of Dominant Species	100.00	/A/B)
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=		
1. Salix spp.	90	yes	FACW	FACW species x2=		_
2. Taxodium distichum	5	no	OBL	FAC species x3=		_
3.				FACU species x4=		_
<b>4</b> .				UPL species x5=		_
5.				Column Totals: (A)		- (B)
6.						-` ′
7.				Prevalance Index = B/A =		
	95	= Total Cove		Hydrophytic Vegetation Indicators		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1. ————————————————————————————————————	<del></del> ′			Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Veg	ietation <sup>1</sup> (Exp	lain)
3.				1 toblemate riyarophytic veg	ctation (Exp	,iaiii)
<del>3.</del> <b>4</b> .				Indicators of hydric soil and wetland	d bydrology r	nuct.
<del>5</del> .	·		-	be present, unless disturbed or prob		iusi
6.				Definitions of Vegetation Strata:	nomatio.	
7.				The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		
		= Total Cove		Trae Woody plants, evaluding woody	vinos	
Herb Stratum (Plot size:)	O	- Total Cove	<b>51</b>	Tree- Woody plants, excluding woody approximately 20 ft (6m) or more in he		(7.6
				cm) or larger in diameter at breast heigh	-	(7.0
1. 2.				•		
				Sapling- Woody plants, excluding woo	•	than 2
3.				approximately 20 ft (6m) or more in he in. (7.6 cm) DBH.	igni and less i	man 3
4.	·	<del></del>		<b>l</b> ' '	d i	
5.				Shrub- Woody plants, excluding wood approximately 3 to 20 ft (1 to 6 m) in h		
<u>6.</u>				1	_	
7.				Herb- All herbaceous (non-woody)plan		
8. 9.			<del> </del>	herbaceous vines, regardless of size. plants, except woody vines, less than		
· · · · · · · · · · · · · · · · · · ·				m) in height.	approximatery	311(1
10. 11.				1 ′		
				Woody vine- All woody vines, regardle	ess of neight.	
12.		<del></del>		1		
	0	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1.				1		
2.						
3.				]		
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	
	0	= Total Cove	er			
Remarks: (If observed, list morph	_					
Parcent cover actimates hased or	moondonna c	LIDIOU OF the b	TODGOT COT	mmunity		

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	_Sampling Date: 10/14/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: DA
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 4 28S 20E	
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.078326	Long:82.3	18000	Datum: WGS84
Soil Map Unit Name: Myakka fine sand			_NWI classification:	. <u>NA</u>
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normat? Yes No ✓
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes ✓ No			
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	Yes No
Wetland Hydrology Present?	Yes No			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	tterns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	rows (C8)
Drift Deposits (B3)	Presence of Reduced Ire	on (C4)	Saturation Vi	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	itard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No <u>✓</u>	Depth (inches):	.	
Water Table Present?	Yes No	Depth (inches):		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology	
(includes capillary fringe)			Present?	Yes No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	···-	
rh d				
Remarks:				
			•	

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	DA
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		-		Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	(A)
3.			-	Total Number of Dominant	
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species 100.00	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
7.		= Total Cove			
Sapling Stratum (Plot size:	)	- Total Cove	; <b>I</b>	Total % Cover of: Multiply by:  OBL species x1=	
Quercus laurifolia	5	yes	FACW	FACW speciesx2=	<u></u>
2.				FAC species x3=	_
3.				FACU species x4=	
4.				UPL species x5=	_
5.			-	Column Totals: (A)	(B)
6.				(·,	<b>—</b> \-'
7.				Prevalance Index = B/A =	
	5	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	7010.0070	,	✓ Dominance Test is 50%	
	/ 	V06	FAC	Prevalence Index is ≤3.01	
<ol> <li>Myrica cerifera</li> <li>.</li> </ol>		yes	170	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	nlain\
3.				Problematic Hydrophytic Vegetation (Ex	piairi)
				<b>4.</b>	
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology r	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				4	
No. 1. Okrat A (Distriction )	5	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	. (7.6
Osmunda cinnamomea	10	yes	FACW	cm) or larger in diameter at breast height (DBH).	
Andropogon virginicus	55	yes	FAC	Sapling- Woody plants, excluding woody vines,	
3. Rhexia spp.	5	yes	FACW	approximately 20 ft (6m) or more in height and less	than 3
4.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wo	ody
9.				plants, except woody vines, less than approximatel	y 3 ft (1
10.				m) in height.	
11.	· <del></del>			Woody vine- All woody vines, regardless of height	
12.				1	
	20	= Total Cove		1	
Woody Vine Stratum (Plot size:	)				
1.	<del></del> /				
2.	· ——			1	
3.	·				
4.	· <del></del>			Hydrophytic	
5.				Hydrophytic Vegetation Present? Yes ✓ No	
J.	· —	- Total Carre	·	Vegetation Present? YesNo	<del></del>
Department (If above and Estate and	0	= Total Cove	:1	1	
Remarks: (If observed, list morph	-				
Percent cover estimates based or	ı meandering s	survey of the b	noader co	mmunity.	

Depth inches) (0.5-20 10 \ 0.20 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.25 \ 0.2	Matrix Color (moist)  (R 3/1 (R 6/1 0 R 3/3	Color (moist)	Redox F		Loc²	Texture	Remarks very dark gray fine sand
inches) (0.5-5 10.3) 5-20 10.3 20-25 N.2/	Color (moist) %  (R 3/1 (R 6/1	Color (moist)			Loc²	Texture	very dark gray fine sand
5-20 10 Y 20-25 N 2/	/R 6/1						
20-25 N 2/	0		=				near fine and
		_	_				gray fine sand
25-30 5 YF	R 3/3	-				4	black fine sand
	<del></del>						dark reddish brown fine sand
			=				
	ntration, D=Depletion, R	:M=Reduced Matrix,	CS=Covere	d or Coated S	and Grains.	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
lydric Soil Indi	cators:						Indicators for Problematic Hydric Soils 3:
Histol (A1)					face (S8) (LRR		1 cm Muck (a9) (LRR O)
Histic Epido	• •				59) (LRR <b>S, T,</b> L	•	2 cm Muck (A10) (LRR S)
Black Histic	. ,			•	al (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen S				Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified La				ed Matrix (F3)			Anomalous Bright Loamy Soils (F20)
<b>—</b> ·	fies (A6) (LRR P, T, U)			Dark Surface			(MLRA 153B)
	Mineral (A7) (LRR P,T,	U)		ed Dark Surfa	. ,		Red Parent Material (TF2)
✓ Muck Prese	ence (A8) (LRR U)		Redox	Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck	(A9) (LRR P,T)		Marl (I	=10) (LRR U)			Other (Explain in Remarks)
Depleted Be	elow Dark Surface (A11)		Deplet	ed Orchric (F	11) (MLRA 151)	•	
Thick Dark	Surface (A12)		Iron-M	langanese Ma	sses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairi	e Redox (A16) (MLRA 1	150A)		•	3) (LRR P, T, U)	.RR P, T, U) hydrology must be present, unless dis	
Sandy Muck	ty Mineral (S1) (LRR O,	S)	Delta	Orchric (F17)	(MLRA 151)		problematic.
Sandy Gley	ed Matrix (S4)				B) (MLRA 150A,	•	
Sandy Redo	x (S5)				Soils (F19) (ML		
Stripped Ma	trix (S6)		Anoma	alous Bright Lo	oamy Soils (F20	) (MLRA 149A, 153	C, 153D)
	e (S7) (LRR P, S, T, U) er (If observed):					T	
Type:	•						
• • •	(inches):					Hydric Soil Prese	nt? Yes ✓ No .
Remarks:	. (#101100)1					1.7	

Soil Map Unit Name: Chobee sandy loam  NWI classification: Shrub wetland  Are climatic / hydrologic conditions on the site typical for this time of year?  Yes No (If no, explain in Remains)		· · · · · · · · · · · · · · · · · · ·	Sampling Date: 10/14/09
Landform (hillslope, terrace, etc.): N/A Local relief (concave, convex, none): none Datum: Subregion (LRR or MLRA): LRR U Lat: 28.076724 Long: -82.314079 Datum: Soil Map Unit Name: Chobee sandy loam NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classification: Shrub wetland NWI classif	Investigation(a). Limits Chine Mate Coddord	State: FL	Sampling Point: DB
Subregion (LRR or MLRA):	Investigator(s): Justin Styer, Nate Goudaiu	Section, Township, Range: 4 28S 2	0E
Soil Map Unit Name: Chobee sandy loam  Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed?  Are Vegetation Soil or Hydrology naturally problematic?  Soil or Hydrology naturally problematic?  Soil or Hydrology naturally problematic?  Soil or Hydrology point locations, transects, important features, etc.  Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes No Is the Sampled Area within a Wetland? Yes No Surface Soil Cracks (B6)  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required, check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surfact High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Seturation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Field Observations:  Surface Water (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches): Users (Pesent? Yes No Depth (inches	Landform (hillslope, terrace, etc.): N/A	Local relief (concave, convex, none)	: <u>none</u> Slope (%):
Are climatic / hydrologic conditions on the site typical for this time of year?  Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes_Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remark SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required, check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) Sparsely Vegetated Concave Surface High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Dry-Season Water Table (C2)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Crayfish Burrows (C8)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation (Nishle on Aerial Imagery Algal Mar or Crust (B4) Recent Iron Remarks)  Field Observations:  Surface Water Present?  Yes No Depth (inches): Uppth (inches): Uppth (inches): Uppth (inches): Uppth (inches): Uppth (inches):	Subregion (LRR or MLRA): LRR U Lat: 2	<u>28.076724</u> Long: <u>-82.314079</u>	Datum: WGS84
Are Vegetation Soil or Hydrology significantly disturbed? Are circumstances normal? Yes_Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remar SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes_ No	Soil Map Unit Name: Chobee sandy loam	NWI clas	ssification: Shrub wetland
Are VegetationSoilor Hydrologynaturally problematic? (If needed, explain any answers in Remar SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? YesNo	Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes <u>√</u> No	(If no, explain in Remarks)
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remar SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes  No  Is the Sampled Area within a Wetland? Yes  No  Suthand Hydrology Present? Yes  No  Is the Sampled Area within a Wetland? Yes  No  Suthand Hydrology Indicators:    HYDROLOGY	Are Vegetation, Soil, or Hydrology	significantly disturbed? Are circu	umstances normal? Yes No ✓
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent of two recent			ed, explain any answers in Remarks)
HyDROLOGY  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Yes	SUMMARY OF FINDINGS - Attach site map showing	sampling point locations, transect	s, important features, etc.
Wetland Hydrology Present?  Wetland Hydrology Indicators: Primary Indicators (minimum of two received substitutions) Surface Water (A1) High Water Table (A2) High Water Table (A2) Saturation (A3) Marl Deposits (B15) (LRR U) Moss Trim Lines (B16)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (B7) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5)  Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron Deposits (B5) Iron	Hydrophytic Vegetation Present? Yes No		
HYDROLOGY  Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) ✓ Surface Water (A1)   Water-Stained Leaves (B9)   Sparsely Vegetated Concave Surface   High Water Table (A2)   Aquatic Fauna (B13)   Drainage Patterns (B10) ✓ Saturation (A3)   Marl Deposits (B15) (LRR U)   Moss Trim Lines (B16)   Water Marks (B1)   Hydrogen Sulfide Odor (C1)   Sediment Deposits (B2)   Oxidized Rhizospheres on Living Roots (C3)   Crayfish Burrows (C8)   Drift Deposits (B3)   Presence of Reduced Iron (C4)   Saturation Visible on Aerial Imagery   Algal Mat or Crust (B4)   Recent Iron Reduction in Tilled Soils (C6)   Geomorphic Position (D2)   Iron Deposits (B5)   Thin Muck Surface (C7)   Shallow Aquitard (D3)   FAC Neutral Test (D5)  Field Observations:  Surface Water Present?   Yes ✓ No   Depth (inches): _0 — 12 Water Table Present?   Yes ✓ No   Depth (inches): _0 — 14 Hydrology (includes capillary fringe)	Hydric Soil Present? YesNo	Is the Sampled Area within a W	etland? YesNo
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  ✓ Surface Water (A1)  — Water-Stained Leaves (B9) — Sparsely Vegetated Concave Surface  — High Water Table (A2) — Aquatic Fauna (B13) — Drainage Patterns (B10)  ✓ Saturation (A3) — Marl Deposits (B15) (LRR U) — Moss Trim Lines (B16) — Water Marks (B1) — Hydrogen Sulfide Odor (C1) — Sediment Deposits (B2) — Oxidized Rhizospheres on Living Roots (C3) — Drift Deposits (B3) — Presence of Reduced Iron (C4) — Saturation Visible on Aerial Imagery  — Algal Mat or Crust (B4) — Recent Iron Reduction in Tilled Soils (C6) — Geomorphic Position (D2) — Iron Deposits (B5) — Thin Muck Surface (C7) — Shallow Aquitard (D3) — Inundation Visible on Aerial Imagery (B7) — Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes ✓ No Depth (inches): 0 Wetland Hydrology Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present? Yes ✓ No Present Yes ✓ No	Wetland Hydrology Present? Yes✓No		
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two recommendations)         Primary Indicators (minimum of one is required; check all that apply)			
Primary Indicators (minimum of one is required; check all that apply)       Surface Soil Cracks (B6)         ✓ Surface Water (A1)       Water-Stained Leaves (B9)       Sparsely Vegetated Concave Surface (B10)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         ✓ Saturation (A3)       Marl Deposits (B15) (LRR U)       Moss Trim Lines (B16)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Crayfish Burrows (C8)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Shallow Aquitard (D3)         ✓ Inundation Visible on Aerial Imagery (B7)       Other (Explain in Remarks)       FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Water Table Present?       Yes ✓ No Depth (inches): 0       Wettand Hydrology         Fresent?       Yes ✓ No Depth (inches): 0       Present?       Yes ✓ No Depth (inches): 0		Seconda	ary Indicators (minimum of two required)
✓ Surface Water (A1)	•		
High Water Table (A2)Aquatic Fauna (B13)Drainage Patterns (B10)  ✓ Saturation (A3)Marl Deposits (B15) (LRR U)Moss Trim Lines (B16)  Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  ✓ Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)FAC Neutral Test (D5)  Field Observations:  Surface Water Present?		<del></del>	` '
✓ Saturation (A3)      Marl Deposits (B15) (LRR U)      Moss Trim Lines (B16)         Water Marks (B1)      Hydrogen Sulfide Odor (C1)      Dry-Season Water Table (C2)        Sediment Deposits (B2)      Oxidized Rhizospheres on Living Roots (C3)      Crayfish Burrows (C8)        Drift Deposits (B3)      Presence of Reduced Iron (C4)      Saturation Visible on Aerial Imagery        Algal Mat or Crust (B4)      Recent Iron Reduction in Tilled Soils (C6)      Geomorphic Position (D2)        Iron Deposits (B5)      Thin Muck Surface (C7)      Shallow Aquitard (D3)        Inundation Visible on Aerial Imagery (B7)      Other (Explain in Remarks)      FAC Neutral Test (D5)         Field Observations:         Surface Water Present?       Yes✓ No Depth (inches):	<del></del>	· ,	
Water Marks (B1)Hydrogen Sulfide Odor (C1)Dry-Season Water Table (C2)  Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Crayfish Burrows (C8)  Drift Deposits (B3)Presence of Reduced Iron (C4)Saturation Visible on Aerial Imagery  Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)  Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks) FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes✓NoDepth (inches):0Wetland Hydrology  Gincludes capillary fringe)		· ,	•
Sediment Deposits (B2)  Oxidized Rhizospheres on Living Roots (C3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B5)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Field Observations:  Surface Water Present?  Yes No Depth (inches):0  Wetland  Hydrology  Present?  Yes No  Includes capillary fringe)  Wetland  Hydrology  Present?  Yes No  Depth (inches):0  Wetland  Hydrology  Present?  Yes No  Depth (inches):0  Wetland  Hydrology  Present?  Yes No  No  Depth (inches):0  Wetland  Hydrology  Present?  Yes No  No  Depth (inches):0  Wetland  Hydrology  Present?  Yes No  No  No  No  Present?  No  No  No  No  No  No  No  No  Present?  Yes  No  No  No  No  No  No  No  Present?  Yes  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No  No		· /· /	• •
Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) ✓ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations: Surface Water Present?  Water Table Present?  Yes ✓ No Depth (inches): 0 Wetland Hydrology Present?  Yes ✓ No Present?  Ves ✓ No Pepth (inches): 0 Wetland Hydrology Present?  Yes ✓ No Persent?  Ves ✓ No Pepth (inches): 0 Wetland Hydrology Present?  Yes ✓ No Persent?  Ves ✓ No Pepth (inches): 0 Wetland Hydrology Present?  Yes ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?  Ves ✓ No Persent?	<del></del>	• , ,	, ,
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)  Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present? Yes V No Depth (inches): 0-12  Water Table Present? Yes No Depth (inches): 0  Saturation Present? Yes No Depth (inches): 0  Wetland Hydrology (includes capillary fringe)	<del></del>	• • • • •	, ,
Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)	<del></del>	• • • • • • • • • • • • • • • • • • • •	* * * *
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  FAC Neutral Test (D5)  Field Observations:  Surface Water Present?  Water Table Present?  Yes   No Depth (inches): 0-12  Wetland Hydrology  (includes capillary fringe)  Wetland Hydrology  Present?  Yes   No Depth (inches): 0  Wetland Hydrology  Present?  Yes   No No Depth (inches): 0  Wetland Hydrology  Present?  Yes   No No Depth (inches): 0		· · · —	• • •
Field Observations:           Surface Water Present?         Yes _ ✓ No Depth (inches):	<del></del>	· ·	
Surface Water Present?       Yes ✓ No Depth (inches):		in Containe)	10 Neutral Foot (DO)
Water Table Present?         Yes ✓ No Depth (inches):         Wetland Hydrology           Saturation Present?         Yes ✓ No Depth (inches):         Wetland Hydrology           (includes capillary fringe)         Present?         Yes ✓ No		Depth (inches): 0-12	
Saturation Present? Yes No Depth (inches):0	t .		
(includes capillary fringe) Present? Yes <a href="#">Yes <a href="#">Yes</a> <a href="#">No</a></a>		Denth (inches): 0 Wetland	
		———— Inyuroio	=="
	Describe Recorded Data (stream gauge, monitoring well, aerial photos,		
Remarks:	Remarks:		

VEGETATION - Use scientific na	mes of plants				Sampling Point:	DB
	Absolute %	Dominant	Indicator	Dominance Test Worksh	neet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
.1.				Number of Dominant Spe-		(4)
2.	-			That Are OBL, FACW, or	FAC: <u>13</u>	(A)
2. 3.	-	-		Total Number of Dominan	nt 4.4	<b>(D)</b>
4.	•	***************************************	-	Species Across All Strata:	<u>14</u>	(B)
5.	-			Percent of Dominant Spec	cies oo oo	:4 (5)
6.				That Are OBL, FACW, or	9/00	(A/B)
7.				Prevalance Index works		
		= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Ulmus americana	<del>-</del> 10	yes	FACW	FACW species	x2=	_
Taxodium distichum	5	yes	OBL	FAC species	x3=	_
Liquidambar styraciflua	5	yes	FAC	FACU species	x4=	_
4.	- — —		170	UPL species	x5=	<del>-</del>
4. E	- —			Column Totals:	(A)	— <sub>(B)</sub>
5. E				Column rotais.	(^)	— (B)
5. 6. 7.				- Provolence Index - F	2/A =	
1.	20	- Total Cove		Prevalance Index = E		
Charle Christian (Blot size)	۷ ک	= Total Cove	:Г	Hydrophytic Vegetation		
Shrub Stratum (Plot size:	<del>_</del> )			✓ Dominance Test is		
Cephalanthus occidentalis	25	yes	OBL	Prevalence Index i		
Gleditsia aquatica	10	yes	OBL	Problematic Hydro	phytic Vegetation <sup>1</sup> (Ex	plain)
3. 4.	<u> </u>			<u>]</u> .		
4.				Indicators of hydric soil a		must
5.				be present, unless disturb		
6.				Definitions of Vegetation	n Strata:	
7.				]		
	35	= Total Cove	r	Tree- Woody plants, exclud		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or	=	ı. <b>(7.6</b>
Rhynchospora inundata	15	yes	OBL	cm) or larger in diameter at	breast height (DBH).	
2. Zizania aquatica	15	yes	OBL	Sapling- Woody plants, exc	cluding woody vines,	
Andropogon glomeratus	10	yes	FACW	approximately 20 ft (6m) or		s than 3
4. Polygonum punctatum	10	yes	FACW	in. (7.6 cm) DBH.		
5. Cyperus haspan	10	yes	OBL	Shrub- Woody plants, exclu	uding woody vines,	
6. Cyperus odoratus	10	yes	FACW	approximately 3 to 20 ft (1 t		
7. Sesbania spp.	10	yes	FAC	Herb- All herbaceous (non-	-woody)plants, including	1
Eupatorium capillifolium	10	yes	FACU	herbaceous vines, regardle		
9.				plants, except woody vines,		
10.	-			m) in height.		•
11.				Woody vine- All woody vine	es regardless of height	t
12.	- ——			1	00, 109414.000 2	
12.	90	= Total Cove		1		
Woody Vine Stratum (Plot size:	١	- 10tai 0000	;1			
, ————————————————————————————————————	<u></u> /					
1. 2.		<del></del>		1		
3.	<u> </u>				<u> </u>	
	- ——			1		
4.				Hydrophytic	V / N-	
5.	- —			Vegetation Present?	Yes <u>√</u> No_	<del></del>
	0	= Total Cove	:r			
Remarks: (If observed, list morph	-					
Percent cover estimates based or	n meanderina s	survey of the b	roader cor	mmunity.		

SOIL	: Hillsborough- Chobe							Sampling Point:
		o the de	pth needed to do			onfirm the ab	sence of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Redox 	Features Type <sup>1</sup>	Loc²	Texture	Remarks
0-16	10 YR 2/1		10 YR 5/1				few small pockets	black loamy fine sand
16-33	10 YR 4/1							dark gray sandy clay loam
33-49	10 YR 5/2		10 YR 6/4				common fine mottles	grayish brown sandy clay loam
49-59	10 YR 7/1		10 YR 5/6; 7.5 YR 5/6				few fine distinct mottles	light gray loarny fine sand
17 6-0	Daniel Daniel		I-Dadward Makin				21ti DID	I Teles Manufacture
	Concentration, D=Deple I Indicators:	etion, Riv	=Reduced Matrix,	CS=Cove	red or Coaled Si	and Grains.	2Location: PL=Pore	ndicators for Problematic Hydric Soils 3:
Histol Histol Histol Black Hydrog Stratifi Organ 5 cm I Muck 1 cm I Deplet Coast Sandty Sandy Strippi		RR P,T,U I) = (A11) MLRA 15 RR O, S	0A)	Thin Loan Loan Depl Redo Depl Redo Marl Depl Iron Umb Redo	value Below Surf Dark Surface (S my Mucky Minerar my Gleyed Matrix eted Matrix (F3) ox Dark Surface leted Dark Surface ox Depressions ( (F10) (LRR U) leted Orchric (F1 Manganese Mas oric Surface (F13) a Orchric (F17) ( uced Vertic (F18 mont Floodplain malous Bright Lo	(F8) (LRR S, T, 1) (LRR O) (CF2) (F6) (F8) (F8) (MLRA 151) (MLRA 151) (MLRA 151) (MLRA 151) (MLRA 150A) (Soils (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (F19) (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (MLRA 50IIs (ML	(S, T, U) U) - - - - R O, P,T) 3  p	1 cm Muck (a9) (LRR 0) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A, B) Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) (LRR T, U) Other (Explain in Remarks) Indicators of hydrophylic vegetation and wetland ydrology must be present, unless disturbed or roblematic.
	Layer (If observed):						.,,	
	Туре:							
Remarks:	Depth (inches):						Hydric Soil Present	? Yes <u>✓ No</u> .

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date	: 10/14/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point	:DC
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	4 28S 20E		
Landform (hillslope, terrace, etc.): N/A	\	Local relief (concave, conv	rex, none): <u>none</u>	s	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.074894	Long: <u>-82.3</u>	09677		Datum: WGS84
Soil Map Unit Name: Immokalee fine sand			NWI classification	Freshwater e	mergent wetland
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain i	n Remarks)
Are Vegetation, Soit,	or Hydrology	_significantly disturbed?	Are circumstances	normal? Y	′es <u>No ✓</u>
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in	Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	rtant feature	es, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes/	lo
Wetland Hydrology Present?	YesNo				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concave	Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	·	Drainage Pa	tterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	(R U)	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor (	-		Water Table (C2	)
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur	•	,
Drift Deposits (B3)	Presence of Reduced Ire	• , ,	•	isible on Aerial Ir	magery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction is	, ,		Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Shallow Aqu		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral		
Field Observations:		, <b>,</b>			
Surface Water Present?	Yes No	Depth (inches): 0-12			
Water Table Present?					
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)			Hydrology Present?	Yes _/N	lo
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	I resent.	163	
	g, p, p	,,			•
Remarks:					
			•		
		•			

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	DC
Torre Observations (DL 1)	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status	Number of Demission of Consider	
1.				Number of Dominant Species	(A)
2.				THALAIE OBL, FACTY, OF FAC.	
3.	-			Total Number of Dominant	(B)
4.				Topecies Across Ali Strata.	` '
5.				Percent of Dominant Species 100.00	(A/B)
6.	. <del></del>			That Are OBL, FACW, or FAC:	
7.				Prevalance Index worksheet:	
Sanling Stratum (Diet size:	, 0	= Total Cove	er	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:  1. Pinus elliottii	) 5	yes	FACW	OBL species x1= x2=	_
2.		yes	FACVV	FAC species x3=	
3.	· <del></del>			<del></del>	_
3. 4.				FACU speciesx4=	_
<u>4.</u> 5.	· ———			UPL speciesx5=(A)	— <sub>(B)</sub>
	·			Column Totals:(A)	(B)
6. 7.	· <del></del>			Decombon on Index of D/A to	
1.		= Total Cove		Prevalance Index = B/A =	
Charle Charters (Dist size)	,	= Total Cove	31	Hydrophytic Vegetation Indicators:  ✓ Dominance Test is 50%	
Shrub Stratum (Plot size:	<del></del> /		EA 0147	Borrimanac reactio 6070	
1 Ilex glabra	2	yes	FACW	Prevalence Index is ≤3.0¹	
2. Ilex cassine	2	yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	piain)
3.				1	
4.				Indicators of hydric soil and wetland hydrology i	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
Harb Stratum (Blat size)	4	= Total Cove	er	Tree- Woody plants, excluding woody vines,	(7.C
Herb Stratum (Plot size:)			E 4 0) 4 /	approximately 20 ft (6m) or more in height and 3 in cm) or larger in diameter at breast height (DBH).	. (7.6
1. Osmunda cinnamomea	30	yes	FACW		
Eleocharis baldwinii	15	yes	FACW	Sapling- Woody plants, excluding woody vines,	41 0
Woodwardia virginica	10	yes	OBL	approximately 20 ft (6m) or more in height and less in. (7.6 cm) DBH.	tnan 3
Panicum hemitomon	10	yes	OBL		
5. Rhynchospora microcarpa	10	yes	FACW	Shrub- Woody plants, excluding woody vines,	
6. Axonopus spp.	10	yes	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Xyris elliotti	5	no	OBL	Herb- All herbaceous (non-woody)plants, including	
8. Solidago spp.	5	no	FACU	herbaceous vines, regardless of size. Includes wo	
Andropogon virginicus	3	no	FAC	plants, except woody vines, less than approximatel m) in height.	y 3 π (1
10. Juncus marginatus	2	no	FACW	' · · ·	
11.				Woody vine- All woody vines, regardless of height	
12.					
	100	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	<u>·</u>
	0	= Total Cove	er		
Remarks: (If observed, list morph		•			
Percent cover estimates based or	n meandering s	survey of the b	roader co	nmunity.	

County/soil: Hillsborough- Immokalee		
SOIL		

SOIL							Sampling Point:DC
1	scription: (Describe to th	e depth needed to doc			onfirm the abs	sence of indicators.	)
Depth	Matrix		Redox F		<del></del>		
(inches)	Color (moist)	% Color (moist)		Type'	Loc²	Texture	Remarks
0-8	10 YR 3/1						very dark gray fine sand
8-36	10 YR 7/1		· — -				light gray fine sand
36-46	10 YR 2/1		·				black fine sand
46-52	5 YR 3/2		· — -				dark reddish brown fine sand
			. — -				
	Concentration, D=Depletion	, RM=Reduced Matrix, (	CS=Covere	d or Coated Sa	and Grains.		e Lining, M=Matrix.
, ,	il Indicators:		D-1	lean Datases Court	(CO) (I DD)		Indicators for Problematic Hydric Soils 3:
Histol (	(A1) Epidon (A2)				ace (S8) (LRR : 9) (LRR S, T, U		1 cm Muck (a9) (LRR O) 2 cm Muck (A10) (LRR S)
	Histic (A3)				i (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)			Gleyed Matrix			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)			ed Matrix (F3)	· -/		Anomalous Bright Loamy Soils (F20)
Organi	ic Bodies (A6) (LRR P, T, I	U)	Redox	Dark Surface	(F6)		(MLRA 153B)
5 cm N	Mucky Mineral (A7) (LRR P	P.T.U)	Deplet	ed Dark Surfac	ce (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR U)	,.,_,	Redox	Depressions (	F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)		_	10) (LRR U)	·		Other (Explain in Remarks)
		445			4) (IAI DA 454)		
	ted Below Dark Surface (A	11)			1) (MLRA 151)		
_	Dark Surface (A12)			_	ses (F12) (LRR		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (MLR.	A 150A)	Umbrid	Surface (F13)	) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy	Mucky Mineral (S1) (LRR	O, S)	Delta (	Orchric (F17) (F	VILRA 151)		problematic.
Sandy	Gleyed Matrix (S4)				(MLRA 150A,		
	Redox (S5)				Soils (F19) (ML		
Strippe	ed Matrix (S6)		Anoma	lous Bright Loa	amy Soils (F20)	) (MLRA 149A, 153C	;, 153D)
	Surface (S7) (LRR P, S, T,	U)					
1	e Layer (If observed):						
	Type:						
	Depth (inches):					Hydric Soil Presen	nt? Yes ✓ No
Remarks:							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date:	10/14/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: DDa				
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: 4 28S 20E			
Landform (hillslope, terrace, etc.): N/A	<b>\</b>	Local relief (concave, con-	vex, none): <u>none</u>	Slop	oe (%):	
Subregion (LRR or MLRA): LRR U		Long: <u>-82.3</u>	08687	Datu	um: WGS84	
Soil Map Unit Name: Immokalee fine sand				n: Freshwater eme	ergent wetland	
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes _✓	_ No	_ (If no, explain in R	emarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal? Yes	No ✓	
	or Hydrology		(If needed, explain	n any answers in Re	marks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	ortant features,	etc.	
Hydrophytic Vegetation Present?	YesNo					
Hydric Soil Present?	Yes No	Is the Sampled Area w	vithin a Wetland?	YesNo _		
Wetland Hydrology Present?	Yes ✓ No	]		,		
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of two	required)	
Primary Indicators (minimum of one is required; of	check all that apply)			l Cracks (B6)	5 required?	
✓ Surface Water (A1)	Water-Stained Leaves (	'R9)		egetated Concave Su	irface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	,,	. ,	atterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR III	Moss Trim L	` '		
Water Marks (B1)	Hydrogen Sulfide Odor	-		Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Bu			
Drift Deposits (B3)	Presence of Reduced In			/isible on Aerial Imag	nery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,		Position (D2)	gar <b>y</b> (00)	
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,	Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai		FAC Neutra	, ,		
Field Observations:	other (Explain in Normal	ino,	17.0110000	1 1031 (50)	· · · · ·	
Surface Water Present?	Yes ✓ No	Depth (inches): 0-6				
Water Table Present?	Yes No		]			
Saturation Present?	Yes ✓ No	Depth (inches): 0	Wetland			
(includes capillary fringe)		- · · · /	Hydrology Present?	Yes <u>✓                                    </u>		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	i resence	TCS NO _		
Remarks:						
rtemans.						

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	DDa
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>(D)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species 100.00	(* 45)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove	er	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.				FACW species x2=	
2.				FAC species x3=	_
3.				FACU species x4=	_
4.			-	UPL species x5=	
5.				Column Totals: (A)	- (В)
6.					_ (- /
7.				Prevalance Index = B/A =	
		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)		-	✓ Dominance Test is 50%	
Ilex glabra	/ 15	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.			17.000	Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	nlain)
3.				1 Toblematio Trydrophytio Vegetation (Ex	Jian'i,
4.				Indicators of hydric soil and wetland hydrology n	nuet
5.				be present, unless disturbed or problematic.	ilust
6.		· · · · · · · · · · · · · · · · · · ·		Definitions of Vegetation Strata:	
7.		<del></del>		John Marie of Cogoladon Gulan.	
	15	= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	10	10101 0010	<b>'</b> '	approximately 20 ft (6m) or more in height and 3 in.	(7.6
Osmunda cinnamomea	15	yes	FACW	cm) or larger in diameter at breast height (DBH).	(
Eleocharis baldwinii	15	yes	FACW	Sapling- Woody plants, excluding woody vines,	
Lachnanthes caroliniana	15	yes	OBL	approximately 20 ft (6m) or more in height and less	than 3
Panicum hemitomon	15	yes	OBL	in. (7.6 cm) DBH.	andin o
Rhynchospora microcarpa	15	yes	FACW	Shrub- Woody plants, excluding woody vines,	
6. Axonopus spp.	15	yes	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Andropogon virginicus	15	yes	FAC	Herb- All herbaceous (non-woody)plants, including	
8.		<u>ycs</u>	170	herbaceous vines, regardless of size. Includes woo	odv
9				plants, except woody vines, less than approximately	
10.	<del></del>			m) in height.	, (.
11.	<del></del>			Woody vine- All woody vines, regardless of height.	
12.			-	i	
12.	105	= Total Cove			
Woody Vine Stratum (Plot size:	1	- 101010010	••		
1					
2.			-		
<del>2.</del> 3.					
				Hudrophytic	
<u>4.</u> 5.			•	Hydrophytic Vegetation Present?  Yes   ✓ No	
J.		= Total Cove		Vegetation Present? YesNoNo	
Remarks: (If observed, list morpho			<i>i</i> 1		
Percent cover estimates based on	-		rnader cor	mmunity	

ile Description: (Describe to the dep	th needed to document the inc	dicator or confirm the ab	sence of indicators.)	
h Matrix	Redox Feat		<b>,</b>	
es) Color (moist) %	Color (moist) %	Type <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks
10 YR 3/1				very dark gray fine sand
10 YR 7/1				light gray fine sand
6 10 YR 2/1				black fine sand
2 5 YR 3/2		<del></del>		dark reddish brown fine sand
e: C=Concentration, D=Depletion, RM= ric Soil Indicators:	Reduced Matrix, CS=Covered of	r Coated Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.  Indicators for Problematic Hydric Soils 3:
Histol (A1)	Doharahio	Below Surface (S8) (LRR		1 cm Muck (a9) (LRR O)
		Surface (S9) (LRR S, T,		2 cm Muck (A10) (LRR S)
Histic Epidon (A2)				
Black Histic (A3)		ucky Mineral (F1) (LRR O	_	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)		eyed Matrix (F2)	_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)		Matrix (F3) ark Surface (F6)	-	Anomalous Bright Loamy Soils (F20)
	<del></del>	, ,		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	<b>—</b> •	Dark Surface (F7)	-	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox De	epressions (F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	<del></del> '	) (LRR U)	-	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted	Orchric (F11) (MLRA 151	)	
Thick Dark Surface (A12)	Iron-Man	ganese Masses (F12) (LR	R O, P,T) 3,	adiantary of bud-only dis variation and watland
Coast Prairie Redox (A16) (MLRA 150	A) Umbric S	urface (F13) (LRR P, T, U		Indicators of hydrophytic vegetation and wetland ydrology must be present, unless disturbed or
, ,,		hric (F17) (MLRA 151)	,	roblematic.
Sandy Mucky Mineral (S1) (LRR O, S)		, ,,	•	i obiomatio.
Sandy Gleyed Matrix (S4)		Vertic (F18) (MLRA 150A		
Sandy Redox (S5)		Floodplain Soils (F19) (M		
Stripped Matrix (S6)	Anomalou	us Bright Loamy Soils (F20	) (MLRA 149A, 153C,	153D)
Dark Surface (S7) (LRR P, S, T, U)				
rictive Layer (If observed):				
Type:			l	
Depth (inches):arks:			Hydric Soil Present	? Yes <u>√</u> No

Project/Site: Levy Nuclear Plant - Transmission Li	ines	City/County: Hillsborou	gh	Sampling Date: 10/14/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL_		Sampling Point: DE		
Investigator(s): Justin Styer, Nate Goddard						
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	ex, none): none	Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.078480	Long:82.2	81126	Datum: WGS84_		
Soil Map Unit Name: Chobee sandy loam			NWI classification:	Shrub wetland		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	. No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes No ✓		
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ng point locations, tr	ansects, impo	rtant features, etc.		
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	is the Sampled Area w	ithin a Wetland?	Yes No		
Wetland Hydrology Present?	Yes No					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:				rs (minimum of two required)		
Primary Indicators (minimum of one is required; c			Surface Soil (	` ′		
Surface Water (A1)	Water-Stained Leaves (I					
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patterns (B10)			
Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim Lir	` '		
Water Marks (B1)	Hydrogen Sulfide Odor (			Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres					
Drift Deposits (B3)	Presence of Reduced Iro					
Algal Mat or Crust (B4)	Recent Iron Reduction in					
Iron Deposits (B5)	Thin Muck Surface (C7)					
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	l est (D5)		
Field Observations:	vaa No 🗸	Donth (inches)				
Surface Water Present?	Yes No Yes No					
Water Table Present?			Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology	Van / Na		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	na well periol photos, provious	increations) if available:	Present?	Yes <u>✓ No</u>		
Describe Recorded Data (stream gauge, monitori	ng well, aeriai photos, previous	inspections), ii available.				
Remarks:						
				·		
			ı			
			•			

VEGETATION - Use scientific nar	mes of plants			Sam	npling Point:	DE
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1.		ороскоо.	Otatao	Number of Dominant Species		
2.	· <del></del>	<del></del>		That Are OBL, FACW, or FAC:	<u>5</u>	(A)
3.				Total Number of Dominant		
				4	<u>6</u>	(B)
4.				Species Across All Strata:		
5.	·			Percent of Dominant Species	83.33	(A/B)
6.				That Are OBL, FACW, or FAC:		
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	_x1=	
Fraxinus caroliniana	5	yes	OBL	FACW species	_x2=	
Taxodium distichum	55	yes	OBL	FAC species	x3=	_
3.				FACU species	x4=	_
4.	· <del></del>			UPL species	x5=	_
5.				Column Totals:	(A)	(B)
6.					_ (	_ (-/
7.				Prevalance Index = B/A =		
• •	10	= Total Cove		Hydrophytic Vegetation Indic	ators:	
Shrub Stratum (Plot size:	١.	10101 0010		✓ Dominance Test is 50%		
Sambucus canadensis	/ 20		FACW	Prevalence Index is ≤3.0		
		yes		<del></del>	_	-1-1-3
Cephalanthus occidentalis	10	yes	OBL	Problematic Hydrophytic	; vegetation (Exp	piain)
3.				4.		
4.				<sup>1</sup> Indicators of hydric soil and we		nust
5.				be present, unless disturbed or		
6.		6		Definitions of Vegetation Stra	ıta:	
7.				]		
	30	= Total Cove	er	Tree- Woody plants, excluding w	oody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
<ol> <li>Ludwigia peruviana</li> </ol>	30	yes	OBL	cm) or larger in diameter at breas	st height (DBH).	
2. Urena lobata	20	yes	FACU	Sapling- Woody plants, excluding	g woody vines,	
3.				approximately 20 ft (6m) or more	in height and less	than 3
4.				in. (7.6 cm) DBH.		
5.		<del></del>		Shrub- Woody plants, excluding	woody vines.	
6.		<del> </del>		approximately 3 to 20 ft (1 to 6 m		
7.				Herb- All herbaceous (non-wood)	-	
8.				herbaceous vines, regardless of		odv
9.	· <del></del>			plants, except woody vines, less t		-
10.		<del></del>		m) in height.	man approximator	, 0 11 (1
11.				Woody vine- All woody vines, red	mardlaga of baimbt	
	· <del></del>			Twoody vine- All woody vines, reg	gardless of neight.	
12.				4		
	50	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
Paederia foetida	55	yes	NL	_		
2. Physalis sp.	5	yes	NL			
3.						
4.		_		Hydrophytic		
5.				1	s <u> </u>	
	10	= Total Cove	er	1		
Remarks: (If observed, list morph						
Percent cover estimates based or	_	-	roader cor	mmunity.		
		,		•		

ila Dagarintian, /Dagarih	to the death seed	ad to desument the india:	ator or confirm the absence o	Sampling Point:
• •	to the depth need			i mulcators.;
h Matrix es) Color (moist)	% Color	Redox Feature (moist) % Typ		exture Remarks
10 YR 2/1	10 YR 5		faw sm	nall pockets black loamy fine sand
3 10 YR 4/1	101113		· · · · · · · · · · · · · · · · · · ·	dark gray sandy clay loam
9 10 YR 5/2	10 YR 6		commo	
9 10 1 1 3/2	10 YR 5			e distinct
9 10 YR 7/1	YR 5/6		mottles	light gray loamy fine sand
	oletion, RM=Reduce	d Matrix, CS=Covered or C	oated Sand Grains. <sup>2</sup> Loca	ntion: PL=Pore Lining, M=Matrix.
ric Soil Indicators: Histol (A1)		Doharahio Po	low Surface (S8) (LRR S, T, U)	Indicators for Problematic Hydric Soils 3: 1 cm Muck (a9) (LRR O)
Histic Epidon (A2)			rface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)			y Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, B
Hydrogen Sulfide (A4)			ed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)		Depleted Ma	trix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR	P, T, U)	Redox Dark	Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (	_RR P,T,U)	Depleted Dar	rk Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRF	U)	Redox Depre	essions (F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
cm Muck (A9) (LRR P,T)		Marl (F10) (L	.RR U)	Other (Explain in Remarks)
Depleted Below Dark Surfa	ce (A11)		chric (F11) (MLRA 151)	
Thick Dark Surface (A12)		Iron-Mangan	ese Masses (F12) (LRR O, P,T	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16)	(MLRA 150A)	Umbric Surfa	ace (F13) (LRR P, T, U)	hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1)	(LRR O, S)		(F17) (MLRA 151)	problematic.
Sandy Gleyed Matrix (S4)			tic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)			oodplain Soils (F19) (MLRA 149	
Stripped Matrix (S6)		Anomalous E	Bright Loamy Soils (F20) (MLRA	( 149A, 153C, 153D)
Dark Surface (S7) (LRR P rictive Layer (If observed				
Type:	· ·			
Depth (inches):		_	Hydric	Soil Present? Yes <u>✓</u> No
arks:				

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Da	te: 10/15/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Po	int: DF
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range			
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, con-	vex, none): none		_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28,077430</u>	)Long: <u>-82.2</u>	64937	· · · · · · · · · · · · · · · · · · ·	Datum: WGS84
Soil Map Unit Name: Candler fine sand			_NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explair	n in Remarks)
Are Vegetation, Soil	or Hydrology	_significantly disturbed?	Are circumstance:	s normal?	Yes <u>No ✓</u>
	or Hydrology		(If needed, explain	any answers	in Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featu	res, etc.
Hydrophytic Vegetation Present?	Yes✓No				
Hydric Soil Present?	YesNo	Is the Sampled Area w	vithin a Wetland?	Yes/	_No
Wetland Hydrology Present?	YesNo	]			
HYDROLOGY Wetland Hydrology Indicators:			Socondan Indian	ore (minimum	of two required)
Primary Indicators (minimum of one is required; of	shock all that apply)		Secondary Indicat Surface Soil		or two required)
✓ Surface Water (A1)	Water-Stained Leaves (	Do)		. ,	vo Surface (BR)
High Water Table (A2)	Aquatic Fauna (B13)	(B9)Sparsely Vegetated Concave Surface (B8Drainage Patterns (B10)			ve Sunace (Bo)
✓ Saturation (A3)	Marl Deposits (B15) (LR	DD 11\			
Water Marks (B1)	Hydrogen Sulfide Odor	•	Moss Trim L		22)
Sediment Deposits (B2)		(C1)Dry-Season Water Table (C2)  on Living Roots (C3)Crayfish Burrows (C8)			
Drift Deposits (B2)	Presence of Reduced In	-			Limagoni (CO)
Algal Mat or Crust (B4)		Iron (C4)Saturation Visible on Aerial Imagery (C9) In Tilled Soils (C6)Geomorphic Position (D2)			
tron Deposits (B5)	Thin Muck Surface (C7)	· / - · · · · · · · · · · · · · · · · ·			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	· · · · · · · · · · · · · · · · · · ·			
Field Observations:	Other (Explain in French	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	17107104114	Test (Be)	
Surface Water Present?	Yes No	Depth (inches): 0-36			
Water Table Present?	Yes No				
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)		-	Hydrology Present?	Yes ✓	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:	-1		
Remarks:					
Renaixs.					

VEGETATION - Use scientific nar	mes of plants			Sampling Point: _	DF
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(A)
2.				That Are OBL, FACW, or FAC: 4	(^)
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	(B)
5.	,			Percent of Dominant Species	·
6.				That Are OBL, FACW, or FAC:	<u>10</u> (A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	·r	Total % Cover of: Multiply b	)V:
Sapling Stratum (Plot size:	)		•	OBL species x1=	<u>J.</u>
Quercus laurifolia	10	yes	FACW	FACW species x2=	—
Liquidambar styraciflua	5	yes	FAC	FAC species x3=	<del></del>
Acer rubrum	5	yes	OBL	FACU species x4=	
4.		yes	OBL	UPL species x5=	
5.				· · · · · · · · · · · · · · · · · · ·	—— <sub>/B</sub> \
				Column Totals:(A)	(B)
6.				·	
7.				Prevalance Index = B/A =	
	20	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	<u>_</u> )			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (	Explain)
3.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrolog	av must
5.	,			be present, unless disturbed or problematic.	j)
6.	. —			Definitions of Vegetation Strata:	
7.				1	ļ
		= Total Cove	<u></u>	Tree- Woody plants, excluding woody vines,	I
Herb Stratum (Plot size:)	-	- 100.00.0	•	approximately 20 ft (6m) or more in height and 3	3 in <i>(</i> 76
Colocasia esculenta	5	ves	FACW	cm) or larger in diameter at breast height (DBH)	
2.		<u>yeə</u>	FACTA	4 ' '	
3.	• ———			Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and let the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the s	
				in. (7.6 cm) DBH.	555 man 5
4.					
5				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, includ	•
8.				herbaceous vines, regardless of size. Includes	
9.				plants, except woody vines, less than approxima	ately 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of hei	ght.
12.		_		1	
	5	= Total Cove	r ·	1.	
Woody Vine Stratum (Plot size:	)		I		
1.	,				
2.				4	
3.					
4.	-				
5.				Hydrophytic Vegetation Present? Yes ✓ No	
5.		- Tatal Cove		Vegetation Present? YesNo	' <del></del>
	0	= Total Cove	<u>r                                      </u>		
Remarks: (If observed, list morph- Percent cover estimates based or	-	-	roader cor	mmunity.	

Color (moist)		scription: (Describe to	o the dep	th needed to doc			onfirm the abs	sence of indicators.	)
10 YR 4/1 2 10 YR 7/4 2 10 YR 7/3 10 YR 7/3 10 YR 7/3 10 YR 7/3; 7.5 YR 10 5/8 10 Yery pale brown fine sand 10 YR 7/3; 7.5 YR 10 5/8 10 Yery pale brown fine sand 10 YR 7/3; 7.5 YR 10 5/8 10 Yery pale brown fine sand 10 YR 7/3; 7.5 YR 10 5/8 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery pale brown fine sand 10 Yery fine sand 10 Yery fine fine yer fine fine fine fine fine fine fine fine	epth	Matrix			Redox	Features			
10 YR 6/4 2 10 YR 7/3	ches)	Color (moist)	%	Color (moist)	%	Type	Loc2	Texture	Remarks
10 YR 7/3; 7.5 YR 10 5/8 very pale brown fine sand 10 YR 7/3; 7.5 YR 10 5/8 very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  **Location: Plevature for problematic tydic Soils of 19 (LRR 0, 0)	;	10 YR 4/1							dark gray fine sand
te: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  **Location: PL=Pore Lining, M=Matrix.**  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric S	5	10 YR 6/4							light yellowish brown fine sand
te: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  **Location: PL=Pore Lining, M=Matrix.**  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric Soils **:  **Indicators for Problematic Hydric S	72	10 YR 7/4							very pale brown fine sand
very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very pale brown fine sand  very sand sand  indicators of Problematic Hydric Soils *:  1 cm Muck (a9) (LRR O)  1 cm Muck (A9) (LRR S, T, U)  2 cm Muck (A10) (LRR S)  2 cm Muck (A10) (LRR S)  Peledmont Floodplain Soils (F19) (LRR O, Pidend Very Shallow Dark Surface, F19)  2 cm Muck (A10) (LRR P, T, U)  2 cm Muck (A10) (LRR P, T, U)  3 cm Muck (A10) (LRR P, T, U)  4 cm Muck (A10) (LRR P, T, U)  4 cm Muck (A9) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  4 cm Muck (A9) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7) (LRR P, T, U)  5 cm Mucky Mineral (A7				······					
Indicators: Histol (A1) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Muck (A9) (LRR P, T) Depleted Orchric (F11) (MLRA 151) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, P, T) Depleted Orchric (F13) (MLRA 150B) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, P, T) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Stripped Matrix (S6) Delta Orchric (F17) (MLRA 150A) Derived Vertic (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped (S7) (LRR P, S, T, U) Trictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	80								very pale brown fine sand
Indicators: Histol (A1) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Muck (A9) (LRR P, T) Depleted Orchric (F11) (MLRA 151) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, P, T) Depleted Orchric (F13) (MLRA 150B) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, P, T) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Stripped Matrix (S6) Delta Orchric (F17) (MLRA 150A) Derived Vertic (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped (S7) (LRR P, S, T, U) Trictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No									
Indicators: Histol (A1) Histo Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Muck (A9) (LRR P, T) Depleted Orchric (F11) (MLRA 151) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, P, T) Depleted Orchric (F13) (MLRA 150B) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, P, T) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Depleted Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Stripped Matrix (S6) Delta Orchric (F17) (MLRA 150A) Derived Vertic (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped Matrix (S6) Delta Orchric (F18) (MLRA 149A) Stripped (S7) (LRR P, S, T, U) Trictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes No	<del></del>								
Histol (A1)	pe: C=0	Concentration, D=Deple	etion, RM	Reduced Matrix, (	CS=Cove	red or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.
Histic Epidon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Loamy Mucky Mineral (F1) (LRR O) Loamy Mucky Mineral (F1) (LRR O) Straitfied (A9+) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F19) (LRR P, S, T) Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Trictive Layer (If Observed): Type: Depth (inches): Hydric Soil Present? Yes No	dric So	il Indicators:							Indicators for Problematic Hydric Soils 3:
Black Histic (A3)  Hydrogen Sulfide (A4)  Hydrocgen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Second Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Trictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes _ No	_Histol	(A1)			Poly	alue Below Surf	ace (S8) (LRR	S, T, U)	1 cm Muck (a9) (LRR O)
Black Histic (A3)  Hydrogen Sulfide (A4)  Hydrocgen Sulfide (A4)  Loamy Gleyed Matrix (F2)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Second Mucky Mineral (A7) (LRR P, T, U)  Depleted Dark Surface (F6)  Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Muck Presence (A8) (LRR P, T)  Depleted Dark Surface (F7)  Marl (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Trictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes _ No	Histic	Epidon (A2)			Thin	Dark Surface (S	9) (LRR S. T. U	J)	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	_					•		• •	
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Redox Dark Surface (F7) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P,T) Depleted Dark Surface (F7) Mark (F1) (LRR U) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Trictive Layer (If observed): Type: Depth (inches):  Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Anomalous Bright Loamy Soils (F20) (MLRA 151)  Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Surface (F7) Pepleted Dark Su									, ,,
Organic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  5 cm Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (A55)  Sandy Redox Derressions (F8)  Delta Orchric (F17) (MLRA 151)  Predomort F100 (LRR P, T, U)  Delta Orchric (F18) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Gieyed Matrix (A16)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Redox (A16) (MLRA 150A)  Sandy Gieyed Matrix (A16)  Sandy Redox (A16) (MLRA 150A)  Sandy Gieyed Matrix (A16)  Sandy Redox (A16) (MLRA 150A)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieyed Matrix (A16)  Sandy Gieye							(1 4)		
5 cm Mucky Mineral (A7) (LRR P,T,U)			T 111				(F6)		
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Surface (S7) (LRR P, S, T, U)  Trictive Layer (if observed):  Type:  Depth (inches):  Marl (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Lron-Manganese Masses (F12) (LRR O, P,T)  Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Pelta Orchric (F13) (MLRA 151)  Reduced Vertic (F18) (MLRA 150A, 150B)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Trictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No	_								
1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11) Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Thick Dark Surface (F13) (LRR O, P,T)  Junon-Manganese Masses (F12) (LRR O, P,T)  Junoic Surface (F13) (LRR P, T, U)  Mydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Trictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No									<del></del>
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Trictive Layer (If observed):  Type:  Depth (inches):  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P, T)  Jeno-Manganese Masses (F12) (LRR O, P)  Jeno-Manganese Masses (F12) (LRR O, P)  Jeno-Manganese Masses (F12) (LRR O, P)  Jeno-Manganese Masses (F12) (LRR O, P)  Jeno-Mang	_		))				F8)		
Thick Dark Surface (A12)									Other (Explain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Type:  Depth (inches):  Depth (inches):  Umbric Surface (F13) (LRR P, T, U)  Hydric Soil Present? Yes _ ✓ No			e (A11)			· · · · · · · · · · · · · · · · · · ·			
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  trictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Types.  Detth (inches):	_	, ,				•			
Sandy Redox (S4)	_	, ,,		•		•			
Sandy Redox (S5)      Piedmont Floodplain Soils (F19) (MLRA 149A)        Stripped Matrix (S6)      Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)        Dark Surface (S7) (LRR P, S, T, U)			.RR O, S)				•		problematic.
Stripped Matrix (S6)		•				, ,		•	
Dark Surface (S7) (LRR P, S, T, U)           trictive Layer (If observed):           Type:									
trictive Layer (If observed):  Type:  Depth (inches): Hydric Soil Present? Yes ✓ No	_Stripp	ed Matrix (S6)			Anor	nalous Bright Lo	amy Soils (F20)	) (MLRA 149A, 153C	C, 153D)
Type:									
Depth (inches):									
narks:		Depth (inches):					<u> </u>	Hydric Soil Presen	nt? Yes <u>√</u> No
		Туре:						Hydric Soil Presen	nt? Yes <u>√</u> No <u></u> .
									·

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County:Hillsborou	gh	Sampling Date	e: 10/15/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: DG			
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range: 1 28S 20E			
Landform (hillslope, terrace, etc.):N/A	•	Local relief (concave, convex, none): none Slope (%):			Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.077549</u>	Long: <u>-82.2</u>	53889		Datum: WGS84
Soil Map Unit Name: St. John's fine sand			_NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo ✓
Are Vegetation, Soil,			(If needed, explain	any answers in	Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featur	es, etc.
Hydrophytic Vegetation Present?	Yes✓No				
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes	No
Wetland Hydrology Present?	YesNo				
Remarks:					****
				•	
<u> </u>					
HYDROLOGY					1
Wetland Hydrology Indicators:			Secondary Indicate		f two required)
Primary Indicators (minimum of one is required; c			Surface Soil		
Surface Water (A1)	Water-Stained Leaves (I	39)			
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat		ŀ
Saturation (A3)	Marl Deposits (B15) (LR		Moss Trim Li		
Water Marks (B1)	Hydrogen Sulfide Odor (	•	Dry-Season Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	- · · · · · · · · · · · · · · · · · · ·			
Drift Deposits (B3)	Presence of Reduced Iro				Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No				
Water Table Present?	Yes No/		Wetland		
Saturation Present?	Yes No	Depth (inches): 0	Hydrology		
(includes capillary fringe)		<del> </del>	Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:			
Remarks:					•
					į
					ļ
					ļ

VEGETATION - Use scientific name	nes of plants			Sampling Point:	DG
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		ļ
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(D)
4.				Species Across All Strata:	(B)
5.	_			Percent of Dominant Species	(A (D)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove	er	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL speciesx1=	_
Acer rubrum	5	yes	OBL	FACW speciesx2=	_
2.				FAC speciesx3=	_
3.				FACU species x4=	_
4.				UPL species x5=	_
5.				Column Totals: (A)	_(B)
6.					_
7.				Prevalance Index = B/A =	
	5	= Total Cove	er .	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	-
1.				Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.					
4.				Indicators of hydric soil and wetland hydrology m	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				1	
	0	= Total Cove	er .	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)			ļ	approximately 20 ft (6m) or more in height and 3 in.	(7.6
<ol> <li>Amphicarpum muhlenbergianu</li> </ol>	ıı <u>30</u>	yes	FACW	cm) or larger in diameter at breast height (DBH).	
Ludwigia peruviana	10	yes	OBL	Sapling- Woody plants, excluding woody vines,	
3. Panicum hemitomon	10	yes	OBL	approximately 20 ft (6m) or more in height and less	than 3
4. Solidago spp.	10	yes	FACU	in. (7.6 cm) DBH.	
<ol><li>Andropogon glomeratus</li></ol>	5	no	FACW	Shrub- Woody plants, excluding woody vines,	
6. Commelina diffusa	5	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Sesbania spp.	5	no	FAC	Herb- All herbaceous (non-woody)plants, including	
8. Juncus megacephalus	5	no	OBL	herbaceous vines, regardless of size. Includes woo	
9. Rhexia spp.	5	no		plants, except woody vines, less than approximately	3 ft (1
10. Juncus effusus	5	no	FACW	m) in height.	
11. Lachnanthes caroliniana	2	no	OBL	Woody vine- All woody vines, regardless of height.	
12. Centella asiatica	2	no	FACW	1	
-	94	= Total Cove	er .	]	
Woody Vine Stratum (Plot size:	)		!		
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No	
	0	= Total Cove	er .	1	
Remarks: (If observed, list morpho	logical adapta	ations below).			
Percent cover estimates based on	meandering s	survey of the b	roader cor	mmunity.	

Profile Descrip Depth (inches)	ption: (Describe to Matrix Color (moist)		th needed to doc	ument th	e indicator or	confirm the ab-	sance of indicators	
_	Color (moist)					committee ab	sence of indicators	·)
(inches)					Features			
		%	Color (moist)	%_	Type <sup>1</sup>	Loc²	Texture	Remarks
0-6 10	YR 2/1							black fine sand
6-12 10	YR 3/2						•••	very dark grayish brown fine sand
12-29 10	YR 6/2							light brownish gray fine sand
29-36 10	YR 2/1							black fine sand
	entration, D=Deple	etion, RM=	=Reduced Matrix, (	CS=Cove	red or Coated S	and Grains.	Location: PL=Por	re Lining, M=Matrix.
Hydric Soil Inc				Б.1	al a Bala o	(00) (1.88	0 - 10	Indicators for Problematic Hydric Soils 3:
Histol (A1)					value Below Sur			1 cm Muck (a9) (LRR O)
Histic Epid Black Histi					Dark Surface (S		•	2 cm Muck (A10) (LRR S)
	Sulfide (A4)				ny Mucky Minera ny Gleyed Matri:			Reduced Vertic (F18) (outside MLRA 150A, B) Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified L					eted Matrix (F3)			Anomalous Bright Loamy Soils (F20)
	odies (A6) (LRR P,	T, U)			ox Dark Surface			(MLRA 153B)
I -	y Mineral (A7) (LR			—— Depl	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)
	sence (A8) (LRR U			Redo	x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck	(A9) (LRR P,T)			Marl	(F10) (LRR U)			Other (Explain in Remarks)
I	Below Dark Surface	(A11)		Depl	eted Orchric (F1	1) (MLRA 151)		
	Surface (A12)	` '		Iron-	Manganese Ma	sses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prai	rie Redox (A16) (N	1LRA 150	Α)	Umbric Surface (F13) (LRR P, T, U)			•	hydrology must be present, unless disturbed or
Sandy Mud	cky Mineral (S1) (L	RR O, S)		Delta	a Orchric (F17) (	MLRA 151)		problematic.
Sandy Gle	yed Matrix (S4)				uced Vertic (F18			
Sandy Red				_	mont Floodplain		•	
Stripped M	latrix (S6)			Anor	nalous Bright Lo	amy Soils (F20	) (MLRA 149A, 1530	C, 153D)
	ice (S7) (LRR P, S	, T, U)					·	
	yer (If observed):							
Type Dept	th (inches):	-	<del></del>				Hydric Soil Preser	nt? Yes ✓ No .
Remarks:							1	
l								
l								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/15			te: 10/15/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poi	nt: DH
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	: 1 28S 20E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.077544	Long:82.2	51591		Datum: WGS84
Soil Map Unit Name: St. John's fine sand			_NWI classification:	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstances		YesNo ✓
Are Vegetation, Soil,			(If needed, explain	any answers i	n Remarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>			ransects, impo	rtant featu	res, etc.
Hydrophytic Vegetation Present?	YesNo				
Hydric Soil Present?	Is the Sampled Area w	vithin a Wetland?	Yes <u>√</u>	No	
Wetland Hydrology Present?	Yes No	]			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum o	of two required)
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Ve	getated Concav	ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa		
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L		
Water Marks (B1)	Hydrogen Sulfide Odor (	•	Dry-Season	Water Table (0	(2)
Sediment Deposits (B2)	on Living Roots (C3)	Crayfish Bur		,	
Drift Deposits (B3)	Presence of Reduced Ire		Saturation V		Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	<del></del>			
Iron Deposits (B5)	Thin Muck Surface (C7)				
✓ Inundation Visible on Aerial Imagery (B7)		<del></del>			
Field Observations:			17.0 (100.110)		
Surface Water Present?	Yes No	Depth (inches): 0-48			
Water Table Present?	Yes No		1		
Saturation Present?	Yes No		Wetland		
	140	_ 5 5 5 11, (11 5 11 5 5) 5	Hydrology Present?	Yes ✓	No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	Presentr	res_v	No
	,, ,, ,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
5					
Remarks:					
I					

VEGETATION - Use scientific na	mes of plants			Samplin	g Point:	DH
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	_			Number of Dominant Species	6	(A)
2.				That Are OBL, FACW, or FAC:	<u>6</u>	(^)
3.				Total Number of Dominant	6	(B)
4.				Species Across All Strata:	<u>6</u>	(6)
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	100.00	(~6)
7.				Prevalance Index worksheet:		
	0	= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	=	
Quercus laurifolia	50	yes	FACW	FACW species x2=	=	_
2. Schinus terebinthifolius	20	yes	FAC	FAC species x3=	=	_
Magnolia virginiana	5	no	FACW	FACU species x4=	=	_
4.	-			UPL species x5=	=	_
5.				Column Totals: (A)		(B)
6.	•			<u> </u>		
7.	-			Prevalance Index = B/A =		
	75	= Total Cove	er	Hydrophytic Vegetation Indicator	s:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.	-			Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Ve	getation <sup>1</sup> (Exp	lain)
3.						
4.				<sup>1</sup> Indicators of hydric soil and wetlan	d hydrology m	nust
5.				be present, unless disturbed or pro-		
6.				Definitions of Vegetation Strata:		
7.						
		= Total Cove	er	Tree- Woody plants, excluding woody	/ vines,	- 1
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in he		(7.6
1. Ludwigia peruviana	10	yes	OBL	cm) or larger in diameter at breast he	ight (DBH).	
Osmunda cinnamomea	5	yes	FACW	Sapling- Woody plants, excluding wo	ody vines,	
3. Woodwardia virginica	5	yes .	OBL	approximately 20 ft (6m) or more in he	eight and less	than 3
4. Sesbania spp.	5	yes	FAC	in. (7.6 cm) DBH.		Ī
5.				Shrub- Woody plants, excluding woo	dy vines,	ŀ
6.				approximately 3 to 20 ft (1 to 6 m) in h	ieight.	
7.	-			Herb- All herbaceous (non-woody)pla	ints, including	
8.				herbaceous vines, regardless of size.	Includes woo	dy
9.				plants, except woody vines, less than	approximately	3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, regard	less of height.	
12.				1		
	25	= Total Cove	er	1		
Woody Vine Stratum (Plot size:	)					
1.	•					
2.				1		
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	✓No	<u> </u>
	0	= Total Cove	er			
Remarks: (If observed, list morph	ological adapta	tions below).				
Percent cover estimates hased of	n maandaring s	urvey of the h	roader cor	mmunity		l

County/soil: Hillsborough- St. Johns SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) Color (moist) Loc2 Texture Remarks 0-6 10 YR 2/1 black fine sand 6-12 very dark grayish brown fine sand 10 YR 3/2 10 YR 6/2 12-29 light brownish gray fine sand 10 YR 2/1 29-36 black fine sand Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: \_Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) \_1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Stratified Layers (A5) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Depleted Dark Surface (F7) Red Parent Material (TF2) 5 cm Mucky Mineral (A7) (LRR P,T,U) Redox Depressions (F8) \_Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) Marl (F10) (LRR U) \_Other (Explain in Remarks) \_1 cm Muck (A9) (LRR P,T) Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T) \_Thick Dark Surface (A12) <sup>3</sup>Indicators of hydrophytic vegetation and wetland Umbric Surface (F13) (LRR P, T, U) Coast Prairie Redox (A16) (MLRA 150A) hydrology must be present, unless disturbed or problematic. Delta Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? No Yes Remarks:

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date: 10/15/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL	Sampling Point: DI	
Investigator(s): Justin Styer, Nate Goddard		Section, Township, Range	e: 1 28S 20E	
Landform (hillslope, terrace, etc.):N/A		Local relief (concave, conv	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: <u>28.077578</u>	Long: <u>-82.2</u>	51154	Datum: WG\$84
Soil Map Unit Name: Malabar fine sand			_NWI classification:	NA
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>√</u>	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes No ✓
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland?	Yes No
Wetland Hydrology Present?	YesNo			
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	tterns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim Li	nes (B16)
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)	Dry-Season \	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burr	rows (C8)
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	Saturation Vi	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	itard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No	Depth (inches): 0-24	4	
Water Table Present?	Yes No	Depth (inches): 0		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology	
(includes capillary fringe)			Present?	Yes ✓No
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:		
Remarks:				
remarks.				
·				
1				

VEGETATION - Use scientific nar	nes of plants			Sam	npling Point:	DI
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	2	رم،
2.				That Are OBL, FACW, or FAC:	<u>3</u>	(A)
3.				Total Number of Dominant	•	(D)
4.				Species Across All Strata:	<u>3</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.				Prevalance Index worksheet:		
_		= Total Cove	er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	, 515, 5511		1	x1=	
Salix caroliniana	20	yes	OBL	· ——	x2=	-
Acer rubrum	15	yes	OBL		x3=	-
3.				· —	x4=	-
4.					x5=	-
<del>5</del> .		<del></del>		•		- <sub>/B\</sub>
5. 6.				Coldiffit Totals.	(A)	– <sup>(B)</sup>
7.				Drovelence Index = B/A =		
1.	35	= Total Cove		Prevalance Index = B/A = Hydrophytic Vegetation Indica	tors	
Shrub Stratum (Plot size:	١ .	- Total Cove	;1	✓ Dominance Test is 50%	itors.	
	_/				1	
1.				Prevalence Index is ≤3.0		1-1-3
2.				Problematic Hydrophytic	vegetation (Exp	plain)
3.			-	1		
4.				Indicators of hydric soil and we		nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ta:	
7.				ļ		
	0	= Total Cove	er	Tree- Woody plants, excluding wo		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more i		(7.6
Ludwigia peruviana	25	yes	OBL	cm) or larger in diameter at breast	height (DBH).	
Osmunda cinnamomea	5	no	FACW	Sapling- Woody plants, excluding		
Woodwardia virginica	5	no	OBL	approximately 20 ft (6m) or more i	n height and less	than 3
4. Sesbania spp.	5	no	FAC	in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding v		
6.				approximately 3 to 20 ft (1 to 6 m)	in height.	
7.				Herb- All herbaceous (non-woody	)plants, including	
8.				herbaceous vines, regardless of s		
9.				plants, except woody vines, less the	nan approximately	/ 3 ft (1
10.		£5.		m) in height.		
11.				Woody vine- All woody vines, reg	ardless of height.	
12.						
	40	= Total Cove	er	1		
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	No	
	0	= Total Cove	er	1		
Remarks: (If observed, list morphe	ological adapta					
Percent cover estimates based or		-	roader cor	mmunity.		

SOIL	ii(Dib-	4-44-4	<u> </u>					Sampling Point:
Profile De Depth	scription: (Describe Matrix	to the dep	an needed to doc		ie mulcator oi Features	confirm the at	sence of indicator	s.)
inches)	Color (moist)	%	Color (moist)	%	Type	Loc²	Texture	Remarks
						• ———		
)-4	10 YR 4/1							dark gray fine sand
1-12	10 YR 6/2							light grayish brown fine sand
12-30	10 YR 6/6							brownish yellow fine sand
30-50	10 YR 6/3							pale brown fine sand
		- —						
						- ——		
Type: C=0	Concentration, D=Dep	letion RM:	Reduced Matrix (	:S=Cove	red or Coated	Sand Grains	2l ocation: Pl =P	ore Lining, M=Matrix.
	il Indicators:	icuon, raw	-readoca main, e	<i>7</i> 0-00 <b>1</b> 0	ica or oddica	Caria Oranio.	LOOGIOTI. I L I	Indicators for Problematic Hydric Soils 3:
Histol				Poly	value Below Si	ırface (S8) (LRF	R.S. T. (II)	1 cm Muck (a9) (LRR O)
	Epidon (A2)		•			(S9) (LRR S, T,		2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR O	•	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		•		ny Gleyed Mati		,	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5)				eted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR I	P, T, U)		Red	ox Dark Surfac	e (F6)		(MLRA 153B)
5 cm l	Mucky Mineral (A7) (L	RR P.T.U)	_	Depl	eted Dark Surf	ace (F7)		Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)Redox Depressions (F8)							Very Shallow Dark Surface (TF12) (LRR T, U)	
1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)				(F10) (LRR U	) .		Other (Explain in Remarks)	
	ted Below Dark Surface	no (A11)	•			11) (MLRA 151	<b>\</b>	
	Dark Surface (A12)	æ (ATT)			-	asses (F12) (LR	-	
	, ,				•			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
	Prairie Redox (A16) (	:'	A) .		•	13) (LRR P, T, U	')	
	Mucky Mineral (S1) (	LRR O, S)	•		a Orchric (F17)			problematic.
	Gleyed Matrix (S4)				•	8) (MLRA 150A		
	Redox (S5)					n Soils (F19) (M	•	
Stripp	ed Matrix (S6)		•	Anor	malous Bright L	oamy Soils (F20	D) (MLRA 149A, 15	3C, 153D)
Dark S	Surface (S7) (LRR P,	S, T, U)						
	e Layer (If observed)	):						
	Туре:							
•••	Depth (inches):						Hydric Soil Pres	ent? Yes <u>√</u> No
Remarks:								
			•					

Project/Site: <u>Levy Nuclear Plant - Transmission L</u>	ines	City/County: Hillsboro	ugh	_Sampling Da	te: 10/19/09
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Po	int:
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range			
Landform (hillslope, terrace, etc.):N/A	\	Local relief (concave, con	vex, none): none		_Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.07762	Long: <u>-82.242153</u>			Datum: WGS84
Soil Map Unit Name: Seffner fine sand			_NWI classification		
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	_ No	_ (If no, explair	in Remarks)
Are Vegetation, Soil,	or Hydrology		Are circumstance:		Yes <u>No ✓</u>
	or Hydrology		(If needed, explain	n any answers i	in Remarks)
SUMMARY OF FINDINGS - Attach sit			transects, impo	ortant featu	res, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Is the Sampled Area v	vithin a Wetland?	Yes <u></u> ✓	_No	
Wetland Hydrology Present?	Yes No	]			
Remarks:					· · · · · · · · · · · · · · · · · · ·
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum	of two required)
Primary Indicators (minimum of one is required; of	check all that apply)	Surface Soil Cracks (I			
Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Conca	ve Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (L	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (	C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bu	rrows (C8)	
Drift Deposits (B3)	Presence of Reduced I	ron (C4)Saturation Visible o			I Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction	in Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7	')	Shallow Aqu	uitard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	arks)	FAC Neutra	l Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):	_		
Water Table Present?	Yes No <u>✓</u>				
Saturation Present?	Yes No		Wetland		
(includes capillary fringe)			Hydrology Present?	Yes <u></u> ✓	_No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:	1,		
			•		
Domarka					
Remarks:					
					•
	•				

Total Number of Dominant   4   (B)	VEGETATION - Use scientific nan	nes of plants			Sampling Point:
Tree Stratum (Plot size:)         Cover         Species?         Status         Number of Dominant Species         3         (A)           2.         That Are OBL, FACW, or FAC:         3         (A)           3.         Total Number of Dominant Species Across All Strata:         4         (B)           5.         Percent of Dominant Species Across All Strata:         75.00         (A/B)           6.         That Are OBL, FACW, or FAC:         75.00         (A/B)           7.         Prevalance Index worksheet:         Prevalance Index worksheet:         Multiply by:         OBL species         X1=         OBL species         X2=         ACC Species         X2=         ACC Species         X3=         ACC Species         X3=         ACC Species         X4=         UPL species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Species         X5=         ACC Speci			Dominant	Indicator	
1.       Number of Dominant Species       3       (A)         2.       That Are OBL, FACW, or FAC:       3       (A)         3.       Total Number of Dominant Species Across All Strata:       4       (B)         5.       Percent of Dominant Species That Are OBL, FACW, or FAC:       75.00       (A/B)         7.       Prevalance Index worksheet:       Total % Cover of:       Multiply by:         8apling Stratum (Plot size:)       OBL species x1=       X1=         1. Quercus laurifolia       5       yes       FACW FACW species       X2=         2. Cinnamomum camphora       5       yes       FACU FAC species       X3=         3. Quercus nigra       5       yes       FAC FACU species       X4=         4.       UPL species       X5=         5.       Column Totals:       (A) (B)         6.       Prevalance Index = B/A =	Tree Stratum (Plot size:)	Cover			
Total Number of Dominant   4   (B)					Number of Dominant Species
Total Number of Dominant   4   (B)	2.				That Are OBL, FACW, or FAC:
Species Across All Strata:   4   (B)			<del></del>		Total Number of Dominant
5.         Percent of Dominant Species         75.00         (A/B)           6.         That Are OBL, FACW, or FAC:         75.00         (A/B)           7.         Prevalance Index worksheet:         Prevalance Index worksheet:         Multiply by:         OBL species         x1=           1. Quercus laurifolia         5         yes         FACW         FACW species         x2=           2. Cinnamomum camphora         5         yes         FACU FACU species         x3=           3. Quercus nigra         5         yes         FAC         FACU species         x4=           4.         UPL species         x5=         Column Totals:         (A)         (B)           6.         Prevalance Index = B/A =					Species Across All Strata:
That Are OBL, FACW, or FAC:   Total Cover   Total % Cover of:   Multiply by:					Percent of Dominant Species 75.00 (A)
Prevalance Index worksheet:           Total Cover of: OBL species         Multiply by: Multiply by: OBL species           Sapling Stratum (Plot size:)         yes         FACW FACW species         x1=           1. Quercus laurifolia         5         yes         FACW species         x2=           2. Cinnamomum camphora         5         yes         FACU FACU species         x3=           3. Quercus nigra         5         yes         FAC FACU species         x4=           4.         UPL species         x5=           5.         Column Totals:         (A)         (B)           6.         Prevalance Index = B/A =					
Sapling Stratum (Plot size:)       OBL species       x1=         1. Quercus laurifolia       5       yes       FACW       FACW species       x2=         2. Cinnamomum camphora       5       yes       FACU       FAC species       x3=         3. Quercus nigra       5       yes       FAC FACU species       x4=         4.       UPL species       x5=         5.       Column Totals:       (A)       (B)         6.       Prevalance Index = B/A =	7.				
Sapling Stratum (Plot size:)       OBL species       x1=         1. Quercus laurifolia       5       yes       FACW       FACW species       x2=         2. Cinnamomum camphora       5       yes       FACU       FAC species       x3=         3. Quercus nigra       5       yes       FAC FACU species       x4=         4.       UPL species       x5=         5.       Column Totals:       (A)       (B)         6.       Prevalance Index = B/A =		0	= Total Cove	r	Total % Cover of: Multiply by:
2. Cinnamomum camphora         5         yes         FACU FAC species         x3=           3. Quercus nigra         5         yes         FAC FACU species         x4=           4.         UPL species         x5=           5.         Column Totals:         (A)         (B)           6.         Prevalance Index = B/A =	Sapling Stratum (Plot size:	)			
2. Cinnamomum camphora         5         yes         FACU FAC species         x3=           3. Quercus nigra         5         yes         FAC FACU species         x4=           4.         UPL species         x5=           5.         Column Totals:         (A)         (B)           6.         Prevalance Index = B/A =		 5	ves	FACW	
3. Quercus nigra         5         yes         FAC         FACU species         x4=           4.         UPL species         x5=           5.         Column Totals:         (A)         (B)           6.         Prevalance Index = B/A =				FACU	
4.     UPL species     x5=       5.     Column Totals:     (A)     (B)       6.     Prevalance Index = B/A =	3. Quercus nigra	5	yes	FAC	
5.     Column Totals:     (A)     (B)       6.     Prevalance Index = B/A =					· — — — — — — — — — — — — — — — — — — —
6.				***	
7. Prevalance Index = B/A =					
					Prevalance Index = B/A =
io – idal cover ilivarophytic vedetation indicators.		15	= Total Cove		Hydrophytic Vegetation Indicators:
Shrub Stratum (Plot size:)   ✓ Dominance Test is 50%	Shrub Stratum (Plot size:	)			
1. Prevalence Index is ≤3.0¹		_/			<u> </u>
2. Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)					
3					
4. Indicators of hydric soil and wetland hydrology must		<del></del>			Indicators of hydric soil and wetland hydrology must
5. be present, unless disturbed or problematic.					
6. Definitions of Vegetation Strata:			<del></del>		
7. • • • • • • • • • • • • • • • • • • •		· · · · · · · · · · · · · · · · · · ·			Dominion of Togotation Guida.
0 = Total Cover Tree- Woody plants, excluding woody vines,			= Total Cove	r	Troe Woody plants, excluding woody vines
Herb Stratum (Plot size:)  approximately 20 ft (6m) or more in height and 3 in. (7.6	Herb Stratum (Plot size:	, 0	- Total Cove	••	
1. Paspalum sp. 20 yes OBL cm) or larger in diameter at breast height (DBH).	<del></del>	20	VAC	OBL	
2. Urena lobata 5 no FACU Sapling- Woody plants, excluding woody vines,					'
3. Woodwardia virginica 1 no OBL approximately 20 ft (6m) or more in height and less than 3					
4. in. (7.6 cm) DBH.				000	
5. Shrub- Woody plants, excluding woody vines,			<del></del>		4
6. approximately 3 to 20 ft (1 to 6 m) in height.			<del></del>		
7. Herb- All herbaceous (non-woody)plants, including					1
8. herbaceous vines, regardless of size. Includes woody					
9. plants, except woody vines, less than approximately 3 ft (					
10. m) in height.			<del></del>		
11. Woody vine- All woody vines, regardless of height.			<del></del>		1 '
12.			<del></del>		i i i i i i i i i i i i i i i i i i i
26 = Total Cover	12.	26	= Total Cove		
Woody Vine Stratum (Plot size: )	Woody Vine Stratum (Plot size:	\	- Total Cove	·I	
1					1
3.					
					Lhudronhudio
4. Hydrophytic 5. Vegetation Present? Yes ✓ No					
5. Vegetation Present? Yes ✓ No	J.		= Total Covo	<del></del>	Aederanou Liezeurt 1e2 - 140 - 140
Remarks: (If observed, list morphological adaptations below).	Pomarka: (If observed list mambe				
Percent cover estimates based on meandering survey of the broader community.			-	roader cor	mmunity.

SOIL Profile De	escription: (Describe	to the de	onth needed to doc	umant ti	he indicator or	confirm the at	seance of indicators	Sampling Point:I	
Depth	Matrix	to ale de	spair needed to doc		r Features	COMMIN LINE OF	sence of mulcators	'1	
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc <sup>2</sup>	Texture	Remarks	
) <u>-</u> 9	10 YR 3/1							very dark gray fine sand	
÷13	10 YR 3/1		10 YR 4/2		-		few medium distinct mottles	very dark gray fine sand	
3-21	10 YR 4/1		10 YR 5/3; 10 YR 3/1				commom medium distinct mottles	dark gray fine sand	
			5 VD 5/0 40 VD				common medium		
1-35	10 YR 7/3		5 YR 5/8; 10 YR 8/2				and distinct mottles	very pale brown fine sand	
Type: C=	Concentration, D=Dep	letion, RM	M=Reduced Matrix, (	CS=Cove	ered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Por	e Lining, M=Matrix.	
lydric Sc	il Indicators:							Indicators for Problematic Hydric Soils 3:	
Histol	(A1)			Poly	value Below St	rface (S8) (LRF	R S, T, U)	1 cm Muck (a9) (LRR O)	
Histic	Epidon (A2)			Thin	Dark Surface	S9) (LRR S, T,	U)	2 cm Muck (A10) (LRR S)	
Black	Histic (A3)			Loai	my Mucky Mine	ral (F1) (LRR O	)	Reduced Vertic (F18) (outside MLRA 150A, B)	
Hydro	gen Sulfide (A4)			Loai	my Gleyed Mati	ix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)	
Strati	fied Layers (A5)			Dep	leted Matrix (F3	) ` ´		Anomaious Bright Loamy Soils (F20)	
Orgai	nic Bodies (A6) (LRR I	P, T, U)		Red	ox Dark Surfac	e (F6)		(MLRA 153B)	
5 cm	Mucky Mineral (A7) (L	DD P T I	N	Dep	leted Dark Surf	ace (F7)		Red Parent Material (TF2)	
	Presence (A8) (LRR		•1		ox Depressions	. ,		Very Shallow Dark Surface (TF12) (LRR T, U)	
	, , ,	u,			•				
	Muck (A9) (LRR P,T)				(F10) (LRR U)			Other (Explain in Remarks)	
	eted Below Dark Surfact Dark Surface (A12)	ce (A11)			-	11) (MLRA 151	-		
	t Prairie Redox (A16) (	MI PA 14	50A)	Iron-Manganese Masses (F12) (LRR O, Umbric Surface (F13) (LRR P, T, U)			, , , ,	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or	
	y Mucky Mineral (S1) (		-		a Orchric (F17)		,	problematic.	
	y Gleyed Matrix (S4)		-1			8) (MLRA 150A	, 150B)		
	y Redox (S5)					n Soils (F19) (M			
	ed Matrix (S6)				•	, ,,	D) (MLRA 149A, 1530	C, 153D)	
	Surface (S7) (LRR P,								
Restrictiv	re Layer (If observed) Type:	):							
	Depth (inches):						Hydric Soil Prese	nt? Yes <u>✓ No</u>	
Remarks:									
								•	

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/19/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: DK
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 6 28S 21E	
Landform (hillslope, terrace, etc.): N/A	<b>.</b>	Local relief (concave, conv	/ex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U		Long: <u>-82.2</u>	37470	Datum: WGS84
Soil Map Unit Name: Basinger fine sand			_NWI classification:	Freshwater Pond
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	_ No	(If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes No ✓
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	te map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.
Hydrophytic Vegetation Present?	Yes ✓ No			·
Hydric Soil Present?	Yes ✓ No	is the Sampled Area w	rithin a Wetland?	Yes No
Wetland Hydrology Present?	YesNo			
Remarks:			·	
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	
✓ Surface Water (A1)	Water-Stained Leaves (	RQ)		etated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)	50)	Drainage Pat	
✓ Saturation (A3)	Marl Deposits (B15) (LR	D III	Moss Trim Li	
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Burn	• •
Drift Deposits (B3)	Presence of Reduced Ire	-	<del></del>	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic	
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Shallow Aqui	· ·
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral	
Field Observations:	- The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the	,	1 110 11001101	100.(20)
Surface Water Present?	Yes No	Depth (inches): 0-36		
Water Table Present?	Yes No			
Saturation Present?	Yes No	Depth (inches): 0	Wetland	
(includes capillary fringe)		•	Hydrology Present?	Yes ✓ No
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous	inspections), if available:	•	
	·			

<b>VEGETATION</b> - Use scientific nan	nes of plants	,		Sampling Point:	DK
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	
2.				That Are OBL, FACW, or FAC:	<u>2</u> (A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	<u>2</u> (B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	<u>).00</u> (A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	r	Total % Cover of: Multiply	y hy:
Sapling Stratum (Plot size:	)	- rotal oove	•	OBL species x1=	<u>,y.</u>
1.	/			FACW species x2=	<del></del>
2				FAC species x3=	
2. 3.			-	· · · · · · · · · · · · · · · · · · ·	
4.				· · ·	
		<del></del>		UPL speciesx5=	—— <u>"</u>
5.				Column Totals:(A)	(B)
6.					
7.				Prevalance Index = B/A =	
<u></u>	0	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
Baccharis glomeruliflora	10	yes	FACW	Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation	<sup>1</sup> (Explain)
3. 4.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydro	loav must
5.				be present, unless disturbed or problemation	~·
6.				Definitions of Vegetation Strata:	
7.				_	
	10	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and	d 3 in. (7.6
1. Brachiaria mutica	60	yes	FACW	cm) or larger in diameter at breast height (DB	
Eupatorium capillifolium	15	no	FACU	Sapling- Woody plants, excluding woody vine	•
Polygonum punctatum	10	no	FACW	approximately 20 ft (6m) or more in height and	
4.			TACVV	in. (7.6 cm) DBH.	3 1033 (11411 0
5.				· · · ·	
6.				Shrub- Woody plants, excluding woody vines approximately 3 to 20 ft (1 to 6 m) in height.	,
7.		<del></del>		,	
8.				Herb- All herbaceous (non-woody)plants, incl	
				herbaceous vines, regardless of size. Include	
9.				plants, except woody vines, less than approxim) in height.	matery 3 it (1
10.				· · ·	
11.				Woody vine- All woody vines, regardless of h	eight.
12.					
	85	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.					
2					
3.					
4.				Hydrophytic	
5.				1	No .
		= Total Cove	r		<u>-</u> _
Remarks: (If observed, list morpho			· .		
Percent cover estimates based on	-	-	roader cor	mmunity	
l croom cover commates based on	meanaching s	arvey or the b	Jaugi COI	mnamy.	

SOIL								Sampling Point:I
Profile De:	scription: (Describe t	o the de	oth needed to doc	ument th	e indicator or	confirm the ab	sence of indicator	s.)
Depth	Matrix				Features			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
~ <del>7</del>	40.70.04							blad for and
)-7 7 20	10 YR 2/1							black fine sand
7-28	10 YR 6/1							gray fine sand
20.42	10 YR 5/3; 10 YR							brown and gravish brown fine sand
28-42 42-80	5/2 10 YR 6/2							light brownish gray fine sand
2-00	10 110 0/2						-	iight brownish gray tine sand
Type: C=0	Concentration, D=Depl	etion RM	=Reduced Matrix (	S=Cove	red or Coated S	and Grains	2Location: PL =P	ore Lining, M=Matrix.
	il Indicators:	ouori, ruivi	Troudoca macrix,	30 0010	od or obalog o	dia Granio.	LOGGION. I L I	Indicators for Problematic Hydric Soils 3:
Histol				Poly	alue Below Sur	face (S8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)
	Epidon (A2)					69) (LRR S, T,		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matri			Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratifi	ed Layers (A5)			Deple	eted Matrix (F3)	) `		Anomalous Bright Loamy Soils (F20)
Organ	ic Bodies (A6) (LRR P	, T, U)		Redo	x Dark Surface	(F6)		(MLRA 153B)
5 cm N	5 cm Mucky Mineral (A7) (LRR P,T,U)				eted Dark Surfa	ice (F7)		Red Parent Material (TF2)
					x Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	1 cm Muck (A9) (LRR P,T)				(F10) (LRR U)	` '		Other (Explain in Remarks)
					, ,, ,			Other (Explain in Normana)
	ted Below Dark Surfac	e (A11)			•	11) (MLRA 151)		
Thick	Dark Surface (A12)						R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (I	VILRA 150	DA)				)	hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (L			Delta	Orchric (F17)	(MLRA 151)		problematic.
	Gleyed Matrix (S4)	-itit 0, 0,	•	_		B) (MLRA 150A,	150B)	
	Redox (S5)					Soils (F19) (MI		
	ed Matrix (S6)			_	•	- ' '	) (MLRA 149A, 15	3C. 153D)
	` '					Janny 6 5 10 (1 2 5	, (	,,
	Surface (S7) (LRR P, S							
	Layer (If observed):						1	
	Type: Depth (inches):						Hydric Soil Pres	ent? Yes <u> </u>
Remarks:	Depth (inches)						Invario 300 Fies	entr res v No .

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	_Sampling Dat	e:10/19/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:DL		
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: 5 28S 21E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	vex, none): none	· · · · · · · · · · · · · · · · · · ·	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.077469	Long: <u>-82.2</u>	232844		Datum: WGS84	
Soil Map Unit Name: Myakka fine sand			_NWI classification			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	_ (If no, explain	in Remarks).	
Are Vegetation, Soil,	or Hydrology		Are circumstance		Yes <u>No ✓</u>	
	or Hydrology		(If needed, explain	n any answers i	n Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	ortant featu	res, etc.	
Hydrophytic Vegetation Present?	Yes No	]	•			
Hydric Soil Present?	Yes No	Is the Sampled Area v	vithin a Wetland?	Yes✓	.No	
Wetland Hydrology Present?	Yes No	]				
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indica	tors (minimum	of two required)	
Primary Indicators (minimum of one is required; of	heck all that apply)	Secondary Indicators (minimum of two requirSurface Soil Cracks (B6)				
✓ Surface Water (A1)	Water-Stained Leaves (	'R9)		getated Concar	ve Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	(33)	Drainage Pa	-	ounder (50)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR UN	Moss Trim I			
Water Marks (B1)	Hydrogen Sulfide Odor	-	<del></del>	Water Table (0	(2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	• •	Crayfish Bu	·	,_,	
Drift Deposits (B3)	Presence of Reduced In				Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i					
Iron Deposits (B5)	Thin Muck Surface (C7)	· · · · · · · · · · · · · · · · · · ·				
✓ Inundation Visible on Aerial Imagery (B7)						
Field Observations:		,				
Surface Water Present?	Yes No	Depth (inches): 0-72				
Water Table Present?	Yes No					
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)		-	Hydrology Present?	Yes <u></u> ✓	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			····	
Remarks:						
	ing wen, aenai proces, previous	· ·				

VEGETATION - Use scientific nar	mes of plants			Sa	ampling Point:	DL
	Absolute %	Dominant	Indicator	Dominance Test Worksheet		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	2	(4)
2.				That Are OBL, FACW, or FAC	<u>2</u>	(A)
3.				Total Number of Dominant	2	(2)
4.	,			Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species	400.00	
6.				That Are OBL, FACW, or FAC	: <u>100.00</u>	(A/B)
7.			-	Prevalance Index worksheet		
		= Total Cove	ar .	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	, , , , , , , , , , , , , , , , , , , ,	"	OBL species	x1=	
1.	'			FACW species		-
2.				FAC species	x3=	<b>-</b>
3.				FACU species	x3 x4=	-
[4.	. ——			UPL species		-
5.				<del></del>	x5=	- <sub>/B</sub> \
5.				Column Totals:	(A)	_ <sup>(B)</sup>
6.	. ,			1		
7.				Prevalance Index = B/A =		
l	. 0	= Total Cove	er '	Hydrophytic Vegetation Indi		-
Shrub Stratum (Plot size:	<u>_</u> _)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3		
2.				Problematic Hydrophyt	ic Vegetation¹ (Exp	olain)
3.						
4.	,			<sup>1</sup> Indicators of hydric soil and w	vetland hydrology n	nust
5.				be present, unless disturbed of		
6.				Definitions of Vegetation St	rata:	
7.				1		
		= Total Cove	er	Tree- Woody plants, excluding	woodv vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
1. Panicum repens	5	yes	FACW	cm) or larger in diameter at brea	_	`
Nuphar luteum	5	yes	OBL	Sapling- Woody plants, excludi	ing woody vines	
Cyperus haspan	1	no	OBL	approximately 20 ft (6m) or more		than 3
Eupatorium capillifolium	1	no	FACU	in. (7.6 cm) DBH.	, , , , , , , , , , , , , , , , , , ,	
Aster spp.	- <del>'</del>	no	FAC	Shrub- Woody plants, excluding	a woody vines	
Hydrocotyle umbellata		no	OBL	approximately 3 to 20 ft (1 to 6 r		
7.	•		<del>ODL</del>	1	-	
	- ——			Herb- All herbaceous (non-woodherbaceous vines, regardless of		- Au
8. 9.	- —			plants, except woody vines, less		
10.	-			m) in height.	, tilali approximator,	, 5 1. (.
11.	-			Woody vine- All woody vines, re		
		<del></del>		1	agardiess of height.	
12.		T-1-1 Co		4		
l , ,,, ,, ,,, ,,, ,, ,, ,, ,, ,, ,, ,	14	= Total Cove	er i	1		
Woody Vine Stratum (Plot size:	)			1		
1				4		
2.						
3.				]		
4.				Hydrophytic		
5.				Vegetation Present? Ye	es <u> </u>	<u>.</u>
	0	= Total Cove	er			
Remarks: (If observed, list morph	ological adapta	itions below).				
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.		

3 4h	scription: (Describe t	o the dep	oth needed to doc		e indicator or Features	confirm the ab	sence of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
irches)	Color (moist)	76	Color (moist)		Турс		Texture	Remains
)-5	10 YR 3/1							very dark gray fine sand
-20	10 YR 6/1		<del></del>					gray fine sand
20-25	N 2/0							black fine sand
25-30	5 YR 3/3	_						dark reddish brown fine sand
				_				
Type: C=	Concentration, D=Dept	etion, RM	=Reduced Matrix, (	CS=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	e Lining, M=Matrix.
	il Indicators:							ndicators for Problematic Hydric Soils 3:
Histol						face (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					59) (LRR S, T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4) ied Layers (A5)				ny Gleyed Matri	. ,	•	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ic Bodies (A6) (LRR P	, T, U)			eted Matrix (F3 x Dark Surface		•	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
5 cm	Mucky Mineral (A7) (LI	R P.T.III		Deple	eted Dark Surfa	ice (F7)		Red Parent Material (TF2)
					x Depressions		•	Very Shallow Dark Surface (TF12) (LRR T, U)
				(F10) (LRR U)	<b>V</b> ,		Other (Explain in Remarks)	
	. , ,	e (A11)		Deple	eted Orchric (F	11) (MLRA 151)		
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)					•	sses (F12) (LRI	O D T\	
	Prairie Redox (A16) (I	MLRA 150	)A)		-	3) (LRR P, T, U)		Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (L		•	_	Orchric (F17)			problematic.
	Gleyed Matrix (S4)					B) (MLRA 150A,	150B)	
	Redox (S5)				-	Soils (F19) (MI	•	
Stripp	ed Matrix (S6)			Anon	nalous Bright L	pamy Soils (F20	) (MLRA 149A, 153C	, 153D)
	Surface (S7) (LRR P, S							
Restrictiv	e Layer (If observed):	:						
	Type:		<del></del>					
D	Depth (inches):						Hydric Soil Presen	t? Yes <u>√</u> No
Remarks:								
		•						

Project/Site: Levy Nuclear Plant - Transmission Li	nes	City/County: Hillsborou	gh	Sampling Date: 10	0/19/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: D	M	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	5 28S 21E		···	
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slope (	%):	
Subregion (LRR or MLRA):LRR U	Lat: 28,077607	Long:82.2	28961	Datum:	WGS84	
Soil Map Unit Name: Myakka fine sand			_NWI classification:	NA		
Are climatic / hydrologic conditions on the site typi	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in Rem	arks)	
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances		No ✓	
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	any answers in Rema	rks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>		ng point locations, t	ransects, impoi	rtant features, et	c.	
Hydrophytic Vegetation Present?	Yes No		•			
Hydric Soil Present?	Is the Sampled Area w	ithin a Wetland?	YesNo			
Wetland Hydrology Present?	Yes No	]				
Remarks:						
		·				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	rs (minimum of two re	quired)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soil Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (E	39)	Sparsely Veg	etated Concave Surfa	ce (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Patt	terns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LRI	R U)	Moss Trim Lir			
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season V	Vater Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres of	on Living Roots (C3)	Crayfish Burro	ows (C8)		
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Saturation Vis	sible on Aerial Imagery	/ (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic F	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	tard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-12				
Water Table Present?	Yes No	Depth (inches): 0	l			
Saturation Present?		Depth (inches): 0	Wetland Hydrology			
(includes capillary fringe)			Present?	Yes No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	•			
Remarks:						
,						
	•					
•						
				•		

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	DM
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Quercus laurifolia	10	yes	FACW	Number of Dominant Species	(0)
2.				That Are OBL, FACW, or FAC: $\frac{4}{}$	(A)
3.				Total Number of Dominant	
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	10	= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	- Total Cove	·1	OBL species x1=	
Acer rubrum	 5	yes	OBL	FACW species x2=	•
Sapium sebiferum	5	yes	FAC	FAC species x3=	•
	• ———			FACU species x4=	•
4.				UPL species x5=	•
5				Column Totals: (A)	(B)
3. 4. 5. 6. 7.	·		•	(\)	-(5)
7	·			Prevalance Index = B/A =	
	10	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	) 10	- 10101 0010	•	✓ Dominance Test is 50%	
dilab Stratam (Flot Size.	<del>-</del> -'			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				<del></del>	oin)
3.	· ———			Problematic Hydrophytic Vegetation <sup>1</sup> (Expl	ант)
4.				1,	
5.	. <del> </del>	<del></del>		Indicators of hydric soil and wetland hydrology m	ust
6.	·			be present, unless disturbed or problematic.	
				Definitions of Vegetation Strata:	
7.				-	
	0	= Total Cove	er	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in. (	7.6
Colocasia esculenta	15	yes	FACW	cm) or larger in diameter at breast height (DBH).	
2. Laportea sp.	2	no	FACW	Sapling- Woody plants, excluding woody vines,	
3.				approximately 20 ft (6m) or more in height and less t	nan 3
4.				in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wood	
9.				plants, except woody vines, less than approximately	3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	!
12.				1	
	17	= Total Cove	er	]	
Woody Vine Stratum (Plot size:	)				
1.	<del></del> /				
2.				1	
3.	·				
4.	- <del> </del>			Hydrophytic	
5.				Vegetation Present? YesNo	
<u>.                                    </u>		= Total Cove		Tegewion riesent:	<u> </u>
Remarks: (If observed, list morph				<u> </u>	
Percent cover estimates based or	-	•	rnader oo	mmunity	
In erocut cover estimates pased of	ii iiicanuciiiig s	our vey or trie L	Toduel CO	initialiacy.	

OIL	scription: (Describe	4- 44- 4-	-46				anna of indicators \	Sampling Point:
	• •	to the de	otn needed to doc			contirm the abs	sence of indicators.)	
pth	Matrix		0-1 (	Redox Fe		Loc²	T4	Demodia
ches)	Color (moist)	%	Color (moist)	<u> </u>	Type <sup>1</sup>	Loc	Texture	Remarks
,	10 YR 3/1							very dark gray fine sand
	10 YR 6/1							
0.0				<del></del>				gray fine sand
25	N 2/0							black fine sand
-30	5 YR 3/3							dark reddish brown fine sand
	Concentration, D=Dep	letion, RM	=Reduced Matrix,	CS=Covered	or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	
	il Indicators:							ndicators for Problematic Hydric Soils 3:
_Histol	(A1)					face (S8) (LRR :		1 cm Muck (a9) (LRR O)
_Histic	Epidon (A2)			Thin Da	ark Surface (	59) (LRR S, T, U		2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loamy	Mucky Miner	al (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
Hvdro	gen Sulfide (A4)			Loamy	Gleyed Matri	x (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Lavers (A5)				ed Matrix (F3		-	Anomalous Bright Loamy Soils (F20)
Organ	nic Bodies (A6) (LRR F	P. T. U)		Redox	Dark Surface	(F6)	-	(MLRA 153B)
					ed Dark Surfa			Red Parent Material (TF2)
_	Mucky Mineral (A7) (L		<b>)</b>				-	- : /
Muck	Presence (A8) (LRR	U)		Redox	Depressions	(18)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm	Muck (A9) (LRR P,T)			Marl (F	10) (LRR U)			Other (Explain in Remarks)
	ted Below Dark Surface	o (A11)		Denlete	ed Orchric (F	11) (MLRA 151)		
		æ (ATT)					O D T)	
				_	sses (F12) (LRR	(O, P, I)	Indicators of hydrophytic vegetation and wetland	
Coast Prairie Redox (A16) (MLRA 150A)Un		Umbric	Surface (F1:	3) (LRR P, T, U)	ŀ	hydrology must be present, unless disturbed or		
Sand	/ Mucky Mineral (S1) (	DD 0 9		Delta C	rchric (F17)	(MLRA 151)	1	problematic.
_		LININ O, O,	,			3) (MLRA 150A,	160D)	
	Gleyed Matrix (S4)				•	Soils (F19) (ML	•	
	Redox (S5)							4500)
Stripp	ed Matrix (S6)			Anoma	ious Bright Lo	oamy Solis (F20)	(MLRA 149A, 153C,	153D)
Dark :	Surface (S7) (LRR P,	S, T, U)						
strictiv	e Layer (If observed)	:						
	Type:							
	Depth (inches):						Hydric Soil Present	t? Yes ✓ No .
marks:	, , , , , , , , , , , , , , , , , , ,							
								•
	-							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ugh	Sampling Date:10/20/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: DN
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: <u>5 28S 21E</u>	
Landform (hillslope, terrace, etc.):N/A	<u> </u>	Local relief (concave, con-	vex, none): none	Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.077619	Dong:82.2	225411	Datum: WGS84
Soil Map Unit Name: Malabar fine sand			_NWI classification	: NA
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	_ (If no, explain in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Yes <u>No ✓</u>
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in Remarks)
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ing point locations, t	ransects, impo	ortant features, etc.
Hydrophytic Vegetation Present?	Yes/ No			
Hydric Soil Present?				YesNo
Wetland Hydrology Present?				
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two require		
Primary Indicators (minimum of one is required; of	heck all that apply)		Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim L	ines (B16)
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bur	rrows (C8)
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)Geomorp		Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	)Shallow		uitard (D3)
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	l Test (D5)
Field Observations:				
Surface Water Present?	Yes No	_ Depth (inches):0-12	4	
Water Table Present?	Yes No	Depth (inches): 0		
Saturation Present?	Yes_ / No		Wetland Hydrology	
(includes capillary fringe)			Present?	Yes No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	- L	
Remarks:				
Nonans.				
·				

VEGETATION - Use scientific nar	mes of plants			Sa	mpling Point:	DN
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet		
1.		·		Number of Dominant Species	6	/A)
2.				That Are OBL, FACW, or FAC	:: <u>6</u>	(A)
3.	-			Total Number of Dominant	7	(D)
4.				Species Across All Strata:	<u>7</u>	(B)
5.				Percent of Dominant Species	95.71	/ ^ /D\
6.				That Are OBL, FACW, or FAC		(A/B)
7.				Prevalance Index worksheet		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Acer rubrum	10	yes	OBL	FACW species	x2=	_
Sapium sebiferum	5	yes	FAC	FAC species	x3=	_
3. Quercus laurifolia	5	yes	FACW	FACU species		_
4. Salix caroliniana	5	yes	OBL	UPL species	x5=	_
5.				Column Totals:	(A)	(B)
6.				1	<del>-</del> ` ′ <del></del>	<b>-</b> ` '
7.				Prevalance Index = B/A =	•	
	25	= Total Cove	r	Hydrophytic Vegetation Indi		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%		
Baccharis glomeruliflora		yes	FACW	Prevalence Index is ≤3		
2.	- ——			Problematic Hydrophyt		lain)
3.				<del></del>		
4.				<sup>1</sup> Indicators of hydric soil and w	etland hydrology m	ust
5.				be present, unless disturbed of		1000
6.	-			Definitions of Vegetation St		
7.	-			1 3		
	10	= Total Cove		Tree- Woody plants, excluding v	woody vines	
Herb Stratum (Plot size:)			•	approximately 20 ft (6m) or more		(7.6
Eupatorium capillifolium	10	yes	FACU	cm) or larger in diameter at brea		(
Andropogon virginicus	5	yes	FAC	Sapling- Woody plants, excludi		
Rhexia spp.	2	no	FACW	approximately 20 ft (6m) or more		han 3
4.			IACTT	in. (7.6 cm) DBH.	o in noight and loss.	man. c
5.	- ———			Shrub- Woody plants, excluding	woody vines	
6.		-		approximately 3 to 20 ft (1 to 6 r	•	
7.				Herb- All herbaceous (non-wood	-	
8.				herbaceous vines, regardless of	,,, ·	dν
9.		-		plants, except woody vines, less		
10.	-			m) in height.	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	• ,
11.				Woody vine- All woody vines, re	egardless of height.	
12.	•	····		<b>1 1000, 1110 / 111 1000, 1111 100</b>	Jgu. 4.000 1	
12.	17	= Total Cove	<u> </u>	1		
Woody Vino Stratum (Plot size:	17	= TOTAL COVE	Г	ļ		
Woody Vine Stratum (Plot size:	<del></del> /					
1. 2.						
3.	-			l		
4.				Hydrophytic	- / No	
5.		T-1-10		Vegetation Present? Ye	s <u> </u>	<del></del>
	0	= Total Cove	<u>r</u>			
Remarks: (If observed, list morph	iological adapta	ations below).				

Adapted from U.S. Army Corps of Engineers Atlantic and Gulf Coastal Plain Region- Interim Version

Percent cover estimates based on meandering survey of the broader community.

SOIL	ii(Dib	4-46-4-		4 44	L - 1 1 4			Sampling Point:Dt
Depth	escription: (Describe Matrix	to the de	pui needed to doc		Features	commin trie at	sence of indicators.	
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc²	Texture	Remarks
)-4	10 YR 4/1							dark gray fine sand
-12	10 YR 6/2							light grayish brown fine sand
12-30	10 YR 6/6							brownish yellow fine sand
30-50	10 YR 6/3							pale brown fine sand
Type: C=	Concentration, D=Dept	letion, RM	=Reduced Matrix, (	CS=Cove	ered or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	E Lining, M=Matrix.
	oil Indicators:		·					Indicators for Problematic Hydric Soils 3:
Histo	, ,				value Below Su			1 cm Muck (a9) (LRR O)
	Epidon (A2)				Dark Surface (		•	2 cm Muck (A10) (LRR S)
	Histic (A3)				my Mucky Miner		) ,	Reduced Vertic (F18) (outside MLRA 150A, B)
	ogen Sulfide (A4)				my Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)	т 111			leted Matrix (F3			Anomalous Bright Loamy Soils (F20)
	Organic Bodies (A6) (LRR P, T, U)Redox Dark Surface (F6)  5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)							(MLRA 153B) Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P,T,U)  ✓ Muck Presence (A8) (LRR U)				Redox Depressions (F8)			•	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)  Depleted Below Dark Surface (A11)				_	I (F10) (LRR U)	(10)	•	Other (Explain in Remarks)
				 Dep	leted Orchric (F	11) (MLRA 151	)	·
	Dark Surface (A12)	~ (////)			-Manganese Ma		POPTI	<b>.</b>
	t Prairie Redox (A16) (	MLRA 15	0A)		oric Surface (F1			Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
Sand	y Mucky Mineral (S1) (I	LRR O, S	)	Delt	a Orchric (F17)	(MLRA 151)	1	problematic.
Sand	y Gleyed Matrix (S4)			Red	uced Vertic (F1	B) (MLRA 150A	, 150B)	
Sand	y Redox (S5)			Pied	lmont Floodplaii	n Soils (F19) (M	LRA 149A)	
	ed Matrix (S6)			Ano	malous Bright L	oamy Soils (F20	) (MLRA 149A, 153C	, 153D)
	Surface (S7) (LRR P, : re Laver (If observed)				<del> </del>			
TO STITUTE	Type:	•	<del></del>				:	
<u>, </u>	Depth (inches):						Hydric Soil Presen	t? Yes <u>✓ No</u> .
Remarks:								•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	Sampling Date: 10/20/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point: DO	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 5 28S 21E		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con-	/ex, none): none	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.077660	Long: <u>-82.2</u>	21641	Datum: WGS84	
Soil Map Unit Name: Malabar and Basinger fine s	sands		_NWI classification:	NA .	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)	
Are Vegetation, Soit,	or Hydrology	significantly disturbed?	Are circumstances	normal? YesNo ✓	
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Remarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ng point locations, t	ransects, impo	rtant features, etc.	
Hydrophytic Vegetation Present?	Yes No			•	
Hydric Soil Present?	Yes No	is the Sampled Area w	vithin a Wetland?	YesNo	
Wetland Hydrology Present?	Yes No				
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:		····	Secondary Indicato	ors (minimum of two required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		•	e Soil Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	39)		etated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	,	Drainage Pat	• •	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	` '	
Water Marks (B1)	Hydrogen Sulfide Odor (			Vater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres of	•	Crayfish Burn	• •	
Drift Deposits (B3)	Presence of Reduced Iro		-	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic	* * * *	
Iron Deposits (B5)	Thin Muck Surface (C7)	· · · · · · · · · · · · · · · · · · ·	Shallow Aqui	• ,	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral Test (D5)		
Field Observations:		·	1		
Surface Water Present?	Yes No	Depth (inches): 0-60			
Water Table Present?	Yes No	Depth (inches): 0			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <u>✓</u> No	
Describe Recorded Data (stream gauge, monitoring Remarks:	ing well, aerial photos, previous	inspections), if available:			

<b>VEGETATION</b> - Use scientific nar	nes of plants			Sampling Point:	DO
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	<b>(5)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.	-			Prevalance Index worksheet:	
	0	= Total Cove		Total % Cover of: Multiply by	<i>r</i> :
Sapling Stratum (Plot size:	)			OBL species x1=	-
Quercus laurifolia	30	yes	FACW	FACW species x2=	_
2. Acer rubrum	20	yes	OBL	FAC species x3=	
Sapium sebiferum	5	no	FAC	FACU species x4=	_
4.				UPL species x5=	
5.				Column Totals: (A)	— <sub>(B)</sub>
6.				(//)	— (B)
7.				Prevalance Index = B/A =	
,	55	= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	- 10101 0011	<b>-</b> 1	✓ Dominance Test is 50%	
· - · · · · · · · · · · · · · · · · · ·	_/			Prevalence Index is ≤3.01	
<u>1.</u> 2.				<del></del> .	'valain)
3.				Problematic Hydrophytic Vegetation <sup>1</sup> (E	:xpiairi)
4.					
5.				Indicators of hydric soil and wetland hydrolog	y must
5. 6.				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:	
7.			· <del></del>	Deniminations of vegetation Strata.	
<u> </u>		- T-1-1 O		<u> </u>	
Harb Stratum (Diataina)	0	= Total Cove	er	Tree- Woody plants, excluding woody vines,	:- /7.0
Herb Stratum (Plot size:)			0.01	approximately 20 ft (6m) or more in height and 3 cm) or larger in diameter at breast height (DBH).	in. (7.6
1. Nuphar luteum		yes	OBL	•	
Rhynchospora inundata		yes	OBL	Sapling- Woody plants, excluding woody vines,	
Woodwardia virginica	5	yes	OBL	approximately 20 ft (6m) or more in height and le in. (7.6 cm) DBH.	ss than 3
4. Eupatorium capillifolium	5	yes	FACU	` '	
5. Osmunda cinnamomea	5	yes	FACW	Shrub- Woody plants, excluding woody vines,	
6. Ludwigia peruviana	5	yes	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Urena lobata	5	yes	FACU	Herb- All herbaceous (non-woody)plants, including	
8. Andropogon virginicus	5	yes	FAC	herbaceous vines, regardless of size. Includes w	
9. Sesbania spp.	2	no	FAC	plants, except woody vines, less than approximate m) in height.	ely 3 π (1
10. Solidago spp.	2	no	FACU	} ' •	
11. Andropogon glomeratus	2	no	FACW	Woody vine- All woody vines, regardless of heig	nt.
12. Cyperus odoratus	2	no	FACW		
	68	= Total Cove	er		
Woody Vine Stratum (Plot size:	)				
1.					
2.					
3.					
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	<u>.</u>
	0	= Total Cove	er	1	
Remarks: (If observed, list morphe	ological adapta	itions below).	· · · · · · · · · · · · · · · · · · ·		
Percent cover estimates based or	meandering s	survey of the b	oroader co	mmunity.	

SOIL	il: Hillsborough- Malaba								Sampling I	Point:DC
	scription: (Describe t	to the de	oth needed to doc			confirm the abse	nce of indicators.)			
Depth	Matrix		Color (maiot)	Redox F	eatures Type <sup>1</sup>	Loc²	Texture		Remarks	
(inches)	Color (moist)		Color (moist)	<u>%</u> _	Type		Texture		Remarks	
0-4	10 YR 4/1							dark gray fine sa	and	
4-12	10 YR 6/2							light grayish bro	wn fine sand	
12-30	10 YR 6/6	_						brownish yellow		
30-50	10 YR 6/3							pale brown fine	sand	
		_			· · · · · · · · · · · · · · · · · · ·					
	Concentration, D=Depl	etion, RM	=Reduced Matrix, C	S=Covere	d or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore			,, 3
Hydric So Histol	il Indicators:			Doharo	lua Balau Cua	face (S8) (LRR S		ndicators for Pro 1 cm Muck (a9	blematic Hydric S	oils *:
	Epidon (A2)		-			69) (LRR S, T, U)	· · · · —	2 cm Muck (A		
	Histic (A3)		-		,	al (F1) (LRR O)	-		c (F18) (outside M	LRA 150A. B)
	gen Sulfide (A4)		•		Gleyed Matrix		_		dpłain Soils (F19) (I	
	fied Layers (A5)				ed Matrix (F3)		_	***	ght Loamy Soils (F	
Organ	nic Bodies (A6) (LRR P	, T, U)		Redox	Dark Surface	(F6)		(MLRA 153B	)	
5 cm	5 cm Mucky Mineral (A7) (LRR P,T,U)				ed Dark Surfa	ce (F7)	_	Red Parent Material (TF2)		
✓ Muck Presence (A8) (LRR U)				Redox	Depressions	(F8)	_	Very Shaflow [	Dark Surface (TF12)	) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl (F	10) (LRR U)		-	Other (Explain	in Remarks)	
Deple	ted Below Dark Surfac	e (A11)		Deplete	ed Orchric (F1	1) (MLRA 151)				
Thick	Dark Surface (A12)			Iron-Ma	anganese Ma	ses (F12) (LRR	O, P,T) <sub>3/</sub>	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.		nd wetland
Coast	Prairie Redox (A16) (I	MLRA 15	DA) .		,	) (LRR P, T, U)	h			
Sandy	y Mucky Mineral (S1) (L	RR O, S			Orchric (F17) (	•	•			
	Gleyed Matrix (S4)					) (MLRA 150A, 1				
	/ Redox (S5)					Soils (F19) (MLR	•	462D)		
	ed Matrix (S6)		•	Arioma	nous bright Lt	iainy sons (F20) (	MLRA 149A, 153C,	1550)		
ı	Surface (S7) (LRR P, See Layer (If observed):					Г				
	Type:									
	Depth (inches):					ĺ,	Hydric Soil Present	? Yes	✓ No	
Remarks:							,	-	,	
İ										
ĺ										

Project/Site: Levy Nuclear Plant - Transmission Li	ines	.City/County: Hillsboro	ugh	Sampling Date:10/20/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poin	it: DP	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: 4 28S 21E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	vex, none): none		Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.07758</u> 3	3 Long: <u>-82.3</u>	217445		Datum: WGS84	
Soil Map Unit Name: Myakka fine sands			_NWI classification	. <u>NA</u>		
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	No	(If no, explain i	in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances	_	Yes <u>No ✓</u>	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in	Remarks)	
SUMMARY OF FINDINGS - Attach sit	e map showing sampl	ing point locations, t	transects, impo	rtant featur	es, etc.	
Hydrophytic Vegetation Present?	Yes No	1				
Hydric Soil Present?	Yes No	Is the Sampled Area v	within a Wetland?	Yes <u>√</u>	No	
Wetland Hydrology Present?	Yes No					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of	f two required)	
Primary Indicators (minimum of one is required; c	heck all that annly)			I Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)		Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	(23)		Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR (II)		Lines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	·	<del></del>	Water Table (C:	2)	
Sediment Deposits (B2)	Oxidized Rhizospheres			rrows (C8)		
Drift Deposits (B3)	Presence of Reduced In			/isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction	. ,		Position (D2)	magery (00)	
Iron Deposits (B5)	Thin Muck Surface (C7	· · · · · · · · · · · · · · · · · · ·				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema					
Field Observations:	Other (Explain it Nema	inoj	TAC Nedital	1031 (00)		
Surface Water Present?	Yes No	Depth (inches): 0-24				
Water Table Present?	Yes No		7			
Saturation Present?	Yes No		Wetland			
(includes capillary fringe)	140		Hydrology Present?	Yes _<	No	
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous	s inspections), if available:	riesenti	163		
Remarks:						
:						
-						

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	DP
	Absolute %	Dominant		Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
<u>1.                                      </u>				Number of Dominant Species	(A)
2.				That Are OBL, FACW, or FAC:	( )
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	(6)
5.				Percent of Dominant Species 50.00	(A (D)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.	<del></del> /			FACW species x2=	-
2.	. ——			FAC species x3=	-
					-
3.	· ——			FACU speciesx4=	-
4.				UPL species x5=	- <u>, _</u> ,
5.				Column Totals:(A)	_ <sup>(B)</sup>
6.					
7.				Prevalance Index = B/A =	
	0	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	-			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	lain)
3.					
4.				Indicators of hydric soil and wetland hydrology m	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.				J	
	0	= Total Cove	<del></del>	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	J	- 10tai 00vc	•	approximately 20 ft (6m) or more in height and 3 in.	/76
	10	V00	EACH	cm) or larger in diameter at breast height (DBH).	۱٬.۰ ۱
Paspalum notatum     Ludvisia ranges		yes	FACU OBL		
Ludwigia repens     Alta-republican additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional additional add		yes		Sapling- Woody plants, excluding woody vines,	
Alternanthera philoxeroides	2	no	OBL	approximately 20 ft (6m) or more in height and less t in. (7.6 cm) DBH.	ınan 3
4. Eichhornia sp.	2	no	OBL		
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	ŀ
8.				herbaceous vines, regardless of size. Includes woo	- 1
9.				plants, except woody vines, less than approximately	3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	j
12.					ı
	19	= Total Cove	r		ł
Woody Vine Stratum (Plot size:	)				
1.	·/				
2.				1	-
3.					
		<del></del>		Hydrophytic	]
<u>4.</u> 5.	· ———			Hydrophytic	1
J.		- Total O		Vegetation Present? YesNo	<u> </u>
Damania (If aba 1:-4 1	0	= Total Cove	1		
Remarks: (If observed, list morph		-			1
Percent cover estimates based or	n meandering s	urvey of the D	roauer cor	mmunity.	ŧ

SOIL Profile De	escription: (Describe	to the der	oth needed to doc	ument t	he indicator or	confirm the abs	ence of indicators.)			Sampling		
Depth	Matrix				x Features	001111111111111111111111111111111111111	ones or maisarcroi,					
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type	Loc²	Texture			Remarks		
0-5	10 YR 3/1							very dark gray	fine san	d		
5-20	10 YR 6/1							gray fine sand				
20-25	N 2/0							black fine sand				
25-30	5 YR 3/3							dark reddish br	own fine	sand		
Type: C=	Concentration, D=Dept	etion, RM	=Reduced Matrix,	CS=Cov	ered or Coated	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix				
Hydric Sc	oil Indicators:					•		ndicators for Pro	blema	tic Hydric S	oils <sup>3</sup> :	
Histol						urface (S8) (LRR :		1 cm Muck (a				
	Epidon (A2)					(S9) <b>(LRR S, T, U</b>	_	2 cm Muck (A				
	: Histic (A3)					ral (F1) (LRR O)	-	Reduced Vert				
	ogen Sulfide (A4)				my Gleyed Mati		-	Piedmont Floo	odplain	Soils (F19) (I	LRR P, S, T	)
	fied Layers (A5)				leted Matrix (F3		_	Anomalous B		amy Soils (F	20)	
Orgai	nic Bodies (A6) (LRR F	, I, U)			lox Dark Surfac			(MLRA 153				
5 cm	Mucky Mineral (A7) (L	RR P,T,U)			leted Dark Surf	, ,	-	Red Parent M		•		
Muck	Presence (A8) (LRR	U)			lox Depressions	` ,	_	Very Shallow		•	) (LRR T, U)	)
1 cm	Muck (A9) (LRR P,T)			Mar	1 (F10) (LRR U	)	-	Other (Explain	n in Ren	narks)		
	eted Below Dark Surfac	æ (A11)			•	11) (MLRA 151)						
Thick	Dark Surface (A12)			Iron	-Manganese Ma	asses (F12) (LRR	O, P,T) 3	Indicators of hydr	ophytic	vegetation a	nd wetland	
Coas	t Prairie Redox (A16) (	MLRA 150	DA)	Um	bric Surface (F1	13) (LRR P, T, U)		hydrology must be present, unless disturbed or				
Sand	y Mucky Mineral (S1) (	LRR O, S)	<b>,</b>	Delf	a Orchric (F17)	(MLRA 151)	r.	roblematic.				
	y Gleyed Matrix (S4)			Rec	luced Vertic (F1	8) (MLRA 150A,	150B)					
Sand	y Redox (S5)			Pied	dmont Floodplai	n Soils (F19) (ML	RA 149A)					
Stripp	ped Matrix (S6)			And	malous Bright L	oamy Soils (F20)	(MLRA 149A, 153C,	153D)				
	Surface (S7) (LRR P,											
Restrictiv	e Layer (If observed)	:										
	Type:		<del></del>									
	Depth (inches):						Hydric Soil Present	? Yes		_ No	<del>'</del>	
Remarks:												
9												
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I												

Project/Site: Levy Nuclear Plant - Transmission Li	nes		City/County: Hillsborou	gh	Sampling Date: 10/20/09			
Applicant/Owner: Progress Energy Florida, Inc.			State: FL		Sampling Point: DQ			
Investigator(s): Justin Styer, Amy Piko			Section, Township, Range: 4 28S 21E					
Landform (hillslope, terrace, etc.): N/A			Local relief (concave, conv	ex, none): none	Slope (%):			
Subregion (LRR or MLRA): LRR U		Lat: 28.077492	Long: <u>-82.2</u>	15943	Datum: WGS84			
Soil Map Unit Name: Malabar fine sands				_NWI classification:	_NA			
Are climatic / hydrologic conditions on the site typi	ical for this time	of year?	Yes <u>✓</u>	No	(If no, explain in Remarks)			
Are Vegetation, Soil	or Hydrology_							
Are Vegetation, Soil	or Hydrology_		naturally problematic?	(If needed, explain	any answers in Remarks)			
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map shov	ving samplir	ng point locations, t	ransects, impo	rtant features, etc.			
Hydrophytic Vegetation Present?	Yes <u></u> ✓	No						
Hydric Soil Present?	Hydric Soil Present? Yes No				YesNo			
Wetland Hydrology Present?	Yes	No						
Remarks:								
					İ			
HYDROLOGY								
Wetland Hydrology Indicators:					ors (minimum of two required)			
Primary Indicators (minimum of one is required; c				Surface Soil (	` '			
Surface Water (A1)		tained Leaves (E	39)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Fauna (B13)		Drainage Pat	· · ·			
✓ Saturation (A3)		posits (B15) <b>(LR</b> )	•	Moss Trim Li	` ´			
Water Marks (B1)	Hydroge	n Sulfide Odor (	C1)	Dry-Season V	Water Table (C2)			
Sediment Deposits (B2)	Oxidized	I Rhizospheres o	on Living Roots (C3)	Crayfish Burn	ows (C8)			
Drift Deposits (B3)	Presence	e of Reduced Iro	on (C4)	Saturation Vis	sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent I	ron Reduction in	Tilled Soils (C6)	Geomorphic Position (D2)				
lron Deposits (B5)	Thin Mu	ck Surface (C7)		Shallow Aquit	tard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (E	xplain in Remarl	ks)	FAC Neutral	Test (D5)			
Field Observations:								
Surface Water Present?			Depth (inches):					
Water Table Present?			Depth (inches):	Wetland				
Saturation Present?	Yes✓	No	Depth (inches): 0	Hydrology				
(includes capillary fringe)				Present?	Yes No			
Describe Recorded Data (stream gauge, monitori	ng well, aerial p	notos, previous	inspections), if available:					
Remarks:								
					İ			

VEGETATION - Use scientific nan	nes of plants			Sampling Point:	DQ
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.				Number of Dominant Species	(A)
2.				That Are OBL, FACW, or FAC:	(/)
3.				Total Number of Dominant	(B)
4.		<u> </u>		Species Across All Strata:	(0,
5.		<del>_</del>		Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	(/// 5/
7.				Prevalance Index worksheet:	
Sapling Stratum (Plot size:	)	= Total Cove	r	Total % Cover of: Multiply by: OBL species x1=	
1.				FACW species x2=	- I
2.				FAC species x3=	-
3.				FACU species x4=	-
4.				UPL species x5=	-
5.				Column Totals: (A)	- (В)
6.					-\-'
7.				Prevalance Index = B/A =	
	0	= Total Cove	·r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	}	, • • • • • • • • • • • • • • • • • • •		✓ Dominance Test is 50%	
1.	_/			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	nlain)
3.				1 Tobicinado Hjarophjao Togoladon (2009	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4.				Indicators of hydric soil and wetland hydrology n	erret
5.				be present, unless disturbed or problematic.	ilusi
6.				Definitions of Vegetation Strata:	
7.				Definitions of Vegetation Straw.	
		= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	•	- 10tal 0010	1	approximately 20 ft (6m) or more in height and 3 in.	176
Dichanthelium sp.	90	yes	FAC	cm) or larger in diameter at breast height (DBH).	(1.0
Ludwigia repens	5	no	OBL		
Hydrocotyle umbellata	5	no	OBL	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less	than 3
4.			ODL	in. (7.6 cm) DBH.	liidi, 5
5.		<del></del>		Shrub- Woody plants, excluding woody vines,	
<u>5.</u> 6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.	E				
8.				Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woo	ndv
9.				plants, except woody vines, less than approximately	
10.				m) in height.	, • , .
11.				Woody vine- All woody vines, regardless of height.	
12.	<del></del>			Trebuty vine 7 in woody vines, regulations of mergina	
12.	100	= Total Cove		-	
Woody Vine Stratum (Plot size:	)	- Total Cove	1		
11.					
2.					
3.		<del> </del>		1	
4.				Hydrophytic	
5.				Vegetation Present? Yes <u> </u>	
	0	= Total Cove	:r		
Remarks: (If observed, list morpho Percent cover estimates based on	-		roader cor	mmunity.	

SOIL	il: Hillsborough- Malaba							Sampling Point:DQ		
Profile De	escription: (Describe t Matrix	to the dep	oth needed to doc		ne indicator or	confirm the abs	sence of indicators.)			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks		
0-4	10 YR 4/1							dark gray fine sand		
4-12	10 YR 6/2						<del></del>	light grayish brown fine sand		
12-30	10 YR 6/6							brownish yellow fine sand		
30-50	10 YR 6/3						<del></del>	pale brown fine sand		
-										
	·									
1= 0		==.	Dad and Marie					I was No Market		
<del></del>	Concentration, D=Deploil Indicators:	etion, RM	=Reduced Matrix, C	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	ndicators for Problematic Hydric Soils <sup>3</sup> :		
Histol				Poke	value Relow Sur	face (S8) (LRR		1 cm Muck (a9) (LRR O)		
	Epidon (A2)		•			69) (LRR S, T, U		2 cm Muck (A10) (LRR S)		
_	Histic (A3)		•		ny Mucky Miner		-	Reduced Vertic (F18) (outside MLRA 150A, B)		
	ogen Sulfide (A4)		•		ny Gleyed Matri		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	fied Layers (A5)		•		eted Matrix (F3)		-	Anomalous Bright Loamy Soils (F20)		
	nic Bodies (A6) (LRR P	, T, U)			ox Dark Surface		-	(MLRA 153B)		
5 cm	Mucky Mineral (A7) (LI	RPTIN		Dept	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)		
_	Presence (A8) (LRR I		•	Rede	ox Depressions	(F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)		
i—	Muck (A9) (LRR P.T)	٠,			(F10) (LRR U)	(1 0)	-	Other (Explain in Remarks)		
_	eted Below Dark Surfac	ο (Δ11)	•			11) (MLRA 151)	-	,		
·—	Dark Surface (A12)	C (A11)	•		•	sses (F12) (LRR	ODEN			
					=			Indicators of hydrophytic vegetation and wetland		
Coast Prairie Redox (A16) (MLRA 150A)			•					nydrology must be present, unless disturbed or problematic.		
	y Mucky Mineral (S1) (L	RR O, S)		_		•	•	orobiematic.		
	y Gleyed Matrix (S4)					) (MLRA 150A,				
	y Redox (S5)				•	Soils (F19) (ML	•			
	ed Matrix (S6)			Anor	malous Bright Lo	oamy Soils (F20)	(MLRA 149A, 153C,	153D)		
	Surface (S7) (LRR P, S									
Restrictiv	e Layer (If observed):	;								
	Type:						l			
	Depth (inches):						Hydric Soil Present	? Yes No		
Remarks:						,				
l										
}										

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ugh	_Sampling Date	e: 10/20/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	·	Sampling Poir	nt: DR	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: 4 28S 21E				
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, conv	vex, none): none	!	Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.077547</u>	<u>'</u> Long: <u>82.2</u>	211507		Datum: WGS84	
Soil Map Unit Name: St. Johns fine sands			_NWI classification		Pond	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes _✓	_ _ No	 _ (If no, explain	in Remarks)	
• •	or Hydrology	_significantly disturbed?	Are circumstances	_	Yes <u>No ✓</u>	
	or Hydrology		(If needed, explain		Remarks)	
SUMMARY OF FINDINGS - Attach sit			•	-	•	
Hydrophytic Vegetation Present?	YesNo	]			<u> </u>	
Hydric Soil Present?	Yes✓ No	Is the Sampled Area w	vithin a Wetland?	Yes/	No	
Wetland Hydrology Present?	Yes✓ No	1				
Remarks:		3				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum o	f two required)	
Primary Indicators (minimum of one is required; of	check all that apply)					
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Aquatic Fauna (B13)	,	Drainage Patterns (B10)			
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	, ,		
Water Marks (B1)	Hydrogen Sulfide Odor (	•	<u> </u>	Water Table (C	2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	•	Crayfish Bur	•	2)	
Drift Deposits (B3)	Presence of Reduced Iro			/isible on Aerial I	Imagani (CQ)	
		, ,			magery (Ca)	
Algal Mat or Crust (B4)	Recent Iron Reduction in					
Iron Deposits (B5)	Thin Muck Surface (C7)					
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)		
Field Observations:	No. /					
Surface Water Present?	Yes No		-}			
Water Table Present?	Yes No		- Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	Yes <u></u> ✓	No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:				
Remarks:						
	•					
	•					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	DR
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.				Number of Dominant Species 5	(4)
2.	·			That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(D)
4.	,			Species Across All Strata:	(B)
5.				Percent of Dominant Species 100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	(AVD)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
Quercus laurifolia	5	yes	FACW	FACW species x2=	_
2.	. ——		<del></del>	FAC species x3=	_
3.	,		,	FACU species x4=	_
4.				UPL species x5=	-
5.				Column Totals: (A)	— <sub>(B)</sub>
6.	•			· · ·	
7.	•			Prevalance Index = B/A =	
	5	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
Myrica cerifera	- 5	yes	FAC	Prevalence Index is ≤3.01	
2.	• ———			Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	plain)
3.				<u> </u>	•
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology r	nust
5.				be present, unless disturbed or problematic.	
6.	- ——			Definitions of Vegetation Strata:	
7.				1	
	5	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in.	. (7.6
Ludwigia peruviana	20	yes	OBL	cm) or larger in diameter at breast height (DBH).	
Eleocharis baldwinii	20	yes	FACW	Sapling- Woody plants, excluding woody vines,	
3. Cyperus haspan	20	yes	OBL	approximately 20 ft (6m) or more in height and less	than 3
Sesbania spp.	15	no	FAC	in. (7.6 cm) DBH.	
Paspalum notatum	10	no	FACU	Shrub- Woody plants, excluding woody vines,	
6. Woodwardia virginica	5	no	OBL	approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.	- ——			herbaceous vines, regardless of size. Includes woo	
9.	-			plants, except woody vines, less than approximately	y 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height.	
12.	•			1	
	90	= Total Cove		1	
Woody Vine Stratum (Plot size:	)				
1.	,				
2.				1	
3.					
4.				Hydrophytic	
5.			-	Vegetation Present? Yes <u>√</u> No_	
	0	= Total Cove	<del></del>		
Remarks: (If observed, list morph	ological adapta	ations below)		<b>L</b> .	

Percent cover estimates based on meandering survey of the broader community.

County/soil: Hillsborough- St. Johns SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) Color (moist) Loc Texture Remarks 10 YR 2/1 0-6 black fine sand very dark grayish brown fine sand 6-12 10 YR 3/2 12-29 10 YR 6/2 light brownish gray fine sand 29-36 10 YR 2/1 black fine sand Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils 3: Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) \_1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) \_Reduced Vertic (F18) (outside MLRA 150A, B) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Depleted Matrix (F3) Stratified Layers (A5) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Depleted Dark Surface (F7) Red Parent Material (TF2) \_5 cm Mucky Mineral (A7) (LRR P,T,U) Very Shallow Dark Surface (TF12) (LRR T, U) ✓ Muck Presence (A8) (LRR U) Redox Depressions (F8) \_Marl (F10) (LRR U) Other (Explain in Remarks) \_1 cm Muck (A9) (LRR P,T) \_Depleted Below Dark Surface (A11) Depleted Orchric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,T) \_Thick Dark Surface (A12) <sup>3</sup>Indicators of hydrophytic vegetation and wetland Umbric Surface (F13) (LRR P, T, U) Coast Prairie Redox (A16) (MLRA 150A) hydrology must be present, unless disturbed or problematic. Delta Orchric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? No Yes Remarks

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling			10/20/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	DS	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: 4 28S 21E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): none	s	ope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.077518	Long:82.2	11098	D	atum: WGS84	
Soil Map Unit Name: St. Johns fine sands			_NWI classification:			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes✓	_ No	(If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances		es <u>No ✓</u>	
Are Vegetation, Soil,			(If needed, explain	any answers in F	Remarks)	
SUMMARY OF FINDINGS - Attach sit		• • •	ransects. impo	rtant feature	s. etc.	
Hydrophytic Vegetation Present?	YesNo		*		<u></u>	
Hydric Soil Present?	YesNo	Is the Sampled Area within a Wetland? Yes No			o	
Wetland Hydrology Present?	Yes ✓ No					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of t	wo required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	Drainage Patterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim L	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	•		Burrows (C8)		
Drift Deposits (B3)	Presence of Reduced Inc	- , ,		isible on Aerial Im	agery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in		· · · · · · · · · · · · · · · · · · ·	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	• •	Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar		FAC Neutral			
Field Observations:	· · · · · · · · · · · · · · · · · · ·		T i			
Surface Water Present?	Yes No	Depth (inches): 0-72	_			
Water Table Present?						
Saturation Present?	Yes No	Depth (inches): 0	Wetland			
(includes capillary fringe)			Hydrology Present?	Yes ✓ N	0	
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:				
Remarks:						

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	DS
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	•			Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC: $\frac{1}{}$	(A)
3.				Total Number of Dominant	<b>(D)</b>
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
<u> </u>		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	10101 0010	•	OBL species x1=	
Washingtonia robusta	5	yes	NL	FACW species x2=	<del>-</del> .
2.	· — —			FAC species x3=	_
3.	· <del></del>			FACU species x4=	_
4.				UPL species x5=	_
5.					— <sub>/B</sub> \
	·			Column Totals:(A)	(B)
6. 7.	·			Decision of trades = D/A =	
7.		- Total Cause		Prevalance Index = B/A =	
Ohach Otashas (Blatains	, 5	= Total Cove	er ·	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	<del>)</del>			Dominance Test is 50%	
1.	·	<del></del>		Prevalence Index is ≤3.0¹	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	(plain)
3.					
4.				Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.					
	0	= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 ir	ı. (7.6
Pistia stratiotes	50	yes	OBL	cm) or larger in diameter at breast height (DBH).	
2. Cyperus haspan	10	no	OBL	Sapling- Woody plants, excluding woody vines,	
3. Ludwigia octovalvis	5	no	OBL	approximately 20 ft (6m) or more in height and les	s than 3
4. Sesbania spp.	5	no	FAC	in. (7.6 cm) DBH.	
5. Nuphar luteum	2	no	OBL	Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	1
8.				herbaceous vines, regardless of size. Includes wo	
9.	· <del></del>			plants, except woody vines, less than approximate	
10.	· <del></del>			m) in height.	,
11.				Woody vine- All woody vines, regardless of heigh	t
12.				Troody vines y in woody vines; regardless of neigh	
12.	72	= Total Cove		1	
Woody Vine Stratum (Plot size:	12	- Total Cove	;1		
	)				
1.				-	
2.					
3.				ł., , , <i>,,</i>	
4.				Hydrophytic	
5.				Vegetation Present? YesNo_	<del></del>
	0	= Total Cove	er		
Remarks: (If observed, list morph	-	•			
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	

County/soil: Hillsborough- St. Johns
SOIL

SUIL								Sampling Point:05
Profile De	scription: (Describe	to the dep	th needed to doc	ument th	e indicator or	confirm the ab	sence of indicators.	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	%_	Type <sup>1</sup>	Locz	Texture	Remarks
0-6	10 YR 2/1							black fine sand
6-12	10 YR 3/2	•				· ——		very dark grayish brown fine sand
12-29	10 YR 6/2				•			light brownish gray fine sand
29-36	10 YR 2/1							black fine sand
-								
				_				
	Concentration, D=Dep	letion, RM=	Reduced Matrix, (	CS=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Por	
	il Indicators:							Indicators for Problematic Hydric Soils 3:
Histol	• •					rface (S8) (LRR		1 cm Muck (a9) (LRR O)
	Epidon (A2)					S9) (LRR S, T, U		2 cm Muck (A10) (LRR S)
	Histic (A3)					ral (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				ny Gleyed Matr			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5) iic Bodies (A6) (LRR I	P, T, U)			eted Matrix (F3 ox Dark Surface			Anomalous Bright Loamy Soils (F20) (MLRA 153B)
5 cm	Mucky Mineral (A7) (L	DD D T III		Depl	eted Dark Surfa	ace (F7)		Red Parent Material (TF2)
	Presence (A8) (LRR				x Depressions			Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	U,			(F10) (LRR U)	• •		Other (Explain in Remarks)
_								Outer (Explain in Normarko)
	ted Below Dark Surfac	ce (A11)			•	11) (MLRA 151) asses (F12) (LRF	0.000	
	Dark Surface (A12)				-	3) (LRR P, T, U)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
_	Prairie Redox (A16) (		•		•			hydrology must be present, unless disturbed or problematic.
	Mucky Mineral (S1) (	LRR O, S)			Orchric (F17)			problematic.
	Gleyed Matrix (S4)					8) (MLRA 150A,		
	Redox (S5)			_		n Soils (F19) (ML	•	4.000
ı— ··	ed Matrix (S6)			Anor	nalous Bright L	oamy Soils (F20	) (MLRA 149A, 153C	, 153D)
	Surface (S7) (LRR P,							
	e Layer (If observed)	):						
	Type: Depth (inches):						Hydric Soil Presen	t? Yes ✓ No .
Remarks:	Depar (mones).						Invalie Southesen	
1								
į								
1								
ļ								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	_Sampling Date: 10/20/09			
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: DT				
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: 4 28\$ 21E			
Landform (hillslope, terrace, etc.): N/F	<u> </u>	Local relief (concave, con	vex, none): none	Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.077455	Long:82.:	210665	Datum: WGS84		
Soil Map Unit Name: St. Johns fine sands				: Freshwater emergent wetland		
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in Remarks)		
Are Vegetation, Soil,	or Hydrology		Are circumstances			
Are Vegetation, Soil,			(If needed, explain	any answers in Remarks)		
SUMMARY OF FINDINGS - Attach si				•		
Hydrophytic Vegetation Present?	YesNo	1		•		
Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland? YesNo				
Wetland Hydrology Present?	Yes✓No					
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:				ors (minimum of two required)		
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Surface Soil Cracks (B6)		
Surface Water (A1)	Water-Stained Leaves (	B9)		getated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)		
Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim Li	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres					
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu	itard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	=	<del>-</del>			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	Yes No		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:				
Remarks:						
				•		

VEGETATION - Use scientific na	mes of plants			Sampling Point:	DT
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	·			Number of Dominant Species	(Δ)
2.				That Are OBL, FACW, or FAC:	(A)
3.				Total Number of Dominant	(D)
4.	-			Species Across All Strata:	(B)
5.				Percent of Dominant Species	
6.	-			That Are OBL, FACW, or FAC:	(A/B)
7.	- —			Prevalance Index worksheet:	-
		= Total Cove	۰r	Total % Cover of: Multiply by:	I
Sapling Stratum (Plot size:	)	- 10101 0010		OBL species x1=	
Taxodium distichum	<del>-</del>	yes	OBL	FACW species x2=	<b>—</b>
2.		<u> </u>	ODL	FAC species x3=	<del></del>
3.				FACU species x4=	<b>-</b>
4.				UPL species x5=	<b></b>
5.					— <sub>/B</sub> ,
5.				Column Totals:(A)	(B)
6.					
7.	- ———			Prevalance Index = B/A =	
	. 2	= Total Cove	ar I	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)		1	✓ Dominance Test is 50%	
1.	- - ————			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	(plain)
3.					
4.				<sup>1</sup> Indicators of hydric soil and wetland hydrology	must
5.				be present, unless disturbed or problematic.	
6.	- —			Definitions of Vegetation Strata:	
7.	- —			1	
		= Total Cove		Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	-	, , , , , , , , , , , , , , , , , , , ,	•	approximately 20 ft (6m) or more in height and 3 in	1 (7.6
Nuphar luteum	- 50	yes	OBL	cm) or larger in diameter at breast height (DBH).	1
			ODL	Sapling- Woody plants, excluding woody vines,	
2. 3.				approximately 20 ft (6m) or more in height and les	e than 3
4.	- ——			in. (7.6 cm) DBH.	3 ulai, c
5.					
	- ——	<del></del>		Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
6.					
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wo	
9.				plants, except woody vines, less than approximate	ly 3 π (1)
10.	-			m) in height.	
11.				Woody vine- All woody vines, regardless of heigh	t.
12.					
	50	= Total Cove	;r		
Woody Vine Stratum (Plot size:	)		i		
1.	•		i		
2.					
2. 3.					
4.		<del></del>		Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	
<u></u>		= Total Cove		Vegetation i resenti	<del></del>
Remarks: (If observed, list morph			*	<u> </u>	
Percent cover estimates based or	-		roader cor	mmunitu	
ir ercent cover estimates based of	il illeanueiling s	Juivey of the D	TOAUCI COI	minumy.	

SOIL	il: Hillsborough- St. Jol	nns						Sampling Point:
Profile De	scription: (Describe	to the de	oth needed to doc	ument ti	ne indicator or	confirm the abs	sence of indicators.)	
Depth	Matrix			Redox	Features			
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc²	Texture	Remarks
0-6	10 YR 2/1							black fine sand
6-12	10 YR 3/2					·		very dark grayish brown fine sand
12-29	10 YR 6/2							light brownish gray fine sand
29-36	10 YR 2/1							black fine sand
20 00	- 10 11(2)							Didde file darid
	· <del></del>							
	·							
Type: C=	Concentration, D=Dep	letion, RM	=Reduced Matrix, (	S=Cove	red or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
	il Indicators:						ı	ndicators for Problematic Hydric Soils 3:
Histor	(A1)			Poly	value Below Su	rface (S8) (LRR	S, T, U) _	1 cm Muck (a9) (LRR O)
Histic	Epidon (A2)			Thin	Dark Surface (	S9) (LRR S, T, U	J) _	2 cm Muck (A10) (LRR S)
Black	Histic (A3)			Loar	ny Mucky Mine	ral (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	gen Sulfide (A4)				ny Gleyed Matr		_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	fied Layers (A5)				leted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Orgai	nic Bodies (A6) (LRR I	P, T, U)		Red	ox Dark Surface	e (F6)		(MLRA 153B)
5 cm	Mucky Mineral (A7) (L	RR P.T.U		Dep	leted Dark Surfa	ace (F7)	_	Red Parent Material (TF2)
	Presence (A8) (LRR		,	Red	ox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
	Muck (A9) (LRR P,T)	-,		 Marl	(F10) (LRR U)	` '	-	Other (Explain in Remarks)
		(0.4.4)				11) (MLRA 151)	-	
	ted Below Dark Surfac	ce (ATT)			•			
I nick	Dark Surface (A12)				•	asses (F12) (LRF		Indicators of hydrophytic vegetation and wetland
Coas	t Prairie Redox (A16) (	MLRA 15	DA)	Umb	oric Surface (F1	3) (LRR P, T, U)	•	nydrology must be present, unless disturbed or
Sand	Mucky Mineral (S1) (	LRR O. S	)	Delta	a Orchric (F17)	(MLRA 151)	F	problematic.
	Gleyed Matrix (S4)			Red	uced Vertic (F1	8) (MLRA 150A,	150B)	
	Redox (S5)					n Soils (F19) (ML		
	ed Matrix (S6)						) (MLRA 149A, 153C,	, 153D)
Dark	Surface (S7) (LRR P,	STIN			-			•
	e Layer (If observed)						1	
	Type:	,.						
	Depth (inches):						Hydric Soil Present	t? Yes ✓ No .
Remarks:							1,	
l								
l								
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Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/20			10/20/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: DU			DU
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: 4 28S 21E		
Landform (hillslope, terrace, etc.): N/A	·	Local relief (concave, con	vex, none): none	Sid	ope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.077779	Long: <u>-82.</u>	207651	Da Da	tum: WGS84
Soil Map Unit Name: Malabar fine sands			_NWI classification	: Freshwater em	nergent wetland
Are climatic / hydrologic conditions on the site type	ical for this time of year?	Yes <u></u> ✓	 No	(If no, explain in	Remarks)
Are Vegetation, Soil,	or Hydrology				s No ✓
	or Hydrology		(If needed, explain		
SUMMARY OF FINDINGS - Attach sit			transects, impo	rtant features	s, etc.
Hydrophytic Vegetation Present?	Yes ✓ No	]			•
Hydric Soil Present?	Yes✓ No	Is the Sampled Area v	vithin a Wetland?	Yes✓No	·
Wetland Hydrology Present?	Yes No	]			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of tv	vo required)
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	egetated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim L	ines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)			
Drift Deposits (B3)	Presence of Reduced In	on (C4)Saturation Visible on Aerial Imagery (C9)			agery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	)Shallow Aquitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No		4		
Water Table Present?	Yes No	Depth (inches): 0			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes _	·
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:		·, "·	
Remarks:					
· ·					
,					

VEGETATION - Use scientific nar	mes of plants			Sampling Point:	<u>DU</u>
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
1.	•			Number of Dominant Species	(4)
2.				That Are OBL, FACW, or FAC: $\frac{4}{}$	(A)
3.				Total Number of Dominant	(5)
4.				Species Across All Strata:	(B)
5.				Percent of Dominant Species 400.00	(4.45)
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
	0	= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)			OBL species x1=	
1.	,			FACW species x2=	
2.				FAC species x3=	_
3.				FACU species x4=	-
4.				UPL species x5=	_
5.				Column Totals: (A)	— (B)
6.				(/ (/	<b>–</b> (b)
7.	· ———			Prevalance Index = B/A =	
		= Total Cove		Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)	- Total Gove	'	✓ Dominance Test is 50%	
1	<del>. '</del>			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	nlain)
3.	· ——			Problematic Hydrophytic Vegetation (Ex	Jiaiii)
4.				The street are settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the settle at the s	
5.	· <del></del>			Indicators of hydric soil and wetland hydrology r	nust
6.				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:	
7.	·	···		Definitions of vegetation Strata.	
1.		- T-4-1 C		<u> </u>	
Herb Stratum (Plot size:)	U	= Total Cove	ſ	Tree- Woody plants, excluding woody vines,	(7.C
			ODI	approximately 20 ft (6m) or more in height and 3 in cm) or larger in diameter at breast height (DBH).	. (7.6
Ludwigia repens     Bacopa caroliniana	- <del>- 5</del> 5	yes	OBL		
·		yes	OBL	Sapling- Woody plants, excluding woody vines,	
	5 5	yes	FACW	approximately 20 ft (6m) or more in height and less in. (7.6 cm) DBH.	man 3
<ul><li>4. Phyla nodiflora</li><li>5.</li></ul>		yes	FACW		
6.				Shrub- Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.	
7.				• • • • • • • • • • • • • • • • • • • •	İ
8.				Herb- All herbaceous (non-woody)plants, including	
9.				herbaceous vines, regardless of size. Includes word plants, except woody vines, less than approximatel	-
				m) in height.	y 5 it (1
10.	-			4	
[11.				Woody vine- All woody vines, regardless of height	•
12.					
	20	= Total Cove	r		
Woody Vine Stratum (Plot size:	)				
1.					
2. 3.					
3.					
4.				Hydrophytic	
5.	·			Vegetation Present? Yes <u>√</u> No_	<u>·</u>
	0	= Total Cove	r		
Remarks: (If observed, list morph					
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.	i

OIL	: Hillsborough- Malaba							Sampling Point:
	scription: (Describe t	o the dep	th needed to doc	ument the i	ndicator or	confirm the abse	ence of indicators.)	
epth	Matrix	•		Redox Fe	atures		·	
ches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
:	10 YR 4/1							dark gray fine sand
12 ·	10 YR 6/2							light grayish brown fine sand
-30	10 YR 6/6							brownish yellow fine sand
-50	10 YR 6/3							pale brown fine sand
							2	
	Concentration, D=Deple il Indicators:	etion, RM	=Reduced Matrix, (	CS=Covered	or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.  Indicators for Problematic Hydric Soils 3:
Histol				Potovali	ie Below Su	face (S8) (LRR S		1 cm Muck (a9) (LRR O)
_	Epidon (A2)					S9) (LRR S, T, U)	· · · · -	2 cm Muck (A10) (LRR S)
	Histic (A3)					al (F1) (LRR O)	-	Reduced Vertic (F18) (outside MLRA 150A, B)
							-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	gen Sulfide (A4)				Gleyed Matri		-	_ ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
	ied Layers (A5)	T 11)			d Matrix (F3		_	Anomalous Bright Loamy Soils (F20)
	ic Bodies (A6) (LRR P				Dark Surface			(MLRA 153B)
_5 cm ł	Mucky Mineral (A7) (LF	R P,T,U)		Deplete	d Dark Surfa	ice (F7)	_	Red Parent Material (TF2)
Muck	Presence (A8) (LRR L	J)		Redox [	Depressions	(F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
_	Muck (A9) (LRR P,T)	•		Marl (F1	10) (LRR U)		_	Other (Explain in Remarks)
_Deptet	ted Below Dark Surface	e (A11)		Deplete	d Orchric (F	11) (MLRA 151)		
_Thick	Dark Surface (A12)			Iron-Ma	nganese Ma	sses (F12) (LRR	O, P,T) 3	Indicators of hydrophytic vegetation and wetland
_Coast	Prairie Redox (A16) (M	/LRA 150	)A)	Umbric	Surface (F1	3) (LRR P, T, U)		hydrology must be present, unless disturbed or
_Sandy	Mucky Mineral (S1) (L	.RR O, S)				(MLRA 151)	•	roblematic.
_Sandy	Gleyed Matrix (S4)				•	B) (MLRA 150A, 1	•	
Sandy	Redox (S5)			Piedmo	nt Floodplair	Soils (F19) (MLF	RA 149A)	
_Stripp	ed Matrix (S6)			Anomal	ous Bright L	oamy Soils (F20)	MLRA 149A, 153C,	153D)
	Surface (S7) (LRR P, S							
	e Layer (If observed):							
	Type:							
marks:	Depth (inches):	<del></del>					Hydric Soil Present	? Yes <u></u> No

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborough Sampling Date: 10/2			10/21/09	
Applicant/Owner: Progress Energy Florida, Inc.	***	State: FL Sampling Point: D			:DV	
Investigator(s): Justin Styer, Amy Piko	<del></del>	Section, Township, Range	e: 4 28S 21E			
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	vex, none): <u>none</u>	s	lope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.077722</u>	Long: <u>-82.2</u>	205510	D	atum: WGS84	
Soil Map Unit Name: Myakka fine sands		_	_NWI classification			
Are climatic / hydrologic conditions on the site type	pical for this time of year?	Yes <u>✓</u>	_ No	_ (If no, explain ir	n Remarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances		′es <u>No </u> ✓	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in I	Remarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	ortant feature	s, etc	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Yes No	Is the Sampled Area within a Wetland? Yes No				
Wetland Hydrology Present?	YesNo					
Remarks:						
		•				
	•					
LIVEROLOGV						
HYDROLOGY			Odes Indicat	· - (!-!		
Wetland Hydrology Indicators:	to all the temphs		Secondary Indicat		two requirea)	
Primary Indicators (minimum of one is required; o		50)	Surface Soil	• •	0 -f (D0)	
✓ Surface Water (A1)	Water-Stained Leaves (I	89)		getated Concave	Suпасе (Бо)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa			
✓ Saturation (A3)	Marl Deposits (B15) (LR	-	Moss Trim L			
Water Marks (B1)	Hydrogen Sulfide Odor (			Water Table (C2)	)	
Sediment Deposits (B2)	Oxidized Rhizospheres	- · ·	Crayfish Bur	, ,		
Drift Deposits (B3)	Presence of Reduced Iro	• •		Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in			Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqu			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)		
Field Observations:	Van / Na	Denth (inches): 0.72				
Surface Water Present?	Yes No		1			
Water Table Present?	Yes/ No		Wetland			
Saturation Present?	Yes No	Deptn (inches): U	Hydrology			
(includes capillary fringe)	ing walt posici photos previous	incondings) if available:	Present?	Yes <u>✓ N</u>	lo	
Describe Recorded Data (stream gauge, monitor	ing well, aeriai priotos, previous	іпѕреслопѕ), іі ачапаліє.				
Remarks:						
		•				

VEGETATION - Use scientific na				Sampling	<del></del>	D/
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	_ Cover	Species?	Status			
1.				Number of Dominant Species	1	(A)
2.				That Are OBL, FACW, or FAC:	<u></u>	` ,
3.				Total Number of Dominant	<u>3</u>	(B)
1.				Species Across All Strata:	<u> </u>	(0)
5.				Percent of Dominant Species	33.33	(A/E
5.	•			That Are OBL, FACW, or FAC:	<u> </u>	(//\
7.	-			Prevalance Index worksheet:		
		= Total Cove	r er	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species 1 x1=		1
1.	<del>-</del>			FACW species 1 x2=		2 .
2.				FAC species 2 x3=		6
3.		•		FACU species 5 x4=		20
<del>5.</del> 4.				UPL species x5=		0
5.				Column Totals: 9 (A)		9 (B)
5. 5.				Column Totals		<u>ə</u> (D)
				Dravalance Index = B/A =	3.2	2
7.		- Total Cave		Prevalance Index = B/A =		
Ohanda Otastana (District	0	= Total Cove	#1	Hydrophytic Vegetation Indicators:	i	
Shrub Stratum (Plot size:	<del>)</del>			Dominance Test is 50%		
Myrica cerifera	1	yes	FAC	Prevalence Index is ≤3.0¹	. 1	
2.				✓ Problematic Hydrophytic Vege	tation' (Exp	plain)
3.				Virtually no vegitation		
4.				<sup>1</sup> Indicators of hydric soil and wetland	hydrology n	nust
5.				be present, unless disturbed or proble	ematic.	
ô.	-			Definitions of Vegetation Strata:		
7.	-					
	1	= Total Cove	er	Tree- Woody plants, excluding woody v	/ines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in heigh		. (7.6
Paspalum notatum	- 4	yes	FACU	cm) or larger in diameter at breast heig	ht (DBH).	
2. Andropogon virginicus	1	no	FAC	Sapling- Woody plants, excluding wood	dv vines.	
3. Rhexia spp.	1	no	FACW	approximately 20 ft (6m) or more in heigh		than :
Ludwigia octovalvis	1	no	OBL	in. (7.6 cm) DBH.	•	
5.	<del></del>			Shrub- Woody plants, excluding woody	vines.	
ô.			-	approximately 3 to 20 ft (1 to 6 m) in he		
7.				Herb- All herbaceous (non-woody)plant		
3.		<del></del>		herbaceous vines, regardless of size. I		
э. Э.				plants, except woody vines, less than a		
				m) in height.	pproximator	,
10.				1 ' '	aa af bajabt	
11.				Woody vine- All woody vines, regardle	ss of neight.	•
12.	<del></del>			4		
	7	= Total Cove	er			
Woody Vine Stratum (Plot size:	)					
1. Rubus spp.	1	yes	FACU	1		
2.	<u> </u>					
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes <u>✓</u>	No	
	1	= Total Cove	er	1		

Matrix Redox Features  Color (moist) % Color (moist) % Type Loc² Texture Remarks  10 YR 3/1  10 YR 6/1  5 N 2/0  5 YR 3/3  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  Polyvalue Below Surface (S8) (LRR S, T, U)  Histic Epidon (A2)  Classific (A3)  Classific (A3)  Classific (A4)  Classific (A4)  Classific (A4)  Classific (A4)  Classific (A4)  Classific (A4)  Classific (A5)  Classific (A6)  Classific (A6)  Classific (A7)  Classific (A7)  Classific (A8)  Classific (A8)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Classific (A9)  Clasi
10 YR 6/1 5 N 2/0 5 YR 3/3  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Concentration, D=Depleted Matrix, CS=Covered or Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=Coated Sand Grains.  E: C=
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e: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  2 Location: PL=Pore Lining, M=Matrix.  ic Soil Indicators:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 3:  Indicators for Problematic Hydric Soils 4:  Indicators for Problematic Hydric Soils 4:  Indicators for Problematic Hydric Soils 4:  Indicators for Problematic Hydric Soils 4:  Indicators for Problematic Hydric Soils 4:  Indicators for Problematic Hydric Soils 4:  Indicators for Problematic Hydric Folls 4:  Indicators for Problematic Hydric Folls 4:  Indicators for Problematic Hydric Folls 4:  Indicators for Problematic Hydric Folls 4:  Indicators for Problematic Hydric Folls 4:  Indicators for Problematic Hydric Folls 4:  Indicators for Problematic Hydric Folls 4:  Indicators for Problematic Hydric Folls 4:  Indicat
ic Soil Indicators:
ic Soil Indicators:
Histol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (a9) (LRR O) Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Hydrogen Sulfide (A4) Reduced Vertic (F18) (outside MLRA 15 Hydrogen Sulfide (A4) Piedmont Floodplain Soils (F19) (LRR P, Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Granic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) For Mucky Mineral (A7) (LRR P,T,U) Peleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) (LRR U)  Mart (F10) (LRR U) Other (Explain in Remarks)
Histic Epidon (A2) Thin Dark Surface (S9) (LRR S, T, U) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A7) (LRR P, T, U) Corn Mucky Mineral (A8) (LRR U) Corn Mucky Mineral (A9) (LRR P, T) Corn Mucky Mineral (A9) (LRR P, T) Corn Mucky Mineral (A9) (LRR P, T) Corn Mucky Mineral (A9) (LRR P, T) Corn Mucky Mineral (A9) (LRR P, T) Corn Mucky Mineral (A9) (LRR P, T) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mineral (A9) (LRR U) Corn Mucky Mi
Black Histic (A3)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, Stratified Layers (A5) Depleted Matrix (F3) Depleted Matrix (F3) Piedmont Floodplain Soils (F19) (LRR P, COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMENT OF COMMEN
Stratified Layers (À5)  Depleted Matrix (F3)  Anomalous Bright Loamy Soils (F20)  Preparic Bodies (A6) (LRR P, T, U)  Redox Dark Surface (F6)  (MLRA 153B)  Red Parent Material (TF2)  Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR U)  Mart (F10) (LRR U)  Other (Explain in Remarks)
Organic Bodies (A6) (LRR P, T, U)         Redox Dark Surface (F6)         (MLRA 153B)           6 cm Mucky Mineral (A7) (LRR P,T,U)         Depleted Dark Surface (F7)         Red Parent Material (TF2)           Muck Presence (A8) (LRR U)         Redox Depressions (F8)         Very Shallow Dark Surface (TF12) (LRR U)           1 cm Muck (A9) (LRR P,T)         Mart (F10) (LRR U)         Other (Explain in Remarks)
Organic Bodies (A6) (LRR P, T, U)        Redox Dark Surface (F6)         (MLRA 153B)           5 cm Mucky Mineral (A7) (LRR P,T,U)        Depleted Dark Surface (F7)        Red Parent Material (TF2)           Muck Presence (AB) (LRR U)        Redox Depressions (F8)        Very Shallow Dark Surface (TF12) (LRR U)           1 cm Muck (A9) (LRR P,T)        Mart (F10) (LRR U)        Other (Explain in Remarks)
5 cm Mucky Mineral (A7) (LRR P,T,U)  ——Depleted Dark Surface (F7)  ——Red Parent Material (TF2)  Muck Presence (A8) (LRR U)  ——Red Parent Material (TF2)  ——Very Shallow Dark Surface (TF12) (LRR U)  1 cm Muck (A9) (LRR P,T)  ——Marl (F10) (LRR U)  ——Other (Explain in Remarks)
Muck Presence (A8) (LRR U)  Redox Depressions (F8)  Yery Shallow Dark Surface (TF12) (LRR U)  1 cm Muck (A9) (LRR P,T)  Mart (F10) (LRR U)  Other (Explain in Remarks)
1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)Other (Explain in Remarks)
Depleted Below Dark Surface (A11)Depleted Orchric (F11) (MLRA 151)
Thick Dark Surface (A12)Iron-Manganese Masses (F12) (LRR O, P,T) 3Indicators of hydrophytic vegetation and wetla
Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F13) (LRR P, T, U) hydrology must be present, unless disturbed o
Sandy Mucky Mineral (S1) (LRR O, S)Delta Orchric (F17) (MLRA 151) problematic.
Sandy Gleyed Matrix (S4)Reduced Vertic (F18) (MLRA 150A, 150B)
Sandy Redox (S5)Piedmont Floodplain Soils (F19) (MLRA 149A)
Stripped Matrix (S6)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
<del></del>
Dark Surface (S7) (LRR P, S, T, U)
· · · · · · · · · · · · · · · · · · ·
rictive Layer (If observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes ✓ No  arks:

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	gh	_Sampling Date:	10/21/09	
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point: DW			DW	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 4 28S 21E	···		
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	rex, none): none	Slop	oe (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28.077769	69 Long: <u>-82.204173</u> Datum: <u>WGS84</u>				
Soil Map Unit Name: Myakka fine sands				: Freshwater eme	ergent wetland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in R	emarks)	
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal? Yes	No ✓	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Re	marks)	
SUMMARY OF FINDINGS - Attach sit	e map showing sampli	ng point locations, t	ransects, impo	rtant features,	etc.	
Hydrophytic Vegetation Present?	Yes No	Ţ				
Hydric Soil Present?	YesNo	Is the Sampled Area within a Wetland? YesNo				
Wetland Hydrology Present?	Yes No	]				
Remarks:		•				
					ļ	
	•				:	
	)					
HYDROLOGY	,					
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two	required)	
Primary Indicators (minimum of one is required; of	heck all that apply)		Surface Soil	oil Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	rsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	itterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim Li	ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)				
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	isible on Aerial Imag	gery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	1	Shallow Aqu	itard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	<del></del>				
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-12	_			
Water Table Present?	Yes No	Depth (inches): 0	L			
Saturation Present?	Yes No		Wetland Hydrology			
(includes capillary fringe)			Present?	Yes <u>✓</u> No		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:	·			
Remarks:						
	•					

VEGETATION - Use scientific nar	mes of plants				Sampling Point:	DW
	Absolute %	Dominant	Indicator	Dominance Test Worksl	heet:	···· · · · · · · · · · · · · · · · · ·
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	•			Number of Dominant Spe		(4)
2.				That Are OBL, FACW, or	FAC: 5	(A)
3.				Total Number of Dominar	nt _	(D)
4.		<del></del>	•	Species Across All Strata	<u>5</u>	(B)
5.			***************************************	Percent of Dominant Spe	cies	
6.				That Are OBL, FACW, or	100.00	(A/B)
7.				Prevalance Index works		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Sapium sebiferum	<sup>-</sup> 5	yes	FAC	FACW species	x2=	_
2.				FAC species	x3=	
3.				FACU species	x4=	_
4.				UPL species	x5=	_
5.				Column Totals:	(A)	— (B)
6.	·			-	(^)	— (D)
7.				Prevalance Index = 8	R/A =	
	5	= Total Cove		Hydrophytic Vegetation		<del></del>
Shrub Stratum (Plot size:	١	10101 0010		✓ Dominance Test is		
1.	<u>-</u> /			Prevalence Index		
2.					phytic Vegetation <sup>1</sup> (Exp	olain)
3.		<del></del>		- Toblematic Hydro	phytic vegetation (Lx)	Jalit
4.				Indicators of budgio soil o	and watland budgalagy r	munt.
5.				<sup>1</sup> Indicators of hydric soil a be present, unless disturb		nust
6.	·			Definitions of Vegetatio		
7.		***************************************		Deminitions of Vegetatio	ii Stiata.	
1.	0	= Total Cove			are en	
Herb Stratum (Plot size:)	U	- Total Cove	<b>:</b> I	Tree- Woody plants, excludapproximately 20 ft (6m) or		(7 G
	20	1100	OBL	cm) or larger in diameter at	_	(7.0
<ol> <li>Ludwigia peruviana</li> <li>Rhynchospora microcarpa</li> </ol>	15	yes	OBL	l '	• , ,	
	15	yes	FACW FACW	Sapling- Woody plants, ex approximately 20 ft (6m) or		than 2
, , ,	15	yes	FACVV	in. (7.6 cm) DBH.	more in neight and less	uiaii 3
Andropogon virginicus     Panicum hemitomon	10	yes	OBL	• '	localita accompanio o cita a a	
		no		Shrub- Woody plants, excl approximately 3 to 20 ft (1)	•	
	10	no	OBL	1	· -	
•		no	FACU	Herb- All herbaceous (non-		
8. Rhexia spp. 9		no	FACW	herbaceous vines, regardle		-
· .				plants, except woody vines m) in height.	, less than approximately	y 5 It (1
10.						
11.				Woody vine- All woody vin	les, regardless of neight.	
12.				İ		
	100	= Total Cove	er			
Woody Vine Stratum (Plot size:	)			į.		
1.				ł		
2.				·		
3.						
4.	·			Hydrophytic		
5.				Vegetation Present?	Yes <u>√</u> No	
	0	= Total Cove	er			
Remarks: (If observed, list morph	ological adapta	tions below).				
Percent cover estimates based or	n meandering s	urvey of the b	roader cor	mmunity.		

SOIL								Sampling Point:DV
1	escription: (Describe	to the dep	oth needed to do			confirm the ab	sence of indicators	.)
Depth	Matrix		C-1 (i-t)		k Features	Loc²	T4	Demonto
(inches)	Color (moist)	%	Color (moist)		Type'	Loc	Texture	Remarks
0-5	10 YR 3/1							very dark gray fine sand
5-20	10 YR 6/1						•	gray fine sand
20-25	N 2/0					•		black fine sand
25-30	5 YR 3/3	_						dark reddish brown fine sand
	-	_						
Type: C=	Concentration, D=Dep	letion RM:	Reduced Matrix	CS=Cove	ered or Coated S	Sand Grains	<sup>2</sup> Location: Pt =Por	re Lining, M=Matrix.
	oil Indicators:	, , , , , , , , , , , , , , , , , , ,	Treduced Hallist,	00 001	orea or courted t	Jana Granis.	Loodion: 1 L 1 of	Indicators for Problematic Hydric Soils 3:
Histol				Poly	value Below Su	rface (S8) (LRR	S. T. U)	1 cm Muck (a9) (LRR O)
_	Epidon (A2)					S9) (L <b>RR S, T,</b> L		2 cm Muck (A10) (LRR S)
	Histic (A3)				•	al (F1) (LRR O)	•	Reduced Vertic (F18) (outside MLRA 150A, B)
Hydro	ogen Sulfide (A4)			Loa	my Gleyed Matri	ix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Strati	fied Layers (A5)				leted Matrix (F3			Anomalous Bright Loamy Soils (F20)
Orgai	nic Bodies (A6) (LRR F	P, T, U)		Red	ox Dark Surface	€ (F6)		(MLRA 153B)
5 cm	Mucky Mineral (A7) (L	RR P,T,U)		Dep	leted Dark Surfa	ace (F7)		Red Parent Material (TF2)
Muck	Presence (A8) (LRR	U)		Red	lox Depressions	(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm	Muck (A9) (LRR P,T)			Mar	1 (F10) (LRR U)			Other (Explain in Remarks)
Deple	eted Below Dark Surface	æ (A11)		Dep	leted Orchric (F	11) (MLRA 151)	1	
Thick	Dark Surface (A12)	, ,		lron	-Manganese Ma	sses (F12) (LRF	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coas	t Prairie Redox (A16) (	MLRA 150	)A)	Uml	bric Surface (F1	3) (LRR P, T, U)	•	hydrology must be present, unless disturbed or
	y Mucky Mineral (\$1) (	LRR O, S)			a Orchric (F17)			problematic.
	y Gleyed Matrix (S4)				,	8) (MLRA 150A,	•	
	y Redox (S5)					n Soils (F19) (ML		
Stripp	ped Matrix (S6)			Ano	malous Bright L	oamy Soils (F20	) (MLRA 149A, 1530	J, 153D)
	Surface (S7) (LRR P,						Υ	
Restrictiv	ve Layer (If observed)	:						
	Type: Depth (inches):		<del></del>				Hydric Soil Preser	nt? Yes ✓ No .
Remarks:							Inyunc Son Fresei	itt tes v no
Remarks.								
İ								
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l								•
1								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date:10/21/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL	<u> </u>	Sampling Point: DX		
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: <u>3 28S 21E</u>			
Landform (hillslope, terrace, etc.): N/A	1	Local relief (concave, con	vex, none): none		_Slope (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.077788</u>	Long: <u>-82.</u>	201634		Datum: WGS84	
Soil Map Unit Name: Malabar fine sands			_NWI classification:			
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes	_ No	(If no, explain	n in Remarks)	
Are Vegetation, Soil,	or Hydrology		Are circumstances			
Are Vegetation, Soil,			(If needed, explain	any answers	in Remarks)	
SUMMARY OF FINDINGS - Attach si			transects, impo	rtant featu	res, etc.	
Hydrophytic Vegetation Present?	YesNo				<del></del>	
Hydric Soil Present?	Yes ✓ No	Is the Sampled Area v	vithin a Wetland?	Yes <u></u> ✓	_No	
Wetland Hydrology Present?	Yes✓No	1				
Remarks:		• • • • • • • • • • • • • • • • • • • •				
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum	of two required)	
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil	Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves (	B9)	Sparsely Veg	etated Conca	ive Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	RR U)	Moss Trim Li	nes (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor (	(C1)Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)				
Drift Deposits (B3)	Presence of Reduced Ire	on (C4)Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)					
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)		
Field Observations:						
Surface Water Present?	Yes No	Depth (inches): 0-6	_			
Water Table Present?	Yes No		. 184-41			
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology			
(includes capillary fringe)			Present?	Yes <u>✓</u>	_No	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:				
Remarks:						
incinarks.						

VEGETATION - Use scientific na	mes of plants				Sampling Point:	DX
	Absolute %	Dominant	Indicator	Dominance Test Worksh	eet:	
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Spec		(A)
2.				That Are OBL, FACW, or	FAC:	(//)
3.				Total Number of Dominan	7	(B)
4.				Species Across All Strata:	=	(5)
5.				Percent of Dominant Spec		(A/B)
6.				That Are OBL, FACW, or	FAC: ——	(,,,,,
7.				Prevalance Index works	neet:	
	0	= Total Cove	r	Total % Cover of:	Multiply by:	<u>.</u>
Sapling Stratum (Plot size:	<u></u> )			OBL species	x1=	
1.				FACW species	x2=	
2.				FAC species	x3=	
3.				FACU species	x4=	
4.				UPL species	x5=	_
5.				Column Totals:	(A)	(B)
6.						
7.				Prevalance Index = B		
	0	= Total Cove	r	Hydrophytic Vegetation		
Shrub Stratum (Plot size:	)			✓ Dominance Test is		
1.				Prevalence Index is		
2.				Problematic Hydro	ohytic Vegetation¹ (E	xplain)
3.						
4.				<sup>1</sup> Indicators of hydric soil as		must
5.				be present, unless disturb		
6.				Definitions of Vegetation	Strata:	
7.	<u> </u>					
	0	= Total Cove	r	Tree- Woody plants, exclud		
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) or		n. (7.6
Paspalum notatum	5	yes	FACU	cm) or larger in diameter at	breast height (DBH).	
Panicum hemitomon	2	yes	OBL	Sapling- Woody plants, exc		
<ol><li>Alternanthera philoxeroides</li></ol>	1	no	OBL	approximately 20 ft (6m) or	more in height and les	s than 3
Phyla nodiflora	1	no	FACW	in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, exclu		
6.				approximately 3 to 20 ft (1 to	o 6 m) in height.	
7.				Herb- All herbaceous (non-	• • • • • • • • • • • • • • • • • • • •	-
8.				herbaceous vines, regardle		7
9.				plants, except woody vines,	less than approximate	ely 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vine	es, regardless of heigh	it.
12.				1		
	9	= Total Cove	r			
Woody Vine Stratum (Plot size:	)					
1.						
2.	_					
3.				1		
4.				Hydrophytic		
5.				Vegetation Present?	Yes <u>√</u> No_	•
	0	= Total Cove	r	1		

Percent cover estimates based on meandering survey of the broader community.

Remarks: (If observed, list morphological adaptations below).

Depth inches)	cription: (Describe t Matrix	to the dep									
inches)	Matrix		th needed to doc			confirm the abs	ence of indicators.)	1			
-4			C-1 (i-4)		Features	Loc <sup>2</sup>	Tardina			Damadia	
	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>		Texture			Remarks	
	10 YR 4/1							dark gray fine	sand		
	10 YR 6/2							light grayish br		e sand	
2-30	10 YR 6/6							brownish yellow	v fine s	and	
0-50	10 YR 6/3							pale brown fine	sand		
										•	
	oncentration, D=Depl	etion, RM=	Reduced Matrix, (	CS=Cover	ed or Coated S	Sand Grains.	<sup>2</sup> Location: PL=Pore	- 0,			. 1
lydric Soil I Histol (A				Doha	ralua Balaur Cur	rface (S8) (LRR S		ndicators for Pr 1 cm Muck (a		•	oils ":
	oidon (A2)					S9) (LRR S, T, U		1 cm Muck (		•	
_	istic (A3)			_		ral (F1) (LRR O)				) (outside ML	RA 150A. B)
	en Sulfide (A4)				ny Gleyed Matr		•			Soils (F19) (L	
	d Layers (A5)				eted Matrix (F3		-	Anomalous E			
Organic	Bodies (A6) (LRR P	P, T, U)		Redo	x Dark Surface	÷ (F6)	-	(MLRA 153		,	
5 cm Mu	ucky Mineral (A7) (LI	RR P,T,U)		Deple	eted Dark Surfa	ace (F7)	_	Red Parent N	/taterial	(TF2)	
✓ Muck Pi	resence (A8) (LRR t	U)		Redo	x Depressions	(F8)	_	Very Shallow	Dark S	urface (TF12)	(LRR T, U)
1 cm Mu	uck (A9) (LRR P,T)			Marl	(F10) (LRR U)		-	Other (Expla	n in Re	marks)	
Depleted	d Below Dark Surfac	e (A11)		Deple	eted Orchric (F	11) (MLRA 151)					
Thick Da	ark Surface (A12)			Iron-l	Manganese Ma	sses (F12) (LRR	O, P,T)	31			
Coast Pi	rairie Redox (A16) (I	MLRA 150	)A)	Umb				<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or			
Sandy M	lucky Mineral (S1) (L	LRR O, S)		Delta	Orchric (F17)	(MLRA 151)	ı	problematic.			
Sandy G	Sleyed Matrix (S4)			Redu	ced Vertic (F1	8) (MLRA 150A,	150B)				
_	Redox (S5)					n Soils (F19) <b>(ML</b>	•				
Stripped	l Matrix (S6)			Anon	nalous Bright L	oamy Soils (F20)	(MLRA 149A, 153C,	, 153D)			
	ırface (S7) (LRR P, S										
	Layer (If observed):	:									
	ype:								,		
De Remarks:	epth (inches):						Hydric Soil Present	t? Yes		_ No	<b>_·</b>

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	_Sampling Date:_	10/21/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:_	DY	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 3 28S 21E			
Landform (hillslope, terrace, etc.):N/A	1	Local relief (concave, conv	vex, none): none	Sto	pe (%):	
Subregion (LRR or MLRA): LRR U	Lat: <u>28.077772</u>	Long: <u>-82.2</u>	01116	Da	tum: WGS84	
Soil Map Unit Name: Malabar fine sands			_NWI classification:		ergent Wetland	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes✓	_ No	(If no, explain in F	Remarks)	
Are Vegetation, Soil,	or Hydrology				s No ✓	
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explain	any answers in Re	emarks)	
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant features	, etc	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	Is the Sampled Area within a Wetland? Yes/ No					
Wetland Hydrology Present?						
Remarks:						
HYDROLOGY	_					
Wetland Hydrology Indicators:			Secondary Indicate	-	o required)	
Primary Indicators (minimum of one is required; c			Surface Soil	, ,		
Surface Water (A1)	Water-Stained Leaves (I	B9)		getated Concave S	urface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
✓ Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)Dry-Season Water Table (C2)				
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)Crayfish Burrows (C8)				
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)Saturation Visible on Aerial Imagery			igery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6)	Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	itard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)				
Field Observations:						
Surface Water Present?	Yes No		.			
Water Table Present?	Yes No	. Depth (inches):	Wetland			
Saturation Present?	Yes No	Depth (inches): 0	Hydrology			
(includes capillary fringe)			Present?	Yes <u>✓</u> No		
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous	inspections), if available:				
Remarks:						
·						

VEGETATION - Use scientific na	mes of plants			Sampl	ling Point:	DY
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	<u>2</u>	(A)
2.				That Are OBL, FACW, or FAC:	=	(/')
3.	· <del>-</del>			Total Number of Dominant	<u>2</u>	(B)
4.				Species Across All Strata:	<b>£</b>	(0)
5.				Percent of Dominant Species	100.00	(A/B)
6.				That Are OBL, FACW, or FAC:	100.00	(AVD)
7.				Prevalance Index worksheet:		
	0	= Total Cove	er .	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	<u></u> )			· ——	1=	_
1. Salix spp.	10	yes	FACW	· · —	2=	_
2.				FAC speciesx	3=	_
3.	,			FACU species x	4=	_
4.				UPL species x	:5=	_
5.	-			Column Totals:	A)	- (B)
16.				<del></del> -	·	-` ′
5. 6. 7.			-	Prevalance Index = B/A =		
<u></u>	10	= Total Cove	-r	Hydrophytic Vegetation Indicate	ors:	$\overline{}$
Shrub Stratum (Plot size:	1	- 10101 00.0	4	✓ Dominance Test is 50%	515.	- 1
	<i></i> /		EAC	Prevalence Index is ≤3.0 <sup>1</sup>		
Baccharis sp.  2.	10	yes	FAC	<del></del>	· · · · · · · · · · · · · · · · · · ·	
3.	- ——			Problematic Hydrophytic V	egetation (Exp	lain)
3. -				<b></b>		
<b>4</b> . <b>5</b> .				<sup>1</sup> Indicators of hydric soil and wetla		nust
5.				be present, unless disturbed or pr		
6.				Definitions of Vegetation Strata	1:	
7.				_		
	10	= Total Cove	÷r	Tree- Woody plants, excluding woo		
Herb Stratum (Plot size:)	_			approximately 20 ft (6m) or more in	-	(7.6
1.				cm) or larger in diameter at breast h	neight (DBH).	
2.				Sapling- Woody plants, excluding v	woody vines,	
3.				approximately 20 ft (6m) or more in		than 3
4.	-			in. (7.6 cm) DBH.	-	
5.				Shrub- Woody plants, excluding wo	oodv vines.	
6.	-			approximately 3 to 20 ft (1 to 6 m) in		
7.				<b>-</b>   ``	_	
8.				Herb- All herbaceous (non-woody)p herbaceous vines, regardless of siz		du
9.				plants, except woody vines, less that		-
10.				m) in height.	III approximately	, J 11 ( .
11.	- —				of hoight	
				Woody vine- All woody vines, rega	raiess of neight.	
12.				4		
l	. 0	= Total Cove	÷L			
Woody Vine Stratum (Plot size:	)					
1.				1		
2.						
3.						
4.	,			Hydrophytic		
5.				Vegetation Present? Yes _	No	
		= Total Cove	er .	1 "		
Remarks: (If observed, list morph	iological adapta					
Percent cover estimates based or	-		oroader cor	mmunity.		
		<b>,</b>		······································		

County/soil: Hillsborough- Malabar	
SOU	Sa

SOIL	. Timoborough Malaba	•						Sampling Point: DY
Profile Des	scription: (Describe t	the depth	needed to docu	ıment th	e indicator or c	onfirm the abs	sence of indicators	.)
Depth	Matrix				Features			
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc²	Texture	Remarks
0-4	10 YR 4/1							dark gray fine sand
4-12	10 YR 6/2							light grayish brown fine sand
12-30	10 YR 6/6							brownish yellow fine sand
30-50	10 YR 6/3							pale brown fine sand
							,	· · · · · · · · · · · · · · · · · · ·
	Concentration, D=Deple	tion, RM=Re	educed Matrix, C	S=Cove	ed or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
	I Indicators:			Daha	alua Dalau Curf	ooo (CO) (I DD I	C T 11)	Indicators for Problematic Hydric Soils 3: 1 cm Muck (a9) (LRR O)
Histol	Epidon (A2)		-		ralue Below Surf Dark Surface (S			2 cm Muck (A10) (LRR S)
	Histic (A3)		-		ny Mucky Minera		''	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		-		ny Gleved Matrix			Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)		-		eted Matrix (F3)	• -7		Anomalous Bright Loamy Soils (F20)
Organi	ic Bodies (A6) (LRR P,	T, U)	-	Redo	x Dark Surface	(F6)		(MLRA 153B)
5 cm N	Mucky Mineral (A7) (LR	R P,T,U)	_	Deple	eted Dark Surfac	e (F7)		Red Parent Material (TF2)
_✓_Muck	Presence (A8) (LRR U	)	_	Redo	x Depressions (	F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm N	Muck (A9) (LRR P,T)		_	Mari	(F10) (LRR U)			Other (Explain in Remarks)
	ed Below Dark Surface	· (A11)		Denle	eted Orchric (F1	1\ (MI RA 151\		
	Dark Surface (A12)	(// 11)	-		Manganese Mas		OPT	
	• •	U DA 450A\	-		ric Surface (F13			<sup>3</sup> Indicators of hydrophytic vegetation and wetland
	Prairie Redox (A16) (N		-					hydrology must be present, unless disturbed or
	Mucky Mineral (S1) (L	RR O, S)	-		Orchric (F17) (I	•		problematic.
	Gleyed Matrix (S4)		-		ced Vertic (F18)	• •	•	
	Redox (S5)		-		mont Floodplain			1620)
1	ed Matrix (S6)		-	Alion	naious brigin Lo	arriy Solis (F20)	(MLRA 149A, 1530	2, 193 <i>D)</i>
	Surface (S7) (LRR P, S	, T, U)					1	
1	Layer (If observed):							
	Type: Depth (inches):						Hydric Soil Prese	nt? Yes ✓ No
Remarks:	Depart (interior).						inyana com i rocci	
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1								
]								
1					*			
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*								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date: 10/21/09			
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Point			nt: DZ		
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	e: 3 28\$ 21E				
Landform (hillslope, terrace, etc.): N/A	\	Local relief (concave, con-			Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: <u>28.077755</u>	Long: <u>-82.2</u>	200009		Datum: WGS84		
Soil Map Unit Name: Malabar fine sand			_NWI classification	: <u>NA</u>			
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	'Yes✓_	_ No	_ (If no, explain	in Remarks)		
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	s normal?	YesNo ✓		
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	n any answers i	n Remarks)		
SUMMARY OF FINDINGS - Attach sit			ransects, impo	ortant featu	res, etc.		
Hydrophytic Vegetation Present?	Yes No		_				
Hydric Soil Present?	is the Sampled Area v	vithin a Wetland?	Yes✓	No			
Wetland Hydrology Present?	Yes✓ No	<u> </u>					
Remarks:					.,		
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum o	of two required)		
Primary Indicators (minimum of one is required; of	check all that apply)			Cracks (B6)			
✓ Surface Water (A1)	Water-Stained Leaves (	R9)		, ,	ve Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	20,	Drainage Pa	•	(D0)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	PR III)	Moss Trim L	, ,			
Water Marks (B1)	Hydrogen Sulfide Odor (	•	Dry-Season Water Table (C2)				
Sediment Deposits (B2)		on Living Roots (C3)Crayfish Burrows (C8)					
Drift Deposits (B3)	Presence of Reduced Ire						
Algal Mat or Crust (B4)	Recent Iron Reduction in				inagery (Co)		
Iron Deposits (B5)	Thin Muck Surface (C7)	, ,					
✓ Inundation Visible on Aerial Imagery (B7)							
Field Observations:	Other (Explain in recinal	KO)	T AC I Vedital	i Test (D3)			
Surface Water Present?	Yes No	Depth (inches): 0-24					
Water Table Present?	Yes No						
i	Yes No		Wetland				
Saturation Present?	1es No	Deptif (inches).	Hydrology	., ,			
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	ing well periol photos provious	inenactions) if available:	Present?	Yes <u>✓</u>	.No		
Describe Recorded Data (stream gauge, monitor	ing well, aeriai priotos, previous	inspections), it available.					
Remarks:							
1							

Tree Stratum (Plot size:)  1.  2.	Absolute % Cover		Indicator	Dominance Test Worksh	eet:	
1.	Cover					
		Species?	Status			
2				Number of Dominant Spec		(A)
<u>.</u>				That Are OBL, FACW, or I	FAC:	(///
3.				Total Number of Dominant	<u>2</u>	(B)
4.				Species Across All Strata:	₹	(D)
5.				Percent of Dominant Spec	ies 400.00	(4 (0)
6.				That Are OBL, FACW, or f		(A/B)
7.				Prevalance Index worksh	ieet:	
	0	= Total Cover		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL species	x1=	
Quercus laurifolia	5	yes	FACW	FACW species	x2=	_
2.				FAC species	x3=	_
<del>2.</del> <b>3</b> .				FACU species	x4=	
<del>3.</del> 4.				UPL species	x5=	_
5.				Column Totals:		— (B)
5. 6.				Column Totals.	(A)	— <sup>(B)</sup>
o. 7.	<del></del>		<del></del>	Barrala a a stadari — B	/A -	
1.	5	- Total Cause		Prevalance Index = B		
Oharah Oharahara (Blatasiana	, 5	= Total Cover	ſ	Hydrophytic Vegetation I		
Shrub Stratum (Plot size:	_)			✓ Dominance Test is		
1.				Prevalence Index is		
2.				Problematic Hydrop	ohytic Vegetation <sup>1</sup> (Ex	:plain)
3.				1.		
4				<sup>1</sup> Indicators of hydric soil ar		must
5.				be present, unless disturbe		
6.				Definitions of Vegetation	Strata:	
7.						
	0	= Total Cover	٢	Tree- Woody plants, exclud		
Herb Stratum (Plot size:)				approximately 20 ft (6m) or i		. (7.6
Brachiaria mutica	20	yes	FACW	cm) or larger in diameter at	oreast height (DBH).	
Ludwigia peruviana	5	no	OBL	Sapling- Woody plants, exc	luding woody vines,	
3. Urena lobata	5	no	FACU	approximately 20 ft (6m) or i	nore in height and less	s than 3
4. Juncus effusus	2	no	FACW	in. (7.6 cm) DBH.		
 5.				Shrub- Woody plants, exclu	ding woody vines,	
6.				approximately 3 to 20 ft (1 to	6 m) in height.	
<del></del> 7.				Herb- All herbaceous (non-	woody)plants_including	1
8.				herbaceous vines, regardles		-
9.				plants, except woody vines,		
10.				m) in height.	• •	•
11.				Woody vine- All woody vine	s, regardless of height	ł.
12.				1	o, regarates at margina	
12.	32	= Total Cover	•	1		
Mandy Vine Stratum (Diet sime)	\	- Total Covel	l			
Woody Vine Stratum (Plot size:						
1.	<del></del>					
2.					······································	
3.						
4				Hydrophytic		
5.				Vegetation Present?	YesNo	<u> </u>
	0	= Total Cover	-	l .		

Percent cover estimates based on meandering survey of the broader community.

file Description: (Describe to the depth ne		confirm the absence of indica	itors.)
th Matrix nes) Color (moist) % Col	Redox Features for (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture	Damadia
les) Color (moist) % Col	or (moist) % Type	Loc <sup>2</sup> Texture	Remarks
10 YR 4/1			dark gray fine sand
10 YR 6/2			light grayish brown fine sand
0 10 YR 6/6	<del></del>		brownish yellow fine sand
0 10 YR 6/3			pale brown fine sand
e: C=Concentration, D=Depletion, RM=Redu	ced Matrix, CS=Covered or Coated S	and Grains. <sup>2</sup> Location: PL	=Pore Lining, M=Matrix.
ric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
Histol (A1)		face (S8) (LRR S, T, U)	1 cm Muck (a9) (LRR O)
Histic Epidon (A2)	Thin Dark Surface (		2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Miner		Reduced Vertic (F18) (outside MLRA 150A, E
Hydrogen Sulfide (A4)	Loamy Gleyed Matri		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3		Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface	• •	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surfa		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions	(F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F	11\ /MI RA 151\	
Thick Dark Surface (A12)	<b>—</b> '	sses (F12) (LRR O, P,T)	
, ,			<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F1:	3) (LRR P, T, U)	hydrology must be present, unless disturbed or
			problematic.
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17)	(MLRA 151)	рговетанс.
		(MLRA 151) 3) (MLRA 150A, 150B)	ргонетанс.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18		problematic.
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	Reduced Vertic (F18Piedmont Floodplain	B) (MLRA 150A, 150B)	
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A)	
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A)	
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) {LRR P, S, T, U) trictive Layer (If observed):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A)	
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) trictive Layer (If observed):  Type:	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A)	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
sandy Gleyed Matrix (S4) sandy Redox (S5) stripped Matrix (S6) sark Surface (S7) (LRR P, S, T, U) sictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
andy Gleyed Matrix (S4) andy Redox (S5) tripped Matrix (S6) ark Surface (S7) (LRR P, S, T, U) ictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
andy Gleyed Matrix (S4) andy Redox (S5) tripped Matrix (S6) bark Surface (S7) (LRR P, S, T, U) ictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
andy Gleyed Matrix (S4) andy Redox (S5) tripped Matrix (S6) ark Surface (S7) (LRR P, S, T, U) ictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
andy Gleyed Matrix (S4) andy Redox (S5) tripped Matrix (S6) ark Surface (S7) (LRR P, S, T, U) ictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
andy Gleyed Matrix (S4) andy Redox (S5) tripped Matrix (S6) ark Surface (S7) (LRR P, S, T, U) ictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18 Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) trictive Layer (If observed):  Type:	Reduced Vertic (F18 Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18 Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18 Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) rictive Layer (If observed): Type: Depth (inches):	Reduced Vertic (F18 Piedmont Floodplain	3) (MLRA 150A, 150B) 3 Soils (F19) (MLRA 149A) 5 Damy Soils (F20) (MLRA 149A,	153C, 153D)

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	_Sampling Date	10/21/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Poi			t: EA		
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 3 28S 21E				
Landform (hillslope, terrace, etc.): N/A	•	Local relief (concave, con-	vex, none): none	;	Slope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.077596	Long:82,1	98721		Datum: <u>WGS84</u>		
Soil Map Unit Name: Matabar fine sands			_NWI classification:	NA			
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u>✓</u>	No	(If no, explain i	n Remarks)		
Are Vegetation, Soit,	or Hydrology	significantly disturbed?	Are circumstances	normal?	Yes <u>No ✓</u>		
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	any answers in	Remarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing samplii	ng point locations, t	ransects, impo	rtant featur	es, etc.		
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Is the Sampled Area within a Wetland? Yes No						
Wetland Hydrology Present?	Yes/ No						
Remarks:							
1							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of	two required)		
Primary Indicators (minimum of one is required; c	heck all that annly)		Surface Soil		two required?		
Surface Water (A1)	Water-Stained Leaves (	39)		jetated Concave	e Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	50,	Drainage Pat		ounded (Bo)		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R III	Moss Trim Li				
Water Marks (B1)	Hydrogen Sulfide Odor (	•	<del></del>	. ,	2)		
Sediment Deposits (B2)	<del></del>	C1)Dry-Season Water Table (C2) on Living Roots (C3)Crayfish Burrows (C8)					
Drift Deposits (B3)	Presence of Reduced Iro	- · · · · · · · · · · · · · · · · · · ·					
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic		magery (00)		
Iron Deposits (B5)	Thin Muck Surface (C7)	1 Tilled Colla (CO)	Shallow Aqui				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ke)	FAC Neutral				
Field Observations:	otror (Explain in Roman	,	1710 Neutrar	1031 (D0)			
Surface Water Present?	Yes No	Denth (inches):					
Water Table Present?	Yes No						
Saturation Present?	Yes No		Wetland				
(includes capillary fringe)		, – opan (monoo). <u>– o</u>	Hydrology Present?	Yes ✓1	No		
Describe Recorded Data (stream gauge, monitori	ng well aerial photos previous	inspections) if available	i resent.	103			
Describe Neserada Bala (Siream gauge, memer	ng wen, dendi protes, provisas	moposioney, il available.					
Remarks:							

<b>VEGETATION</b> - Use scientific nar	mes of plants			Sampling Point:	EA
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1.		орос.ос.	010100	Number of Dominant Species	
2.	· ——			That Are OBL, FACW, or FAC:	(A)
3.	· ——			Total Number of Dominant	
4.	· <del></del>			Species Across All Strata:	(B)
5.				Percent of Dominant Species 100.00	
6.				That Are OBL, FACW, or FAC:	(A/B)
7.				Prevalance Index worksheet:	
		= Total Cove		Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	)	- Total Cove	'	OBL speciesx1=	_
1.				FACW species x2=	_
2.				FAC speciesx3=	
3.				FACU species x4=	<u> </u>
4.				UPL species x5=	_
5.				Column Totals: (A)	(B)
6.					_ ` `
7.				Prevalance Index = B/A =	
		= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%	
1.	•			Prevalence Index is ≤3.0 <sup>1</sup>	
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.					, . ,
4.				Indicators of hydric soil and wetland hydrology r	must
5.				be present, unless disturbed or problematic.	···act
6.				Definitions of Vegetation Strata:	
7.				1	
		= Total Cove	r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in height and 3 in	. (7.6
Polygonum punctatum	35	yes	FACW	cm) or larger in diameter at breast height (DBH).	
Juncus effusus	25	yes	FACW	Sapling- Woody plants, excluding woody vines,	
3. Alternanthera philoxeroides	15	no	OBL	approximately 20 ft (6m) or more in height and less	than 3
Cyperus haspan	10	no	OBL	in. (7.6 cm) DBH.	
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	1
8.				herbaceous vines, regardless of size. Includes wo	
9.				plants, except woody vines, less than approximatel	-
10.				m) in height.	
11.	. ——			Woody vine- All woody vines, regardless of height	
12.				1	
	85	= Total Cove	r	1	
Woody Vine Stratum (Plot size:	)				
1.	<del></del> /				
2.				1	
3.	·			<u> </u>	
4.				l Hydrophytic	
5.	· <del></del>			Vegetation Present? Yes✓No	
-		= Total Cove		Trogomiton i resent:	<u>·</u>
Remarks: (If observed, list morph			•	<u> </u>	
Percent cover estimates based or	-		roader cor	mmunity.	

	escription: (Describe t	o the dep	oth needed to doo			confirm the ab	sence of indicators	i.)
epth nches)	Matrix Color (moist)	%	Color (moist)	Redox %	Features Type <sup>1</sup>	Loc²	Texture	Remarks
nches)	Color (moist)	-70	Coloi (moist)		Турс		Texture	Kemaks
-4	10 YR 4/1							dark gray fine sand
-12	10 YR 6/2							light grayish brown fine sand
2-30	10 YR 6/6							brownish yellow fine sand
0-50	10 YR 6/3			_				pale brown fine sand
	Concentration, D=Depl oil Indicators:	etion, RM	=Reduced Matrix,	CS=Cove	ed or Coated S	and Grains.	*Location: PL=Po	re Lining, M=Matrix. Indicators for Problematic Hydric Soils 3:
Black Hydro Strati	l (A1) : Epidon (A2) : Histic (A3) ogen Sulfide (A4) fied Layers (A5) nic Bodies (A6) (LRR P	, T, U)		Thin Loan Loan Depl	value Below Sur Dark Surface (\$ ny Mucky Miner ny Gleyed Matri eted Matrix (F3) ox Dark Surface	69) (LRR S, T, al (F1) (LRR O x (F2)	U)	1 cm Muck (a9) (LRR O)2 cm Muck (A10) (LRR S)Reduced Vertic (F18) (outside MLRA 150A, B)Piedmont Floodplain Soils (F19) (LRR P, S, T)Anomalous Bright Loamy Soils (F20) (MLRA 153B)
5 cm	Mucky Mineral (A7) (LF	RR P.T.UI		Depl	eted Dark Surfa	ce (F7)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)Redox Depressions (F8)				(F8)		Very Shallow Dark Surface (TF12) (LRR T, U)		
1 cm Muck (A9) (LRR P,T)Mari (F10) (LRR U)				. ,		Other (Explain in Remarks)		
	eted Below Dark Surfac	e (A11)			eted Orchric (F	11) (MLRA 151	)	
Thick	Dark Surface (A12)			Iron-Manganese Masses (F12) (LRR O, P,T) Umbric Surface (F13) (LRR P, T, U) Delta Orchric (F17) (MLRA 151)			R O, P,T)	31-41-4
Coas	t Prairie Redox (A16) (I						)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
	y Mucky Mineral (S1) (L	.RR O, S)	)					problematic.
	y Gleyed Matrix (S4)				iced Vertic (F18	, .	•	
	y Redox (S5)				mont Floodplain		•	C 452D)
	ped Matrix (S6)			Anor	naious Bright Et	amy Solls (F20	) (MLRA 149A, 153	C, 153D)
	Surface (S7) (LRR P, S							
estrictiv	Type:							
	Depth (inches):						Hydric Soil Prese	nt? Yes <u>✓ No</u>
emarks:	<del></del>							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	ıgh	Sampling Date:10/21/09			
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	:EB		
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	z <u>3 28S 21E</u>				
Landform (hillstope, terrace, etc.):N/A	1	Local relief (concave, conv	vex, none): none	s	lope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.077632	Long:82.1	93947	D	atum: WGS84		
Soil Map Unit Name: Myakka fine sands			_NWI classification:				
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes✓_	_ _ No		ı Remarks)		
Are Vegetation, Soil,			Are circumstances		es <u>No </u> ✓		
Are Vegetation, Soil,			(If needed, explain		Remarks)		
SUMMARY OF FINDINGS - Attach sit				•	•		
Hydrophytic Vegetation Present?	Yes ✓ _ No				_, _,		
Hydric Soil Present?	Yes✓No	Is the Sampled Area within a Wetland? YesNo					
Wetland Hydrology Present?	YesNo						
Remarks:		1					
HADBOLOCA		-					
HYDROLOGY			Secondary Indicate	ara (minimum of t	hua raquirad)		
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; of	shoot all that apply				(wo required)		
		D0)	Surface Soil	. ,	Surface (DO)		
Surface Water (A1)	Water-Stained Leaves (	D9)		getated Concave	Sulface (B6)		
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	. ,			
Saturation (A3)	Marl Deposits (B15) (LR	•	Moss Trim Li	` '			
Water Marks (B1)	Hydrogen Sulfide Odor (		<del></del> ·	Water Table (C2)	)		
Sediment Deposits (B2)	Oxidized Rhizospheres	* '	Crayfish Burn	, ,	(00)		
Drift Deposits (B3)	Presence of Reduced Ir	<del></del>					
Algal Mat or Crust (B4)	Recent Iron Reduction in	· · · · · · · · · · · · · · · · · · ·					
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	rks)	FAC Neutral	Test (D5)			
Field Observations:	V /	D45 (b). 70.00					
Surface Water Present?	Yes No		-				
Water Table Present?	Yes No	_	Wetland				
Saturation Present?	Yes No	Depth (inches):u	Hydrology				
(includes capillary fringe)			Present?	Yes <u>✓</u> N	lo		
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	inspections), if available:					
Remarks:							

<b>VEGETATION</b> - Use scientific nar	mes of plants			San	npling Point:	EB
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.	•	·		Number of Dominant Species		
2.				That Are OBL, FACW, or FAC:	<u>2</u>	(A)
3.	· <del></del>			Total Number of Dominant	_	
4.				Species Across All Strata:	<u>2</u>	(B)
5.				Percent of Dominant Species		
6.				That Are OBL, FACW, or FAC:	<u>100.00</u>	(A/B)
7.	· ——			Prevalance Index worksheet:		
.,		= Total Cove		Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)	- 10101 0010	•	OBL species	x1=	
1.	·/			FACW species	x2=	-
2.				FAC species	x3=	-
3.				FACU species	_x3=	- [
<b>4</b> .				UPL species		- [
					_x5=	- <sub>(B)</sub>
5. 6.				Column Totals:	_(A)	- <sup>(B)</sup>
7.		<del></del>		Prevalance Index = B/A =	_ •	
	0	= Total Cove	r	Hydrophytic Vegetation Indic		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.				Prevalence Index is ≤3.0		
2.				Problematic Hydrophytic	: Vegetation' (Exp	lain)
3.				<b>.</b>		į
4.				¹Indicators of hydric soil and we		nust
5.				be present, unless disturbed or		
6.				Definitions of Vegetation Stra	ıta:	[
7.						
	0	= Total Cove	r ·	Tree- Woody plants, excluding w		I
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more		(7.6
Panicum repens	5	yes	FACW	cm) or larger in diameter at breas	st height (DBH).	ı
Hydrocotyle umbellata	2	yes	OBL	Sapling- Woody plants, excludin	g woody vines,	
3.				approximately 20 ft (6m) or more	in height and less	than 3
4.			-	in. (7.6 cm) DBH.		ļ
5.				Shrub- Woody plants, excluding	woody vines,	į
6.				approximately 3 to 20 ft (1 to 6 m	) in height.	
7.				Herb- All herbaceous (non-wood	y)plants, including	
8.				herbaceous vines, regardless of		dy
9.				plants, except woody vines, less	than approximately	3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vines, re-	gardless of height.	
12.				1		
	7	= Total Cove	r	1		Ì
Woody Vine Stratum (Plot size:	)					
1.						ļ
2.				1		
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes	√ No	
	0	= Total Cove		Togomion resent!		<u>-</u>
Remarks: (If observed, list morph			•	L		
Percent cover estimates based or			roader cor	mmunity .		İ

Profile De	escription: (Describe	to the dep	oth needed to do	cument th	ne indicator or	confirm the abs	sence of indicators.)	)					
Depth	Matrix	-		Redox	Features								
inches)	Color (moist)	%	Color (moist)	%_	Type'	Loc²	Texture				Remark	s	
0-5	10 YR 3/1							very da	ark gray f	ine sar	nd		
5-20	10 YR 6/1			-				gray fi	ne sand				
20-25	N 2/0							black f	ine sand				
25-30	5 YR 3/3			. —				dark re	eddish bro	own fin	e sand		
Tyme: C=	Concentration, D=Depl	letion PM:	=Reduced Matrix	CS=Cove	red or Coated S	Sand Grains	2Location: PL=Pore	e Lining A	M=Matriy				
	oil Indicators:	etion, Rivi-	-Reduced Matrix,	C3-Cove	red or Coaled 3	Saliu Giallis.			s for Pro		tic Hydri	c Soils	3;
Histol				Poly	value Below Su	rface (S8) (LRR			Muck (as				
Histic	Epidon (A2)			Thin	Dark Surface (	S9) (LRR S, T, U	J)	2 cm	Muck (A	10) (LF	RRS)		
Black	Histic (A3)			Loan	ny Mucky Miner	al (F1) (LRR O)		Redu	iced Verti	ic (F18	) (outsid	e MLR	A 150A, B)
	gen Sulfide (A4)				ny Gleyed Matri			Piedr	mont Floo	dplain	Soils (F1	9) (LRI	R P, S, T)
	fied Layers (A5)				eted Matrix (F3		-	Anon	nalous Br	ight Lo	amy Soils	s (F20)	
Orgai	nic Bodies (A6) (LRR P	P, T, U)			ox Dark Surface			(ML	_RA 153E	3)			
5 cm	Mucky Mineral (A7) (LI	RR P,T,U)		Depl	leted Dark Surfa	ace (F7)		Red	Parent M	aterial	(TF2)		
✓ Muck	Presence (A8) (LRR I	U)		Redo	ox Depressions	(F8)		Very	Shallow I	Dark S	urface (T	F12) (L	RR T, U)
1 cm	Muck (A9) (LRR P,T)			Marl	(F10) (LRR U)		<u>-</u>	Othe	r (Explair	in Rer	narks)		
Deple	ted Below Dark Surfac	æ (A11)		Depl	eted Orchric (F	11) (MLRA 151)							
Thick	Thick Dark Surface (A12)			Iron-	Manganese Ma	sses (F12) (LRR	R O, P,T)	3 Indicator	s of hydro	nhutic	vocatatio	n and	wetland
Coast Prairie Redox (A16) (MLRA 150A)		Umb	oric Surface (F1	3) (LRR P, T, U)			must be						
Sand	Sandy Mucky Mineral (S1) (LRR O, S)		Delta	a Orchric (F17)	(MLRA 151)		problema			.,			
	y Gleyed Matrix (S4)	L , . ,				B) (MLRA 150A,	150B)						
	Redox (S5)					Soils (F19) (ML							
	ed Matrix (S6)						(MLRA 149A, 153C	, 153D)					
Dark	Surface (S7) (LRR P, S	S, T, U)			-								
Restrictiv	e Layer (If observed)	:											
	Type:												
	Depth (inches):						Hydric Soil Presen	t?	Yes		No _		<u> </u>
Remarks:													
													•

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsborou	igh	Sampling Date: 10/21/09			
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:_	EC		
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range					
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): none	Slo	pe (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.077695	Long:82.1	92191	Dat	tum: <u>WGS84</u>		
Soil Map Unit Name: Malabar fine sands			_NWI classification:				
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes <u></u> ✓	_ No	(If no, explain in F	Remarks)		
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes	s <u>No                                </u>		
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in Re	emarks)		
SUMMARY OF FINDINGS - Attach sit	e map showing samplir	ng point locations, t	ransects, impo	rtant features	, etc.		
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	YesNo	Is the Sampled Area w	rithin a Wetland?	Yes <u></u> ✓No	<del></del>		
Wetland Hydrology Present?	YesNo						
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicato	ore (minimum of tw	ro required)		
Primary Indicators (minimum of one is required; c	hack all that apply)	Surface Soil Cracks (B6)					
✓ Surface Water (A1)	Water-Stained Leaves (E	39)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Aquatic Fauna (B13)	,,	Drainage Pat		unace (20)		
✓ Saturation (A3)	Marl Deposits (B15) (LRI	R U)	Moss Trim Li	, ,			
Water Marks (B1)	Hydrogen Sulfide Odor (			Nater Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres o	•	Crayfish Burr				
Drift Deposits (B3)	Presence of Reduced Iro	- ' '	-	sible on Aerial Ima	igery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	, ,	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	` ,	Shallow Aquitard (D3)				
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral Test (D5)				
Field Observations:	· · · · · · · · · · · · · · · · · · ·	,		, ,			
Surface Water Present?	Yes No	Depth (inches): 72	]		j		
Water Table Present?		Depth (inches): 0					
Saturation Present?		Depth (inches): 0	Wetland Hydrology				
(includes capillary fringe)			Present?	Yes <u>✓</u> No			
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous i	inspections), if available:					
		•					
Remarks:							
			•				
					į		

VEGETATION - Use scientific na	mes of plants			Sampling	Point:	EC
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:		
Tree Stratum (Plot size:)	Cover	Species?	Status			
1.				Number of Dominant Species	1	(A)
2.				That Are OBL, FACW, or FAC:	<u>1</u>	(~)
3. 4. 5.				Total Number of Dominant	1	(B)
4.				Species Across All Strata:	<u>1</u>	(0)
				Percent of Dominant Species	100.00	(A/D)
6.				That Are OBL, FACW, or FAC:	100.00	(A/B)
7.				Prevalance Index worksheet:		
	0	= Total Cove	r	Total % Cover of:	Multiply by:	
Sapling Stratum (Plot size:	)			OBL speciesx1=_		
1.				FACW species x2=		
2.				FAC species x3=		_
3. 4.				FACU species x4=		_
4.				UPL species x5=		_
5. 6. 7.				Column Totals: (A)		(B)
6.						
7.				Prevalance Index = B/A =		
	0	= Total Cove	r	Hydrophytic Vegetation Indicators		
Shrub Stratum (Plot size:	)			✓ Dominance Test is 50%		
1.	•			Prevalence Index is ≤3.0 <sup>1</sup>		
2.				Problematic Hydrophytic Vege	etation <sup>1</sup> (Exc	olain)
3.	• •					,
4.				<sup>1</sup> Indicators of hydric soil and wetland	hydrology n	nust
5.				be present, unless disturbed or probl		
6.				Definitions of Vegetation Strata:		
7.	• ———			1		
	0	= Total Cove	er	Tree- Woody plants, excluding woody	vines.	
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more in hei		(7.6
Eleocharis baldwinii	- 5	yes	FACW	cm) or larger in diameter at breast heig	jht (DBH).	
2.				Sapling- Woody plants, excluding woo	dv vines.	
3.	·			approximately 20 ft (6m) or more in hei		than 3
4.				in. (7.6 cm) DBH.		
5.				Shrub- Woody plants, excluding wood	v vines.	
6.		<del></del>		approximately 3 to 20 ft (1 to 6 m) in he		
7.	-			Herb- All herbaceous (non-woody)plan	its including	
8.				herbaceous vines, regardless of size.		ody
9.	-			plants, except woody vines, less than a		
10.				m) in height.		
11.	·			Woody vine- All woody vines, regardle	ess of height.	
12.				1	•	
	5	= Total Cove	r	1		
Woody Vine Stratum (Plot size:	)					
1.						
2.				1		
3.			-			
4.	<del></del>	-		  Hydrophytic		
5.	-	-		Vegetation Present? Yes✓	No	
-		= Total Cove				<del></del>
Remarks: (If observed, list morph						
Percent cover estimates based of		•	roader cor	mmunity.		
	J -	-		-		

Profile Des Depth inches)							Sampling Point:
	• •	o the dep	th needed to doc		r or confirm the absen	ce of indicators.)	
iches)	Matrix			Redox Features			5
	Color (moist)	%	Color (moist)		Loc²	Texture	Remarks
4	10 YR 4/1						dark gray fine sand
12	10 YR 6/2		<del></del>			<del></del>	light grayish brown fine sand
-30	10 YR 6/6		<del></del>				brownish yellow fine sand
0-50	10 YR 6/3						pale brown fine sand
	Concentration, D=Depl	etion, RM:	=Reduced Matrix, C	CS=Covered or Coa	red Sand Grains. 2	Location: PL=Pore	
	il Indicators:						ndicators for Problematic Hydric Soils 3:
Histol					v Surface (S8) (LRR S,	T, U) _	1 cm Muck (a9) (LRR O)
	Epidon (A2)				ice (S9) (LRR S, T, U)	-	2 cm Muck (A10) (LRR S)
	Histic (A3)				Mineral (F1) (LRR O)	_	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)			Loamy Gleyed		_	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)			Depleted Matrix		_	Anomalous Bright Loamy Soils (F20)
Organi	ic Bodies (A6) (LRR P	, τ, υ)	-	Redox Dark Su	• •		(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P,T,U)				Depleted Dark	Surface (F7)	_	Red Parent Material (TF2)
✓ Muck Presence (A8) (LRR U)			4	Redox Depress	ions (F8)	Very Shallow Dark Surface (TF12) (LRR T, U)	
1 cm Muck (A9) (LRR P,T)				Marl (F10) (LRI	₹ U)	Other (Explain in Remarks)	
_	ed Below Dark Surface	ο /Δ11\		Depleted Orchr	ic (F11) (MLRA 151)		
	Dark Surface (A12)	c (A11)	•		e Masses (F12) (LRR O	DT\	
• '							Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)			·A) .		(F13) (LRR P, T, U)		hydrology must be present, unless disturbed or
Sandy Mucky Mineral (S1) (LRR O, S)				Delta Orchric (F	<sup>-</sup> 17) (MLRA 151)	р	problematic.
Sandy	Gleyed Matrix (S4)			Reduced Vertic	(F18) (MLRA 150A, 150	0B)	
Sandy	Redox (S5)				lplain Soils (F19) (MLRA		
Strippe	ed Matrix (S6)			Anomalous Brig	tht Loamy Soils (F20) (M	ILRA 149A, 153C,	153D)
Dark S	Surface (S7) (LRR P, S	S, T, U)					
estrictive	E Layer (If observed):						
•	Туре:				·		
	Depth (inches):				H <sub>3</sub>	ydric Soil Present	? Yes <u> </u>
marks:							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	Sampling Date: 10/21/09		
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Poi	nt:ED
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	:: 3 28\$ 21E		
Landform (hillslope, terrace, etc.): N/A	\	Local relief (concave, con	vex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U	Lat: 28.077788	Long:82.	89083		Datum: WGS84
Soil Map Unit Name: Malabar fine sands			_NWI classification	: <u>NA</u>	
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes	_ No	_ (If no, explain	in Remarks)
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstances	s normal?	Yes <u>No ✓</u>
Are Vegetation, Soil,	or Hydrology	_ naturally problematic?	(If needed, explain	n any answers i	n Remarks)
SUMMARY OF FINDINGS - Attach sit			ransects, impo	rtant featui	es, etc.
Hydrophytic Vegetation Present?	Yes No				
Hydric Soil Present?	Yes✓ No	Is the Sampled Area v	vithin a Wetland?	Yes✓	No
Wetland Hydrology Present?	Yes No	]			
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat		of two required)
Primary Indicators (minimum of one is required; o			Surface Soil		
Surface Water (A1)	Water-Stained Leaves (	(B9)	Sparsely Ve	getated Concav	re Surface (B8)
	High Water Table (A2)  Aquatic Fauna (B13)  Saturation (A3)  Marl Deposits (B15) (LRR U)				
✓ Saturation (A3)	•	Moss Trim L	, ,		
Water Marks (B1)	(C1)	·	Water Table (C	:2)	
Sediment Deposits (B2)	Oxidized Rhizospheres		Crayfish Bur		
Drift Deposits (B3)	Presence of Reduced In	<del></del>			Imagery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in				
Iron Deposits (B5)	Thin Muck Surface (C7)	<del></del>			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remai	rks)	FAC Neutral	Test (D5)	
Field Observations:	NI= Z				
Surface Water Present?	Yes No		-		
Water Table Present?	Yes No		Wetland		
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology		
(includes capillary fringe)		in a setting of a settle to	Present?	Yes <u>✓</u>	No
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:			
Remarks:					

<b>VEGETATION</b> - Use scientific na	mes of plants				Sampling Point:	ED
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksh	eet:	
1.	•			Number of Dominant Spec	cies -	(4)
2. 3.				That Are OBL, FACW, or F	AC: 7	(A)
3.				Total Number of Dominant		(D)
4.				Species Across All Strata:	· <u>9</u>	(B)
5.				Percent of Dominant Spec	ies 77.78	(A/B)
6.				That Are OBL, FACW, or f	AC: 77.76	(AVD)
7.				Prevalance Index worksh	neet:	
Sapling Stratum (Plot size:	0	= Total Cov	er	<u>Total % Cover of:</u> OBL species	Multiply by: x1=	
Acer rubrum	10	yes	OBL	FACW species	x2=	_
Salix caroliniana	10	yes	OBL	FAC species	x3=	_
Quercus laurifolia	10	yes	FACW	FACU species	x4=	_
Sapium sebiferum	5	no	FAC	UPL species	x5=	_
5.				Column Totals:	(A)	- (В)
6.	· ——	-			, , ,	<b>—</b> (2)
7.		***	-	Prevalance Index = B	/A =	
	35	= Total Cov	er	Hydrophytic Vegetation I		
Shrub Stratum (Plot size:	)			✓ Dominance Test is		
Baccharis glomeruliflora	10	yes	FACW	Prevalence Index is	s ≤3.0 <sup>1</sup>	
Myrica cerifera	10	yes	FAC	Problematic Hydrop	hytic Vegetation <sup>1</sup> (Exp	olain)
3.	-					ŕ
4.	-			<sup>1</sup> Indicators of hydric soil ar	nd wetland hydrology r	nust
5.				be present, unless disturbe		
6.				Definitions of Vegetation		
7.			<del></del>			
	20	= Total Cov	er	Tree- Woody plants, excludi	ing woody vines,	,
Herb Stratum (Plot size:)				approximately 20 ft (6m) or r	more in height and 3 in.	(7.6
Panicum hemitomon	20	yes	OBL	cm) or larger in diameter at I	breast height (DBH).	
2. Eupatorium capillifolium	20	yes	FACU	Sapling- Woody plants, exc	luding woody vines,	
3. Ludwigia peruviana	15	yes	OBL	approximately 20 ft (6m) or r	more in height and less	than 3
4. Andropogon glomeratus	10	no	FACW	in. (7.6 cm) DBH.		
<ol><li>Andropogon virginicus</li></ol>	10	no	FAC	Shrub- Woody plants, exclu		
6.				approximately 3 to 20 ft (1 to	6 m) in height.	
7.				Herb- All herbaceous (non-v		
8.				herbaceous vines, regardles		
9.				plants, except woody vines,	less than approximately	y 3 ft (1
10.				m) in height.		
11.				Woody vine- All woody vine	s, regardless of height.	
12.						
Woody Vine Stratum (Plot size:	75 )	= Total Cov	er			
1. Rubus spp.	25	yes	FACU			
2.	-			1		
3.						
4.	-	***************************************		Hydrophytic		
5.			-	Vegetation Present?	YesNo	
	25	= Total Cov	er	1 ~		

Percent cover estimates based on meandering survey of the broader community.

Remarks: (If observed, list morphological adaptations below).

	eeded to document the indicator or o	onfirm the absence of indicators	5.)
Pepth Matrix	Redox Features		
nches) Color (moist) % Co	olor (moist) % Type'	Loc <sup>2</sup> Texture	Remarks
-4 10 YR 4/1			dark gray fine sand
12 10 YR 6/2		·	light grayish brown fine sand
2-30 10 YR 6/6			brownish yellow fine sand
0-50 10 YR 6/3			pale brown fine sand
ype: C=Concentration, D=Depletion, RM=Red	luced Matrix, CS=Covered or Coated Sa	and Grains. <sup>4</sup> Location: PL=Po	ore Lining, M=Matrix.
ydric Soil Indicators:Histol (A1)	Boharohio Bolow Sud	face (S8) (LRR S, T, U)	Indicators for Problematic Hydric Soils 3:
Histic Epidon (A2)	Polyvalue Below Surface (S		1 cm Muck (a9) (LRR 0) 2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Minera		Z cfil Midck (A10) (LRR 5)Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)		
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface		Anomalous Bright Loamy Soils (F20) (MLRA 153B)
	Depleted Dark Surface		Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P,T,U)	<del></del> ·	• •	
✓ Muck Presence (A8) (LRR U)	Redox Depressions (	F8)	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F1	1) (MLRA 151)	
Thick Dark Surface (A12)	Iron-Manganese Mas	sses (F12) (LRR O, P,T)	3
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13		<sup>3</sup> Indicators of hydrophytic vegetation and wetland
	<del></del>		hydrology must be present, unless disturbed or problematic.
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (	•	problematic.
Sandy Gleyed Matrix (S4)		) (MLRA 150A, 150B)	
Sandy Redox (S5)		Soils (F19) (MLRA 149A)	
Stripped Matrix (S6)	Anomalous Bright Lo	amy Soils (F20) (MLRA 149A, 153	C, 153D)
Dark Surface (S7) (LRR P, S, T, U)			
Restrictive Layer (If observed):			
Туре:		l	
Depth (inches):	<u></u>	Hydric Soil Prese	ent? Yes ✓ No
temarks:			

Project/Site: <u>Levy Nuclear Plant - Transmission Li</u>	nes	City/County: Hillsborou	gh	Sampling Date:_	10/21/09		
Applicant/Owner: Progress Energy Florida, Inc.		State: FL		Sampling Point:	EEa		
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range	: 3 28S 21E				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, conv	ex, none): <u>none</u>	SI	ope (%):		
Subregion (LRR or MLRA): LRR U	Lat: 28.077738	Long:82.1	88467	Da	tum: <u>WGS84</u>		
Soil Map Unit Name: Malabar fine sands			_NWI classification:	_NA			
Are climatic / hydrologic conditions on the site type	ical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in	Remarks)		
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances	normal? Ye	s <u>No                                </u>		
Are Vegetation, Soil	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)		
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ng point locations, t	ransects, impo	rtant features	s, etc.		
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes <u>✓</u> No	·		
Wetland Hydrology Present?	Yes						
Remarks:							
HYDROLOGY			<del></del>				
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of ty	vo required)		
Primary Indicators (minimum of one is required; c	heck all that apply)						
Surface Water (A1)	Water-Stained Leaves (I	39)	Surface Soil (	etated Concave S	Surface (B8)		
High Water Table (A2)	Aquatic Fauna (B13)	•	Drainage Pat		` ,		
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li				
Water Marks (B1)	Hydrogen Sulfide Odor (	-		Nater Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizospheres of	•	Crayfish Burr				
Drift Deposits (B3)	Presence of Reduced In			sible on Aerial Im	agery (C9)		
Algal Mat or Crust (B4)	Recent Iron Reduction in	• •		omorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aqui	(quitard (D3)			
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	ks)	FAC Neutral	Test (D5)			
Field Observations:							
Surface Water Present?	Yes No/	Depth (inches):	.]				
Water Table Present?	Yes No/	Depth (inches):			1		
Saturation Present?	Yes No	Depth (inches): 0	Wetland  Hydrology				
(includes capillary fringe)			Present?	Yes _/No	·		
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous	inspections), if available:					
Remarks:							

<b>VEGETATION</b> - Use scientific nar	mes of plants			Samp	oling Point:	<u>EEa</u>	
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:			
	- 00461	opecies:	Glatus	Number of Deminant Species			
1.				Number of Dominant Species	<u>9</u>	(A)	
2.	-			That Are OBL, FACW, or FAC:	_	•	
3.				Total Number of Dominant	<u>11</u>	(B)	
4.				Species Across All Strata:	<u></u>	ι-,	
5.			-	Percent of Dominant Species	<u>81.82</u>	(A/B)	
6.				That Are OBL, FACW, or FAC:	<u> </u>	(~~)	
7.				Prevalance Index worksheet:			
	0	= Total Cove	er	Total % Cover of:	Multiply by:		
Sapling Stratum (Plot size:	)			OBL species	x1=		
Acer rubrum	15	yes	OBL	FACW species	x2=	_	
2.				FAC species	x3=	_	
3.				FACU species	x4=	-	
4.				UPL species	x5=	_	
5.	•			Column Totals:	(A)	– (B)	
6.				Column Totals.	_(^)	_ <sup>(0)</sup>	
				A Bassalas and Index of B/A and			
7.	- 45	T-1-1-0		Prevalance Index = B/A =	4		
[	15	= Total Cove	er.	Hydrophytic Vegetation Indica	ators:		
Shrub Stratum (Plot size:	<u>-</u> -)			✓ Dominance Test is 50%			
Baccharis glomeruliflora	10	yes	FACW	Prevalence Index is ≤3.0			
Myrica cerifera	10	yes	FAC	Problematic Hydrophytic	: Vegetation <sup>1</sup> (Exp	olain)	
Sambucus canadensis	5	yes	FACW		•		
4.	,			<sup>1</sup> Indicators of hydric soil and we	tland hydrology m	nust	
5.				be present, unless disturbed or			
6.	-			<b>Definitions of Vegetation Stra</b>		-	
7.	• ——			1 -			
	25	= Total Cove		Tree- Woody plants, excluding we	oody vines		
Herb Stratum (Plot size:)	<del>-</del> -	, , , , , , , , , , , , , , , , , , , ,	.,	approximately 20 ft (6m) or more		<i>(</i> 7.6	
Ludwigia peruviana	10	yes	OBL	cm) or larger in diameter at breas	-	(*	
Andropogon glomeratus	10		FACW	<b>-</b>   • • • • • • • • • • • • • • • • • • •			
Commelina diffusa	10	yes		Sapling- Woody plants, excluding		than 3	
	- — —	yes	FACW	<ul> <li>approximately 20 ft (6m) or more in height and less in. (7.6 cm) DBH.</li> </ul>			
4. Panicum hemitomon	10	yes	OBL	<b>-</b>			
5. Urena lobata	10	yes	FACU	Shrub- Woody plants, excluding			
Woodwardia virginica	10	yes	OBL	approximately 3 to 20 ft (1 to 6 m)	) in height.		
7.				Herb- All herbaceous (non-wood)			
8.				herbaceous vines, regardless of s			
9.	· <del>-</del>			plants, except woody vines, less t	han approximately	/ 3 ft (1	
10.				m) in height.			
11.				Woody vine- All woody vines, reg	gardless of height.		
12.	•			1			
	60	= Total Cove	er	1			
Woody Vine Stratum (Plot size:	)			1			
Rubus spp.	10	yes	FACU	1			
2.		yes	1700	1			
	- ———			<del>                                     </del>			
3.	- ——			4			
4.				Hydrophytic			
5.				Vegetation Present? Yes	No	<del></del>	
	10	= Total Cove	er				
Remarks: (If observed, list morph	ological adapta	tions below).					
Percent cover estimates based or	n meandering s	survey of the b	roader cor	mmunity.			

	escribe to the						Sampling Point:
'		depth needed to do			ontirm the ab	sence of indicator	s.)
cries) Color (r	Matrix noist) %	Color (moist)	Redox Fe	Type <sup>1</sup>	Loc²	Texture	Remarks
	illust) 70	Coloi (moist)		туре		1 exture	Remarks
10 YR 4/1							dark gray fine sand
2 10 YR 6/2		-					light grayish brown fine sand
-30 10 YR 6/6		_					brownish yellow fine sand
-50 10 YR 6/3		_					pale brown fine sand
		RM=Reduced Matrix,	CS=Covered	or Coated Sa	and Grains.	Location: PL=P	ore Lining, M=Matrix.
dric Soil Indicators	:		5, ,	D	(00) (1.55	0.7.10	Indicators for Problematic Hydric Soils 3:
_Histol (A1)					ace (S8) (LRR		1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)				•	9) (LRR S, T, U	•	2 cm Muck (A10) (LRR S)
_Black Histic (A3)	• 40			•	I (F1) (LRR O)		Reduced Vertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (. Stratified Layers (A				Gleyed Matrix ed Matrix (F3)	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A Organic Bodies (At		n		Dark Surface	(F6)		Anomalous Bright Loamy Soils (F20)
		•		ed Dark Surfac	` '		(MLRA 153B) Red Parent Material (TF2)
_5 cm Mucky Minera		T,U)			. ,		
_Muck Presence (A	8) (LRR U)			Depressions (	F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (L	RR P,T)		Marl (F	10) (LRR U)			Other (Explain in Remarks)
_Depleted Below Da	rk Surface (A1	1)	Deplete	ed Orchric (F1	1) (MLRA 151)	)	
_Thick Dark Surface	(A12)		Iron-Ma	nganese Mas	ses (F12) (LRI	R O, P,T)	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
Coast Prairie Redox (A16) (MLRA 150A)							hydrology must be present, unless disturbed or
sandy Mucky Mine		•					problematic.
_Sandy Midcky Mine _Sandy Gleyed Mati		2, 3)		` '.	(MLRA 150A,	150B)	
_Sandy Cicycu Mai	ix (0+)				Soils (F19) (MI		
Stripped Matrix (Se	a.					) (MLRA 149A, 15	3C. 153D)
Dark Surface (S7)	•	n		Sg 20	, (	, (	,,
		<u> </u>				1	
strictive Layer (If o	oserveuj.						
Depth (inche	c).					Hydric Soil Pres	ent? Yes ✓ No .
marks:	o,					Triyano com rico	
marks.							

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	Sampling Date: 10/21/09			
Applicant/Owner: Progress Energy Florida, Inc.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	State:FL	·	Sampling Point: EF			
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range					
Landform (hillslope, terrace, etc.): N/A	<u> </u>	Local relief (concave, con	vex, none): none	Slope (%):			
Subregion (LRR or MLRA): LRR U	Lat: <u>28.077696</u>	6 Long:82.	185697	Datum: WGS84			
Soil Map Unit Name: Ona fine sands			_NWI classification	n: Shrub wetland			
Are climatic / hydrologic conditions on the site typ	oical for this time of year?	Yes <u>✓</u>	No	_ (If no, explain in Remarks)			
Are Vegetation, Soil,	or Hydrology	_significantly disturbed?	Are circumstance	s normal? Yes <u>No ✓</u>			
Are Vegetation, Soil,	or Hydrology	_naturally problematic?	(If needed, explai	n any answers in Remarks)			
SUMMARY OF FINDINGS - Attach si	te map showing sampli	ing point locations, t	transects, impo	ortant features, etc.			
Hydrophytic Vegetation Present?	Yes No						
Hydric Soil Present?	YesNo	Is the Sampled Area within a Wetland? YesNo					
Wetland Hydrology Present?	Yes No						
HYDROLOGY							
Wetland Hydrology Indicators:	ala ala all'Ala da a a ala A			tors (minimum of two required)			
Primary Indicators (minimum of one is required; o		(BO)	Surface Soi	egetated Concave Surface (B8)			
✓ Surface Water (A1)	Water-Stained Leaves ( Aquatic Fauna (B13)	(09)	Sparsely ve	` ,			
High Water Table (A2)		D 111		•			
Saturation (A3)  Marl Deposits (B15) (LRR U)  Moss Trim Lines (B16)  Water Marks (B1)  ——Hydrogen Sulfide Odor (C1)  ——Dry-Season Water Table (C							
Water Marks (B1)	Oxidized Rhizospheres	•	Crayfish Bu				
Sediment Deposits (B2) Drift Deposits (B3)	Presence of Reduced Ir			/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Recent Iron Reduction i			Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	` '	Shallow Aqu	, ,			
✓ Inundation Visible on Aerial Imagery (B7)			FAC Neutra	, ,			
Field Observations:	Other (Explain III Nema	iks)	FAC Neutra	i rest (D3)			
Surface Water Present?	Yes No	Depth (inches): 0-24					
Water Table Present?	Yes No						
Saturation Present?	Yes No		Wetland				
(includes capillary fringe)	NO	_ Depth (mones)o	Hydrology Present?	Yes <u>✓ No</u>			
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous	s inspections), if available:	Fresentr	Yes <u> </u>			
Demonto							
Remarks:							

VEGETATION - Use scientific nar	nes of plants			Sampling Point:	EF
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status		
1.	. <u>-</u>			Number of Dominant Species	(A)
2.				That Ale OBL, FACVV, OF FAC.	(,,)
3.				Total Number of Dominant	(B)
4.				Species Across All Strata:	(6)
5.				Percent of Dominant Species 50.00	(A/B)
6.				That Are OBL, FACW, or FAC:	(700)
7.				Prevalance Index worksheet:	
	0	= Total Cove	r	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:	_)			OBL species x1=	
1.				FACW species x2=	_
2.				FAC species x3=	-
3.			•••	FACU species x4=	— I
<del>3.</del> 4.				UPL species x5=	— I
				- — — — — — — — — — — — — — — — — — — —	一 <sub>/B</sub> 、
5.				Column Totals:(A)	— <sup>(B)</sup>
6.					
7.				Prevalance Index = B/A =	
	, 0	= Total Cove	r	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:	_)			✓ Dominance Test is 50%	
1.				Prevalence Index is ≤3.0 <sup>1</sup>	l
2.				Problematic Hydrophytic Vegetation <sup>1</sup> (Ex	plain)
3.					
4.				Indicators of hydric soil and wetland hydrology i	must
5.				be present, unless disturbed or problematic.	
6.			-	Definitions of Vegetation Strata:	
<del>7</del> .				1	
Herb Stratum (Plot size:)	0	= Total Cove	r	Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and 3 in	76
Cynodon dactylon	2	VAS	FACU	cm) or larger in diameter at breast height (DBH).	. (
<del> </del>	1	yes		<b>∤</b> `	
		yes	FACU	Sapling- Woody plants, excluding woody vines,	- than 3
Andropogon virginicus	1	yes	FAC	approximately 20 ft (6m) or more in height and less in. (7.6 cm) DBH.	i man s
4. Cyperus haspan	1	yes	OBL		
5.				Shrub- Woody plants, excluding woody vines,	
6.				approximately 3 to 20 ft (1 to 6 m) in height.	
7.				Herb- All herbaceous (non-woody)plants, including	
8.				herbaceous vines, regardless of size. Includes wo	
9	. <u></u>			plants, except woody vines, less than approximatel	ly 3 ft (1
10.				m) in height.	
11.				Woody vine- All woody vines, regardless of height	i.
12.					
	5	= Total Cove	r		
Woody Vine Stratum (Plot size:	)		I		
1.			I		
2.				1	
3.		<del></del>			
				11	
4. E				Hydrophytic	
5.		Total Cours		Vegetation Present? Yes <u>√</u> No	<del></del>
	0	= Total Cove	<u>r</u>		
Remarks: (If observed, list morpho Percent cover estimates based on	-	-	roader cor	mmunitv	

OIL			Sampling Point:
ofile Description: (Describe to the depth neede		absence of indicators	s.)
epth Matrix	Redox Features		
ches) Color (moist) % Color (	moist) % Type¹ Loc²	Texture	Remarks
10 YR 3/1			very dark gray fine sand
3 10 YR 2/1		<del>-</del>	black fine sand
2 10 YR 2/2		<del></del>	very dark brown fine sand
80 10 YR 7/1		<del>-</del>	light gray fine sand
			-
pe: C=Concentration, D=Depletion, RM=Reduced	Matrix, CS=Covered or Coated Sand Grains.	<sup>2</sup> Location: PL=Po	ore Lining, M=Matrix.
dric Soil Indicators:			Indicators for Problematic Hydric Soils 3:
_Histol (A1)	Polyvalue Below Surface (S8) (L		1 cm Muck (a9) (LRR O)
_Histic Epidon (A2)	Thin Dark Surface (S9) (LRR S,		2 cm Muck (A10) (LRR S)
_Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR	: O)	Reduced Vertic (F18) (outside MLRA 150A, B
_Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)
_Stratified Layers (A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)
_Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)		(MLRA 153B)
_5 cm Mucky Mineral (A7) (LRR P,T,U)	Depleted Dark Surface (F7)		Red Parent Material (TF2)
_Muck Presence (A8) (LRR U)	Redox Depressions (F8)		Very Shallow Dark Surface (TF12) (LRR T, U)
_1 cm Muck (A9) (LRR P,T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Orchric (F11) (MLRA 1	51)	,
_Depleted Below Dark Surface (ATT) _Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (	•	
-	Umbric Surface (F13) (LRR P, T	· · · · ·	<sup>3</sup> Indicators of hydrophytic vegetation and wetland
_Coast Prairie Redox (A16) (MLRA 150A)		•	hydrology must be present, unless disturbed or problematic.
_Sandy Mucky Mineral (S1) (LRR O, S)	Delta Orchric (F17) (MLRA 151)		problematic.
_Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 15	•	
_Sandy Redox (S5)	Piedmont Floodplain Soils (F19)	•	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (	F20) (MLRA 149A, 153	C, 153D)
_Dark Surface (S7) (LRR P, S, T, U)			
strictive Layer (If observed):			
Type:	_	- I	
Depth (inches):		Hydric Soil Prese	ent? Yes <u>√</u> No
marks;			

Project/Site: Levy Nuclear Plant - Transmission L	nes		City/County: Hillsborou	gh	Sampling Date	e: 10/21/09
Applicant/Owner: Progress Energy Florida, Inc.			State:FL_	Sampling Poin	it: EG	
Investigator(s): Justin Styer, Amy Piko			Section, Township, Range			
Landform (hillslope, terrace, etc.):N/A			Local relief (concave, conv	ex, none): none		Slope (%):
Subregion (LRR or MLRA): LRR U		Lat: <u>28.078407</u>	Long:82.1	72791		Datum: <u>WGS84</u>
Soil Map Unit Name: Malabar fine sands				_NWI classification:	NA	
Are climatic / hydrologic conditions on the site typ	ical for this time	e of year?	Yes <u>√</u>	_ No	(If no, explain i	in Remarks)
Are Vegetation, Soil	or Hydrology_		significantly disturbed?	Are circumstances	normal?	Yes <u>No ✓</u>
			naturally problematic?	(If needed, explain	any answers in	Remarks)
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map shov	wing samplir	ng point locations, ti	ransects, impo	rtant featur	es, etc.
Hydrophytic Vegetation Present?	Yes/	No		*		
Hydric Soil Present?	Yes	No	is the Sampled Area w	ithin a Wetland?	Yes✓I	No
Wetland Hydrology Present?	Yes✓	No				
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indicato	rs (minimum of	two required)
Primary Indicators (minimum of one is required; c	heck all that an	nlv)		Surface Soil (		two required?
✓ Surface Water (A1)		itained Leaves (E	19)		etated Concave	e Surface (B8)
High Water Table (A2)		Fauna (B13)	,	Drainage Patt		(,
✓ Saturation (A3)		posits (B15) (LRF	R UI)	Moss Trim Lir		
Water Marks (B1)		n Sulfide Odor (0	•	·	Vater Table (C2	2)
Sediment Deposits (B2)			n Living Roots (C3)	Crayfish Burre	,	,
Drift Deposits (B3)		e of Reduced Iro		Saturation Vis		magery (C9)
Algal Mat or Crust (B4)			Tilled Soils (C6)	Geomorphic F		, , ,
Iron Deposits (B5)		ck Surface (C7)	,	Shallow Aquit		
✓ Inundation Visible on Aerial Imagery (B7)		xplain in Remark	(s)	FAC Neutral		
Field Observations:			•		,	
Surface Water Present?	Yes/	Nó	Depth (inches): 0-8	]		
Water Table Present?			Depth (inches):0			
Saturation Present?			Depth (inches): 0	Wetland  Hydrology		
(includes capillary fringe)				Present?	Yes <u>√</u> !	No
Describe Recorded Data (stream gauge, monitori	ng well, aerial p	ohotos, previous i	nspections), if available:			
Remarks:						

VEGETATION - Use scientific nar	mes of plants			Samı	oling Point:	EG		
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:				
Tree Stratum (Plot size:)	Cover	Species?	Status					
1.	•	•		Number of Dominant Species				
2.				That Are OBL, FACW, or FAC:	1	(A)		
3.				Total Number of Dominant	_			
4.				Species Across All Strata:	<u>2</u>	(B)		
5.	· <del></del>			Percent of Dominant Species				
6.				That Are OBL, FACW, or FAC:	<u>50.00</u>	(A/B)		
7.		<del></del>		Prevalance Index worksheet:				
		= Total Cove		Total % Cover of:	Multiply by:			
Sapling Stratum (Plot size:	,	- 10tal 00V6	<b>7</b> 1	1	x1=			
11.	<del></del> /			<u> </u>	x2=	_		
2.	. ———			<del></del>	x3=	_		
3.	. ———			<del></del>	x4=			
4.				· ——	x5=	_		
5.				<del></del>		- <sub>(B)</sub>		
6.	· ——			Column rotals.	(A)	_ <sup>(B)</sup>		
7.				Drawalanaa Indaw - B/A -				
1.		= Total Cove		Prevalance Index = B/A = Hydrophytic Vegetation Indica	10.00			
Shrub Stratum (Plot size:	,	- Total Cove	<b>3</b> 1	✓ Dominance Test is 50%	itors:			
. —————————————————————————————————————	<del>. '</del>				1			
11.				Prevalence Index is ≤3.0		1		
2.				Problematic Hydrophytic	vegetation (Exp	olain)		
3.				1				
4.				<sup>1</sup> Indicators of hydric soil and wet		nust		
5.				be present, unless disturbed or				
6.				Definitions of Vegetation Strat	ta:			
7.				4				
	0	= Total Cove	er	Tree- Woody plants, excluding wo				
Herb Stratum (Plot size:)				approximately 20 ft (6m) or more i		(7.6		
Cynodon dactylon	25	yes	FACU	cm) or larger in diameter at breast	neight (DBH).			
2. Alternanthera philoxeroides	25	yes	OBL	Sapling- Woody plants, excluding woody vines,				
Panicum hemitomon	10	no	OBL	approximately 20 ft (6m) or more in height and less				
Cyperus haspan	55	no	OBL	in. (7.6 cm) DBH.				
Hydrocotyle umbellata	5	no	OBL	Shrub- Woody plants, excluding v				
6. Polygonum punctatum	5	no	FACW	approximately 3 to 20 ft (1 to 6 m)	in height.			
7. Commelina diffusa	5	no	FACW	Herb- All herbaceous (non-woody				
Sesbania spp.	55	no	FAC	herbaceous vines, regardless of s		-		
9. Phyla nodiflora	2	no	FACW	plants, except woody vines, less the	nan approximately	/ 3 ft (1		
10				m) in height.				
11.				Woody vine- All woody vines, reg	ardless of height.			
12.								
	87	= Total Cove	er					
Woody Vine Stratum (Plot size:	)							
1.								
2.								
3.								
4.				Hydrophytic				
5.				Vegetation Present? Yes	No	<u>.</u>		
	0	= Total Cove	er	1 -				
Remarks: (If observed, list morph	ological adapta	tions below).		•				
Percent cover estimates based or	n meandering s	survey of the b	oroader coi	mmunity.				

10 YR 6/2   12:30   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/	SOIL	· ·							Sampling Point:
Color (moist)	Profile De	escription: (Describe	to the de	oth needed to doc	ument th	he indicator o	r confirm the at	sence of indicator	rs.)
D.4	Depth	Matrix			Redox	r Features			
### 12 To YR 6/2  12-30 10 YR 6/3  30-50 10 YR 6/3  30-50 10 YR 6/3  ### 17 ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### 17 ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### 17 ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### 17 ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### 17 ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### 17 ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### 17 ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.  ### 17 ype: C=Concentration, D=Depletion, RM=Reduced Matrix. ### 17 ype: Lining, M=Matrix. ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3  ### 10 YPR 6/3	(inches)	Color (moist)	- %	Color (moist)	%	Type	Loc²	Texture	Remarks
10 YR 6/2   10 YR 6/2   12:30   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/6   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/7   10 YR 6/	0.4	10 VD 4/1							dark gray fine cand
12-30 10 YR 6/6 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/3 30-50 10 YR 6/						-			
30-50 10 YR 6/3 pale brown fine sand  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, C\$=Covered or Coated Sand Grains.   Turns			- —				- ——		
Hydric Soil Indicators:  Histol (A1)  Polyvalue Below Surface (S8) (LRR S, T, U)  Histol Epidon (A2)  Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  End Muck (A9) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  End Muck Presence (A8) (LRR P, T, U)  Depleted Dark Surface (F7)  Mart (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mecky Mineral (S1) (LRR O, S)  Sandy Mecky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Delta Orchric (F17) (MLRA 150A)  Polyvalue Below Surface (S8) (LRR S, T, U)  1 cm Muck (A9) (LRR S, T, U)  Depleted Dark Surface (F7)  Mart (F10) (LRR U)  Depleted Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Delta Orchric (F17) (MLRA 151)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mecky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Indicators for Problematic Hydric Soils *:  1 cm Muck (A9) (LRR S, T, U)  1 cm Muck (A9) (LRR S, T, U)  Anomalous Bright Loamy Soils (F20) (MLRA 149A)  1 cm Muck (A9) (LRR P, T, U)  Mart (F10) (LRR U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.									
Hydric Soil Indicators: Histol (A1) Histol (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Hist									- <del>·</del>
Hydric Soil Indicators: Histol (A1) Histol (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Hist									
Hydric Soil Indicators: Histol (A1) Histol (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A2) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Histol Epidon (A1) (LRR O, F) Hist									
Histol (A1)			letion, RM	=Reduced Matrix, (	CS=Cove	red or Coated	Sand Grains.	Location: PL=P	9,
Histic Epidon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Pepleted Matrix (F3)  Mart (F10) (LRR U)  Depleted Dark Surface (F10) (LRR O, F110)  Depleted Below Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mecky Mineral (S1) (LRR O, S)  Delta Orchric (F17) (MLRA 151)  Reduced Vertic (F18) (outside MLRA 150A, B  Reduced Vertic (F18) (outside MLRA 150A, B  Reduced Vertic (F18) (outside MLRA 150A, B  Reduced Vertic (F18) (outside MLRA 150A, B  Reduced Vertic (F18) (outside MLRA 150A, B  Reduced Vertic (F18) (LRR O, S)  Piedmont Floodplain Soils (F19) (LRR O, S)  Redox Dark Surface (F10)  Red Parent Material (TF2)  Very Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Jindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Tinich Dark Surface (S9) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:					D.L.		-f (00) (1 PE		•
Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Som Mucky Mineral (F1) (LRR O)  Redox Dark Surface (F6)  Muck Presence (A8) (LRR P, T)  Depleted Dark Surface (F8)  Depleted Dark Surface (F8)  Mart (F10) (LRR U)  Depleted Dark Surface (F8)  Mart (F10) (LRR U)  Depleted Dark Surface (F1)  Iron-Manganese Masses (F12) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mecky Mineral (S1) (LRR O, S)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Reduced Vertic (F18) (outside MLRA 150A, 150B)  Reduced Vertic (F18) (outside MLRA 150A, 150B)  Reduced Vertic (F18) (outside MLRA 150A, 150B)  Reduced Vertic (F18) (LRR O, P, T)  Redox Depleted Matrix (F2)  Piedmont Floodplain Soils (F19) (LRR O, P, T)  Redox Depressions (F8)  Nurka Presence (A8) (LRR P, T)  Mart (F10) (LRR U)  Depleted Dark Surface (F12) (LRR T, U)  Mart (F10) (LRR U)  Depleted Orchric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR O, P, T)  Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:									
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Organic Bodies (A6) (LRR P, T, U)  Stratified Layers (A5)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Pepleted Dark Surface (F7)  Redox Depressions (F8)  Very Shallow Dark Surface (TF12) (LRR T, U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Type:  Iconmy Gleyed Matrix (F2)  Piedmont Floodplain Soils (F19) (LRR P, S, T)  Anomalous Bright Loamy Soils (F20)  (MLRA 153B)  Anomalous Bright Loamy Soils (F20)  (MLRA 151B)  Loamy Gleyed Matrix (F2)  Anomalous Bright Loamy Soils (F20)  (MLRA 151B)  Anomalous Bright Loamy Soils (F10) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  (MLRA 149A)  Type:  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  Mark Surface (S7) (LRR P, S, T, U)								•	
Stratified Layers (Å5)  Organic Bodies (A6) (LRR P, T, U)  Edox Dark Surface (F6)  Sem Mucky Mineral (A7) (LRR P,T,U)  Muck Presence (A8) (LRR U)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Mart (F10) (LRR U)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Redox Depressions (F8)  Medox Depressions (F8)  Medox Depressions (F8)  Medox Depressions (F8)  Wery Shallow Dark Surface (TF12) (LRR T, U)  Other (Explain in Remarks)  Other (Explain in Remarks)  Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Reduced Vertic (F13) (LRR P, T, U)  MrRA 150A)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20)  MLRA 149A, 153C, 153D)  Restrictive Layer (If observed):  Type:  Type:								,	
Organic Bodies (Å6) (LRR P, T, U)  — Redox Dark Surface (F6)  — S cm Mucky Mineral (A7) (LRR P, T, U)  — Muck Presence (A8) (LRR U)  — 1 cm Muck (A9) (LRR P, T)  — Depleted Below Dark Surface (A11)  — Thick Dark Surface (A12)  — Coast Prairie Redox (A16) (MLRA 150A)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sandy Mucky Mineral (S1) (LRR O, S)  — Sandy Redox (S5)  — Stripped Matrix (S6)  — Dark Surface (S7) (LRR P, S, T, U)  Redox Dark Surface (F6)  — (MLRA 153B)  — Red Parent Material (TF2)  — Redox Surface (F7)  — Mart (F10) (LRR U)  — Depleted Dark Surface (TF12) (LRR T, U)  — Other (Explain in Remarks)  — Other (Explain in Remarks)  — Other (Explain in Remarks)  — Iron-Manganese Masses (F12) (LRR O, P,T)  — Iron-Manganese Masses (F12) (LRR O, P,T)  — Jandicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  — Reduced Vertic (F13) (MLRA 151)  — Redox Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Type:  — Ty									
			P. T. U)						
✓ Muck Presence (A8) (LRR U)  —1 cm Muck (A9) (LRR P,T) ——Depleted Below Dark Surface (A11) ——Thick Dark Surface (A12) ——Coast Prairie Redox (A16) (MLRA 150A) ——Sandy Mucky Mineral (S1) (LRR O, S) ——Sandy Gleyed Matrix (S4) ——Sandy Redox (S5) ——Sandy Redox (S5) ——Dark Surface (S7) (LRR P, S, T, U)  Redox Depressions (F8) ——Ned Art (F10) (LRR U) ——Other (Explain in Remarks) ——Other (Explain in Remarks) ——Other (Explain in Remarks) ——Other (Explain in Remarks) ——Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. ——Problematic. ——Problematic. ——Problematic. ——Reduced Vertic (F18) (MLRA 150A, 150B) ——Predmont Floodplain Soils (F19) (MLRA 149A) ——Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——Problematic. ——P	i -						• •		
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Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Tiron-Manganese Masses (F12) (LRR O, P,T)  John LRR 151)  John LRR 151, (LRR P, T, U)  All dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Peleta Orchric (F17) (MLRA 151)  problematic.  Reduced Vertic (F18) (MLRA 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	1 cm Muck (A9) (LRR P,T)Marl (F10) (LRR U)								
Thick Dark Surface (A12)  Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:  Iron-Manganese Masses (F12) (LRR O, P,T)  Jelta Orchric (F13) (LRR P, T, U)  Aphydrology must be present, unless disturbed or problematic.  Pelta Orchric (F17) (MLRA 151)  problematic.  Reduced Vertic (F18) (MLRA 150A, 150B)  Piedmont Floodplain Soils (F19) (MLRA 149A)  Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D)			(844)			, ,,	•		
Coast Prairie Redox (A16) (MLRA 150A)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:			æ (ATT)			•	, ,	•	
Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:						-	, , ,		
sandy Mucky Willerar (S1) (ERR C, S)school (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type:		, , ,		•				)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed): Type:			LRR O, S)	1		, ,	•		problematic,
Stripped Matrix (S6) —Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)  Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (If observed):  Type:						•	, .		
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type:		, , ,				•		•	
Restrictive Layer (If observed): Type:		` '			Anoi	malous Bright I	Loamy Soils (F20	)) (MLRA 149A, 15	3C, 153D)
Туре:	_							<del>,</del>	
	Restrictiv		):						
								Shadaia Cail Basa	
Depth (inches): Hydric Soil Present? Yes ✓ No  Remarks:	Domadia	Depth (inches):				<del> </del>		Invaric Soil Pres	ent/ fes v No
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	Í								

Project/Site: Levy Nuclear Plant - Transmission L	ines	City/County: Hillsboro	ugh	_Sampling Date:	10/21/09	
Applicant/Owner: Progress Energy Florida, Inc.		State:FL		Sampling Point:	EH	
Investigator(s): Justin Styer, Amy Piko		Section, Township, Range: <u>2 28S 21E/ 1 28S 21E</u>				
Landform (hillslope, terrace, etc.): N/A		Local relief (concave, con	vex, none): none	S	lope (%):	
Subregion (LRR or MLRA): LRR U	Lat: 28,078657	Long: <u>-82.</u>	170401	D	atum: WGS84	
Soil Map Unit Name: Basinger fine sands			_NWI classification	n: Freshwater Er	nergent Wetland	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	Yes	No	_ (If no, explain in	Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly disturbed?	Are circumstance	s normal? Y	es <u>No </u>	
Are Vegetation, Soit,	or Hydrology	_naturally problematic?	(If needed, explain	n any answers in f	Rémarks)	
<b>SUMMARY OF FINDINGS - Attach sit</b>	e map showing sampli	ing point locations, t	transects, impo	ortant feature	s, etc.	
Hydrophytic Vegetation Present?	Yes No					
Hydric Soil Present?	YesNo	Is the Sampled Area v	vithin a Wetland?	Yes/_N	o	
Wetland Hydrology Present?	Yes No					
Remarks:						
	,					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indica	tors (minimum of t	two required)	
Primary Indicators (minimum of one is required; c	heck all that apply)		Surface Soi	l Cracks (B6)		
✓ Surface Water (A1)	Water-Stained Leaves	(B9)	Sparsely Ve	egetated Concave	Surface (B8)	
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pa	atterns (B10)		
✓ Saturation (A3)	Marl Deposits (B15) (LF	RR U)	Moss Trim I	_ines (B16)		
Water Marks (B1)	Hydrogen Sulfide Odor	(C1)	Dry-Season	Water Table (C2)	)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Bu	rrows (C8)		
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	Saturation \	/isible on Aerial In	nagery (C9)	
Algal Mat or Crust (B4)	Recent Iron Reduction i	n Tilled Soils (C6)	Geomorphic	Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	)	Shallow Aqu	uitard (D3)		
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rema	rks)	FAC Neutra	l Test (D5)		
Field Observations:						
Surface Water Present?	Yes No		_			
Water Table Present?	Yes No		Wetland			
Saturation Present?	Yes No	_ Depth (inches):0	Hydrology			
(includes capillary fringe)			Present?	Yes <u>-</u> ✓N	lo	
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previous	s inspections), if available:				
					•	
Remarks:						
					•	

VEGETATION - Use scientific na				<del>, · · · · · · · · · · · · · · · · · · ·</del>	ling Point:	EH
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:		
1. 2.			· —	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>11</u>	(A)
3. 4.				Total Number of Dominant Species Across All Strata:	<u>12</u>	(B)
5.	-			Percent of Dominant Species	04.67	(A (D)
6.				That Are OBL, FACW, or FAC:	<u>91.67</u>	(A/B)
7.	-			Prevalance Index worksheet:		
Sapling Stratum (Plot size:	· 0 )	= Total Cove	er	Total % Cover of: OBL species x	Multiply by: 1=	
Salix caroliniana	25	yes	OBL	FACW species x2	2=	
2. Acer rubrum	10	yes	OBL	f ' —	3=	_
3. Quercus laurifolia	5	no	FACW	1	4=	_
4.				<del>-</del>	5=	_
5.				Column Totals: (A	4)	(B)
6.				]	· ·	_
7.				Prevalance Index = B/A =		
la companya da sa sa sa sa sa sa sa sa sa sa sa sa sa	40	= Total Cove	er	Hydrophytic Vegetation Indicate	ors:	
Shrub Stratum (Plot size:	<u>-</u> )			✓ Dominance Test is 50%		
Baccharis glomeruliflora	10	yes	FACW	Prevalence Index is ≤3.0¹	1 .	
Cephalanthus occidentalis	10	yes	OBL	Problematic Hydrophytic V	egetation⁺ (Exp	olain)
3.				4		
4. 5. 6. 7.	- ——			Indicators of hydric soil and wetla		nust
<u>5.</u>	- ——			be present, unless disturbed or pr Definitions of Vegetation Strata		
0.	-			Deminions of Vegetation Strate	:	
1.	20	= Total Cove	·	T Woody plants, evaluding woo	de educación de la constantidad de la constantidad de la constantidad de la constantidad de la constantidad de	
Herb Stratum (Plot size:)	20	- 10tai 00+0	31	Tree- Woody plants, excluding wood approximately 20 ft (6m) or more in		76
Panicum hemitomon	- 10	yes	OBL	cm) or larger in diameter at breast h		(1.0
Paspalum notatum	10	yes	FACU	Sapling- Woody plants, excluding w		
Cyperus haspan	10	yes	OBL	approximately 20 ft (6m) or more in		than 3
Diodia virginiana	10	yes	FACW	in. (7.6 cm) DBH.	··· <b>J</b>	
5. Aster spp.	10	yes	FAC	Shrub- Woody plants, excluding wo	ody vines,	
6. Commelina diffusa	10	yes	FACW	approximately 3 to 20 ft (1 to 6 m) in		
7. Hydrocotyle umbellata	10	yes	OBL	Herb- All herbaceous (non-woody)p	lants, including	
8. Ludwigia repens	10	yes	OBL	herbaceous vines, regardless of size	e. Includes woo	
9.	-			plants, except woody vines, less tha		
10.				m) in height.		
11.				<b>Woody vine</b> - All woody vines, regar	dless of height.	
12.				]		
Woody Vine Stratum (Plot size:	80	= Total Cove	er .			
1.						
2.				1		_
3.						
4.				Hydrophytic		
5.				Vegetation Present? Yes _	<u>√No</u>	<del></del>
	0	= Total Cove	er	1		

Remarks: (If observed, list morphological adaptations below).

Percent cover estimates based on meandering survey of the broader community.

-	l: Hillsborough- Basing	jer						
SOIL						<u> </u>		Sampling Point: EF
	scription: (Describe	to the dep	th needed to doc			onfirm the abs	sence of indicators.)	
Depth	Matrix				k Features			
(inches)	Color (moist)	<u> </u>	Color (moist)	%_	Type'	Loc²	Texture	Remarks
0-7	10 YR 2/1							black fine sand
7-28	10 YR 6/1		<del></del>					gray fine sand
7 20	10 YR 5/3; 10 YR		<del>-</del>		<del></del>	<del></del>	<del></del>	gray line salid
28-42	5/2							brown and grayish brown fine sand
42-80	10 YR 6/2							light brownish gray fine sand
								· · · · · · · · · · · · · · · · · · ·
	Concentration, D=Depl	etion, RM=	Reduced Matrix, (	S=Cove	ered or Coated Sa	and Grains.	<sup>2</sup> Location: PL=Pore	
•	il Indicators:							ndicators for Problematic Hydric Soils 3:
Histol					value Below Surf			1 cm Muck (a9) (LRR O)
	Epidon (A2)				Dark Surface (S			2 cm Muck (A10) (LRR S)
	Histic (A3)				my Mucky Minera		-	Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)				my Gleyed Matrix		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ied Layers (A5) ic Bodies (A6) (LRR F	T 10			leted Matrix (F3) lox Dark Surface		-	Anomalous Bright Loamy Soils (F20)
						. ,		(MLRA 153B)  Red Percet Material (TE2)
	Mucky Mineral (A7) (LI				leted Dark Surfac		-	Red Parent Material (TF2)
	Presence (A8) (LRR I	U)			lox Depressions (	F8)	-	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm l	Muck (A9) (LRR P,T)			Mari	I (F10) (LRR U)		-	Other (Explain in Remarks)
Deplet	ted Below Dark Surfac	e (A11)		Dер	leted Orchric (F1	1) (MLRA 151)		
	Dark Surface (A12)			Iron-	-Manganese Mas	ses (F12) (LRF	R O, P,T) 3	)d;t
—— Coast	Prairie Redox (A16) (	MI RA 150	ιΔ)	 Limb	bric Surface (F13	) (LRR P. T. U)		Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	, , ,		•		•			problematic.
	Mucky Mineral (S1) (I	LRR O, S)			a Orchric (F17) (F		•	orobicinatio.
	Gleyed Matrix (S4)				luced Vertic (F18		•	
	Redox (S5)				lmont Floodplain		•	4620)
	ed Matrix (S6)			A110	maious Bright Lo	arriy Solis (F20)	) (MLRA 149A, 153C,	(1930)
	Surface (S7) (LRR P,							
	e Layer (If observed)	:						
	Type:							
	Depth (inches):						Hydric Soil Present	t? Yes <u></u> No
Remarks:								
l								
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ł								

Project/Site: Levy Baseload Transmission Progra	am, Kathleen Substation	City/County: Polk		Sampling Date:_	9/17/09
Applicant/Owner: Progress Energy Florida, Inc.		State: FL Sampling Poi			A/B
Investigator(s): Blake Meinecke, Justin Stye	er	Section, Township, Range	: <u>26 23S 17E</u>		
Landform (hillslope, terrace, etc.): N/A	<b>\</b>	Local relief (concave, conv	vex, none): none	Slo	pe (%):
Subregion (LRR or MLRA): LRR U	Lat: _28.22756	1 Long:8	2.027462	Da	tum: <u>WGS84</u>
Soil Map Unit Name: Pomona fine sand			_NWI classification:	Pond/emergent/	forested wetland
Are climatic / hydrologic conditions on the site typ	pical for this time of year?	Yes <u>✓</u>	_ No	(If no, explain in I	Remarks)
Are Vegetation, Soil	or Hydrology	significantly disturbed?	Are circumstances	normal? Yes	s∕No
Are Vegetation, Soil,	or Hydrology	naturally problematic?	(If needed, explain	any answers in R	emarks)
SUMMARY OF FINDINGS - Attach site	e map showing samplir	ng point locations, tr	ansects, impor	tant features,	etc.
Hydrophytic Vegetation Present?	Yes No			-	
Hydric Soil Present?	Yes No	Is the Sampled Area w	ithin a Wetland?	Yes <u>√</u> No	
Wetland Hydrology Present?	Yes No				
Remarks: Depressional wetland, drought stress					
HYDROLOGY					•
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of tw	o required)
Primary Indicators (minimum of one is required; of	check all that apply)		Surface Soil (	Cracks (B6)	
✓ Surface Water (A1)	Water-Stained Leaves (I	B9)	Sparsely Veg	etated Concave S	iurface (B8)
High Water Table (A2)	Aquatic Fauna (B13)		Drainage Pat	terns (B10)	
✓ Saturation (A3)	Marl Deposits (B15) (LR	R U)	Moss Trim Li	nes (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (	C1)	Dry-Season \	Vater Table (C2)	
Sediment Deposits (B2)	Oxidized Rhizospheres	on Living Roots (C3)	Crayfish Burn	ows (C8)	1
Drift Deposits (B3)	Presence of Reduced In	on (C4)	Saturation Vis	sible on Aerial Ima	igery (C9)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic	Position (D2)	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquit	tard (D3)	
✓ Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	ks)	FAC Neutral	Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	Depth (inches): 1-12			
Water Table Present?	Yes No	Depth (inches): 0	107-411		
Saturation Present?	Yes No	Depth (inches): 0	Wetland Hydrology		
(includes capillary fringe)			Present?	Yes <a href="#">Yes</a> <a href="#">No</a>	
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previou	s inspections), if available:			
Remarks:					
			·		

VEGETATION - Use scientific name	nes of plants	•		Sampling Point:	A/B
	Absolute %	Dominant	Indicator	Dominance Test Worksheet:	
Tree Stratum (Plot size:)	Cover	Species?	Status		
Acer rubrum	20	yes	OBL	Number of Dominant Species	(A)
Quercus nigra	5	no	FAC	That Are OBL, FACW, or FAC:	(^)
Quercus laurifolia	5	no	FACW	Total Number of Dominant	(B)
Sapium sebiferum	2	no	FAC	Species Across All Strata:	(6)
5. Taxodium ascendens	30	yes	OBL	Percent of Dominant Species 100.00	(A/B)
6. Ulmus americana	5	no	FACW	That Are OBL, FACW, or FAC:	(~0)
7. Pinus elliottii	10	no	FACW	Prevalance Index worksheet:	
	77	= Total Cove	er.	Total % Cover of: Multiply by:	
Sapling Stratum (Plot size:)				OBL speciesx1=	_
Salix caroliniana	10	yes	FACW	FACW speciesx2=	
Schinus terebinthifolius	5	no	FAC	FAC speciesx3=	
3.				FACU speciesx4=	_
<ul><li>2. Schinus terebinthifolius</li><li>3.</li><li>4.</li><li>5.</li></ul>				UPL speciesx5=	
5.				Column Totals:(A)	_(B)
6.				]	
7.				Prevalance Index = B/A =	
	15	= Total Cove	er	Hydrophytic Vegetation Indicators:	
Shrub Stratum (Plot size:)				Dominance Test is 50%	İ
Myrica cerifera	10	yes	FAC	Prevalence Index is ≤3.0 <sup>1</sup>	
Baccharis glomeruliflora	10	yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Exp	olain)
3.				<u>.</u>	
4.				Indicators of hydric soil and wetland hydrology n	nust
5.				be present, unless disturbed or problematic.	
6.				Definitions of Vegetation Strata:	
7.		Tstal Cove			
Harb Stratum (Blot size:	20 = Total Cover		÷r	Tree- Woody plants, excluding woody vines,	
Herb Stratum (Plot size:)	25	1120	OBL	approximately 20 ft (6m) or more in height and 3 in. cm) or larger in diameter at breast height (DBH).	(7.0
Panicum hemitomon     Andropogon glomeratus	20	yes	OBL FACW		
Andropogon glomeratus     Amphicarpum muhlenbergianu		yes	FACW	Sapling- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less	than 3
Amphicarpum munienbergianu     Rhynchospora colorata	10	yes	OBL	in. (7.6 cm) DBH.	llian o
Juncus effusus	5	no	FACW	Shrub- Woody plants, excluding woody vines,	
Junicus entisus     Phyla nodiflora	2	no	FACW	approximately 3 to 20 ft (1 to 6 m) in height.	
7. Polygonum punctatum	2	no	FACW	• • • • • • • • • • • • • • • • • • • •	
Pluchea odorata	2	no	FACW	Herb- All herbaceous (non-woody)plants, including herbaceous vines, regardless of size. Includes woo	
9.			17011	plants, except woody vines, less than approximately	
10.			*	m) in height.	, ,
11.				Woody vine- All woody vines, regardless of height.	
12.				,,	
12.	96	= Total Cove	٥r	1	
   Woody Vine Stratum (Plot size:	١	1010, 00.0	,,		
Vitus rotundifolia	/	yes	FAC		
Ampelopsis arborea	10	yes	FAC	1	
3.			17.4		
4.				Hydrophytic	
5.				Vegetation Present? Yes <u>√</u> No_	
	20	= Total Cove			
Remarks: (If observed, list morpho	logical adapta				
Percent cover estimates based on	_		roader cor	mmunity.	
1					

County/coil:	DAIL	Domona

SUIL								Sampling Point,
Profile De	scription: (Describe	to the de	pth needed to docu	ıment th	e indicator or	confirm the ab	sence of indicators.)	i
Depth	Matrix			Redox	Features			· ·
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc²	Texture	Remarks
0-6	10 YR 3/1							dark grayish brown fine sand
	10 YR 6/2	<del></del>						_
6-12								light gray fine sand
12-21	10 YR 7/2							yellow fine sand
21-26	5 YR 3/3		10 YR 5/6				common fine	grayish brown sandy clay loam
			<del> </del>					
		- —		—				
Type: C=0	Concentration, D=Dep	letion, RM	=Reduced Matrix, C	S=Cove	red or Coated S	and Grains.	<sup>2</sup> Location: PL=Pore	Lining, M=Matrix.
Hydric So	I Indicators:						ı	ndicators for Problematic Hydric Soils 3:
Histol	(A1)			Poly	alue Below Sur	face (S8) (LRR	R S, T, U)	1 cm Muck (a9) (LRR O)
	Epidon (A2)		•		Dark Surface (\$			2 cm Muck (A10) (LRR S)
	Histic (A3)		-		ny Mucky Miner			Reduced Vertic (F18) (outside MLRA 150A, B)
	gen Sulfide (A4)		-		ny Gleved Matri		-	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)		-		eted Matrix (F3)			
	ic Bodies (A6) (LRR I	P, T, U)	-		ox Dark Surface		-	Anomalous Bright Loamy Soils (F20) (MLRA 153B)
5 cm I	Mucky Mineral (A7) (L	RR P,T,U	) -	Depl	eted Dark Surfa	ce (F7)	-	Red Parent Material (TF2)
Muck	Presence (A8) (LRR	U)	-	Redo	x Depressions	(F8)	_	Very Shallow Dark Surface (TF12) (LRR T, U)
1 cm I	Muck (A9) (LRR P,T)		-	Marl	(F10) (LRR U)		-	Other (Explain in Remarks)
Deple	ed Below Dark Surfac	ce (A11)	-		eted Orchric (F		•	
	Dark Surface (A12)		-		Manganese Ma			Indicators of hydrophytic vegetation and wetland
Coast	Prairie Redox (A16) (	MLRA 15	0A) _		ric Surface (F13		•	nydrology must be present, unless disturbed or
_	Mucky Mineral (S1) (	LRR O, S	) _		Orchric (F17)	•	•	problematic.
	Gleyed Matrix (S4)		-		iced Vertic (F18			
Sandy	Redox (S5)				mont Floodplain	· , ,	,	
Stripp	ed Matrix (S6)		-	Anon	nalous Bright Lo	amy Soils (F20	)) (MLRA 149A, 153C,	153D)
Dark S	Surface (S7) (LRR P,	S, T, U)						
Restrictive	Layer (If observed)	):						•
	Type:							
	Depth (inches):						Hydric Soil Present	? Yes <u>√</u> No
Remarks:								
Ì								
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!								
1								
								•
1								

# APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I:	BACKGROUND	INFORMATION

	DEPODE COMPLETION DATE FOR	ADDDOVED HIDIODICTION	ALL DETERMINATION (
А.	REPORT COMPLETION DATE FOR	APPROVED JURISDICTION	NAL DETERMINATION (

-	TO YOUR TORREST	OTTLOT	TOTAL TO ST. 4 B 4 TO	A DATE OF THE STREET
В.	DISTRICT	OFFICE.	FILE NAME.	AND NUMBER:

OF	CHON I. DACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Florida County/parish/borough: Polk City: Kathleen Center coordinates of site (lat/long in degree decimal format): Lat. 28.224805° N, Long82.039493° N.  Universal Transverse Mercator: Name of nearest waterbody: Withlacoochee River and tributaries
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Withlacoochee River  Name of watershed or Hydrologic Unit Code (HUC): Port Lonesome Ditches/03100205  Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.  Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  Office (Desk) Determination. Date: December 14, 2009.  Field Determination. Date(s): September 22-23, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
А.	RHA SECTION TO DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required]  Waters subject to the ebb and flow of the tide.  Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere are and are not "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S.  a. Indicate presence of waters of U.S. in review area (check all that apply):  TNWs, including territorial seas  Wetlands adjacent to TNWs  Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs (Wetland 1)  Non-RPWs that flow directly or indirectly into TNWs (Wetland 1)  Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland 1)  Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands 2, 9)  Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs  Impoundments of jurisdictional waters  Isolated (interstate or intrastate) waters, including isolated wetlands

## b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 110 linear feet: 6 width (ft) and/or acres.

Wetlands: 2.79 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

## Non-regulated waters/wetlands (check if applicable):<sup>3</sup>

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 3 through 8 and 10 through 14 are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup> Supporting documentation is presented in Section III.F.

# SECTION III: CWA ANALYSIS

## A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

# B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW (Wetland 1)

## (i) General Area Conditions:

Watershed size: 9,282 acres
Drainage area: 9,282 acres
Average annual rainfall: 52 inches

Average annual snowfall: 0 inches

## (ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 2-5 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: N/A.

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Identify flow route to TNW <sup>5</sup> : Wetland 1 (intermittent RPW) flows into several unnamed RPWs before reaching the Withlacoochee River, a TNW.  Tributary stream order, if known: First.
(b)	General Tributary Characteristics (check all that apply):  Tributary is:  Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the
stream bed a	ppear to be ditched.
	Tributary properties with respect to top of bank (estimate): Average width: 2.5 feet Average depth: 2.5 feet Average side slopes: Vertical (1:1 or less).
	Primary tributary substrate composition (check all that apply):  Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Herbaceous/50% Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable - no erosion evident. Presence of run/riffle/pool complexes. Explain: N/A.  Tributary geometry: Relatively straight  Tributary gradient (approximate average slope): 2 %
(c)	Flow: Tributary provides for: Intermittent but not seasonal flow Estimate average number of flow events in review area/year: 6-10 Describe flow regime: Other information on duration and volume:.
	Surface flow is: Confined. Characteristics: .
	Subsurface flow: Unknown. Explain findings:  Dye (or other) test performed:
	Tributary has (check all that apply):  Bed and banks  OHWM <sup>6</sup> (check all indicators that apply):  Clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wrack line vegetation matted down, bent, or absent vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition multiple observed or predicted flow events abrupt change in plant community other (list):  Discontinuous OHWM. Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):  High Tide Line indicated by:  oil or scum line along shore objects  fine shell or debris deposits (foreshore)  physical markings/characteristics  tidal gauges  other (list):  Mean High Water Mark indicated by:  survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW. <sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. <sup>7</sup>Ibid.

	(iii)	Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
		Explain: Unknown.  Identify specific pollutants, if known:
	(iv)	Biological Characteristics. Channel supports (check all that apply):  Riparian corridor. Characteristics (type, average width):
		<ul><li>Wetland fringe. Characteristics: .</li><li>⋈ Habitat for:</li></ul>
		☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
Vildlif	e Man	Aquatic/wildlife diversity. Explain findings: Diverse due to location within and in proximity to Green Swamp agement Area.
2.	Cha	tracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Wetlands 1, 2, 9)
	(i)	Physical Characteristics:  (a) General Wetland Characteristics:
		Properties: Wetland size: 2.79 acres
		Wetland type. Explain: Emergent.
		Wetland quality. Explain: Fair to good, due to proximity to Green Swamp Wildlife Management Area.  Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Freshwater marsh wetlands within Wetland 1 directly abut an intermittent
		d Wetlands 2 and 9 are hydrologically connected through adjacent wetlands and culverts under US 98 to Wetland 1, an tent RPW that flows into several RPWs before reaching the Withlacoochee River, a TNW.
		Surface flow is: Confined Characteristics: Both confined (within ditch banks) and sheetflow (non-ditched areas).
		Subsurface flow: Unknown. Explain findings:  Dye (or other) test performed:
		(c) Wetland Adjacency Determination with Non-TNW:  ☐ Directly abutting (Wetland 1 directly abuts intermittent stream.)  ☐ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: Wetlands 2 and 9 are hydrologically connected to
int	termit	tent stream through adjacent wetlands and culverts under US 98.    Ecological connection. Explain:   Separated by berm/barrier. Explain:
		(d) Proximity (Relationship) to TNW
		Project wetlands are 510 river miles from TNW.  Project waters are 2.5 aerial (straight) miles from TNW.
		Flow is from: Wetland to navigable waters.  Estimate approximate location of wetland as within the 100 - 500-year floodplain.
	(ii)	Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Water was moderately clear. Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply):
		<ul> <li>☐ Riparian buffer. Characteristics (type, average width):</li> <li>☐ Vegetation type/percent cover. Explain: emergent and forested wetland/95%.</li> </ul>
		Habitat for:    Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:

## 3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 3
Approximately (2.79) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland 1 - Y	0.15		
Wetland 2 - N	2.63		
Wetland 9 - N	0.01		

Summarize overall biological, chemical and physical functions being performed: Wetlands 1, 2, and 9 provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are part of a larger network of wetlands and RPWs that form a contiguous connection to TNWs in the region. As part of a larger system, these wetlands provide some habitat, foraging, and refugia for wildlife.

#### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Wetlands 2 and 9 provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are part of a larger network of wetlands and RPWs that form a contiguous to semi-contiguous connection to TNWs in the region. As part of a larger system, these wetlands provide some habitat, foraging, and refugia for wildlife, and in combination with adjacent wetlands, could have a significant effect on the physical, chemical, and biological integrity of the Withlacoochee River.
- D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):
  - 1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

	Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines ent Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 1 - 14
	TNWs: linear feet width (ft), Or, acres.  Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs. (Wetland 1)  Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:  Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: According to USGS NHD data, the RPW is intermittent.
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: 110 linear feet 6 width (ft).  Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs <sup>8</sup> that flow directly or indirectly into TNWs.  Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. (Wetland 1)  Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetland 1 directly abuts the RPW.
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.15 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. (Wetlands 2, 9)  Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: 2.64 acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.  Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters.  As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.  Demonstrate that impoundment was created from "waters of the U.S.," or  Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  Demonstrate that water is isolated with a nexus to commerce (see E below).

 $<sup>^8</sup> See$  Footnote # 3.  $^9$  To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

E.	ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): 10  which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:  Other factors. Explain:
	Identify water body and summarize rationale supporting determination:
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .  Wetlands: acres.
F.	NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):  If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.  Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.  Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).  Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource:  Wetlands: acres.
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource:  Wetlands: 7.67 acres. (Wetlands 3 through 8 and 10 through 14)
SE	CTION IV: DATA SOURCES.
Α.	SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):  Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:  Data sheets prepared/submitted by or on behalf of the applicant/consultant.  Office concurs with data sheets/delineation report.  Data sheets prepared by the Corps:  Corps navigable waters' study:  U.S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org.  USGS NHD data.  USGS 8 and 12 digit HUC maps.  U.S. Geological Survey map(s). Cite scale & quad name:.

<sup>&</sup>lt;sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

	USDA Natural Resources Conservation Service Soil Survey. Citation:
茵	National wetlands inventory map(s). Cite name: USFWS, HRC 2008; www.fgdl.org.
同	State/Local wetland inventory map(s):
	FEMA/FIRM maps;
	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
$\boxtimes$	Photographs: Aerial (Name & Date): AerialExpress 2008.
********	or Other (Name & Date):
	Previous determination(s). File no. and date of response letter:
	Applicable/supporting case law:
	Applicable/supporting scientific literature:
$\boxtimes$	Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land
cove	er data, 2004.

# **B. ADDITIONAL COMMENTS TO SUPPORT JD:**

## APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I:	RACKGROUND	INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C.	PROJECT LOCATION AND BACKGROUND INFORMATION:
	State: Florida County/parish/borough: Polk City: Kathleen
	Center coordinates of site (lat/long in degree decimal format): Lat. 28.197081° N, Long82.039524° W.
	Universal Transverse Mercator:
	Name of nearest waterbody: Hillsborough River and tributaries
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hillsborough River
	Name of watershed or Hydrologic Unit Code (HUC): Fish Hatchery Drain/03100205
	Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
	Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a
	different JD form.

- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
  - Office (Desk) Determination. Date: December 14, 2009.
  - Field Determination. Date(s): September 23-24, 2009.

# **SECTION II: SUMMARY OF FINDINGS**

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

review ar	ea. [Required]
	Waters subject to the ebb and flow of the tide.
	Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce
	Explain:

There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the

## B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are and are not "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

- 1. Waters of the U.S.
  - a. Indicate presence of waters of U.S. in review area (check all that apply): 1 TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs (Wetland 21A/21B) Non-RPWs that flow directly or indirectly into TNWs (Wetland 25A/25B) Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland 21A/21B) Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (Wetland 15, 20A/20B, 23A/23B)
    - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
    - Impoundments of jurisdictional waters
    - Isolated (interstate or intrastate) waters, including isolated wetlands
  - b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 100 linear feet: 6 width (ft) and/or Wetlands: 4.2 acres.

- c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
- 2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

Supporting documentation is presented in Section III.F.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 15 - 30A/30B

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 16 through 19, 22A/22B, 24, and 26 through 30A/30B are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

## SECTION III: CWA ANALYSIS

## A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

## B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY);

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW (Wetlands 21A/21B, 25A/25B)
  - (i) General Area Conditions:

Watershed size: 13,249 acres
Drainage area: 13,249 acres
Average annual rainfall: 52 inches
Average annual snowfall: 0 inches

# (ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW. (Wetland 21A/21B)

☐ Tributary flows through 2 tributaries before entering TNW. (Wetland 25A/25B)

Project waters are 2.5 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 2.5 aerial (straight) miles from TNW.

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters are 1 (or less) aerial (straight) miles from RPW.  Project waters cross or serve as state boundaries. Explain:
	Identify flow route to TNW <sup>5</sup> : Wetland 21A/21B is a perennial RPW labeled as an artificial path according to USGS NHD data. The perennial RPW flows west directly into the Hillsborough River. Wetland 25A/25B is a non-RPW (ditch) that flows into a mixed forested wetland adjacent to the perennial RPW (Wetland 21A/21B). Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply):  Tributary is:  Natural Artificial (man-made). Explain: Labeled as an artificial path by USGS NHD. Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the
stream bed a	ppear to be ditched.
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 3 feet Average side slopes: 2:1.
	Primary tributary substrate composition (check all that apply):  Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable - no erosion evident.  Presence of run/riffle/pool complexes. Explain:.  Tributary geometry: Relatively straight  Tributary gradient (approximate average slope): 2 %
(c)	Flow: Tributary provides for: Seasonal flow (Wetland 21A/21B); Intermittent flow (Wetland 25A/25B) Estimate average number of flow events in review area/year: 6-10  Describe flow regime: Other information on duration and volume:
	Surface flow is: Confined. Characteristics: .
	Subsurface flow: Unknown. Explain findings:  Dye (or other) test performed:
	Tributary has (check all that apply):  Bed and banks  OHWM <sup>6</sup> (check all indicators that apply):  clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wrack line vegetation matted down, bent, or absent vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition multiple observed or predicted flow events abrupt change in plant community  other (list):  Discontinuous OHWM. Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):  High Tide Line indicated by:  oil or scum line along shore objects  fine shell or debris deposits (foreshore)  Mean High Water Mark indicated by:  survey to available datum;  physical markings;

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

			Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines  P. H. Lines A. C. Levy Nuclear Plant - Transmission Lines 204 (201)
Assessm	ient A	rea:	Polk-Hillsborough-Pinellas Transmission Line Wetlands 15 – 30A/30B
			<ul> <li>□ physical markings/characteristics</li> <li>□ tidal gauges</li> <li>□ other (list):</li> </ul>
	(iii)	Cha	emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  Explain: Unknown.  ntify specific pollutants, if known:
	(iv)	$\boxtimes$	logical Characteristics. Channel supports (check all that apply):  Riparian corridor. Characteristics (type, average width): Mixed forested and cypress wetlands, 400 feet.  Wetland fringe. Characteristics: Freshwater marsh habitat in transmission line right of way.  Habitat for:  Federally Listed species. Explain findings:  Fish/spawn areas. Explain findings:  Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Diverse due to proximity to Green Swamp Wildlife Management
Area an	id Hil	Isboi	rough River.
2.			eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Wetlands 15, 20A/20B, 23A/23B)
	(i)		Visical Characteristics:  General Wetland Characteristics:  Properties:  Wetland size: 3.09 acres  Wetland type. Explain: freshwater marsh.  Wetland quality. Explain: Fair to good; mostly undisturbed except for clearing from transmission line.  Project wetlands cross or serve as state boundaries. Explain:
	•	Vetla	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Wetlands 15, 20A/20B, 23A/23B, and 25A/25B are adjacent to a perennial nd 21A/21B) labeled as an artificial path according to USGS NHD data. The perennial RPW flows west directly borough River.
			Surface flow is: Overland sheetflow Characteristics: Sheetflow from wetlands into perennial artificial path.
			Subsurface flow: Unknown. Explain findings:
		(c)	Wetland Adjacency Determination with Non-TNW:  ☐ Directly abutting (Wetland 21A/21B directly abuts perennial artificial path.)  ☐ Not directly abutting  ☐ Discrete wetland hydrologic connection. Explain:  ☐ Ecological connection. Explain: Wetlands 15, 20A/20B, and 23A/23B are adjacent to the perennial artificial
pat	h thr	ough	mixed forested wetlands.  Separated by berm/barrier. Explain:
	,	(d)	Proximity (Relationship) to TNW  Project wetlands are 2-5 river miles from TNW.  Project waters are 2-5 aerial (straight) miles from TNW.  Flow is from: Wetland to navigable waters.  Estimate approximate location of wetland as within the 100 - 500-year floodplain.
	(ii)	Cha	emical Characteristics:  aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:  attify specific pollutants, if known:
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Mixed forested wetland, 400 feet. Vegetation type/percent cover. Explain: Emergent and forested/95%. Habitat for:

Federally Listed species. Explain findings:
Fish/spawn areas. Explain findings:
Other environmentally-sensitive species. Explain findings:
Aquatic/wildlife diversity. Explain findings: Diverse due to proximity to Green Swamp Wildlife Management
Area and Hillsborough River.

## 3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 4
Approximately (3.09) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland 15 - N	1.31		
Wetland 20A/20B - N	0.47		
Wetland 21A/21B - Y	0.82		
Wetland 23A/23B - N	0.49		

Summarize overall biological, chemical and physical functions being performed: Wetlands 15, 20A/20B, 21A/21B, and 23A/23B provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are part of a larger network of wetlands and RPWs that form a contiguous connection to TNWs in the region. As part of a larger system, these wetlands provide some habitat, foraging, and refugia for wildlife.

## C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Wetland 25A/25B is a non-RPW that flows through mixed forested wetlands, indirectly into a perennial artificial path (Wetland 21A/21B), which flows into the Hillsborough River. Because the perennial RPW flows directly into the Hillsborough River, it is anticipated that it has a significant nexus with the Hillsborough River, in that it has the capacity to carry and also reduce pollutants reaching it, it provides habitat and lifecycle support for fish and other species, it has the capacity to transfer nutrients, and it contributes to the physical, chemical, and biological integrity of the Hillsborough River.

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Wetlands 15, 20A/20B, and 23A/23B are adjacent to a perennial RPW (Wetland 21A/21B) labeled as an artificial path according to USGS NHD data. The perennial RPW flows west directly into the Hillsborough River. Because the perennial RPW flows directly into the Hillsborough River, it is anticipated that it has a significant nexus with the Hillsborough River, in that it has the capacity to carry and also reduce pollutants reaching it, it provides habitat and lifecycle support for fish and other species, it has the capacity to transfer nutrients, and it contributes to the physical, chemical, and biological integrity of the Hillsborough River.

	TERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL AT APPLY):
1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:  TNWs: linear feet width (ft), Or, acres.  Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs. (Wetland 21A/21B)  Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Wetland 21A/21B is a perennial RPW that is labeled as an artificial path according to USGS NHD data. This artificial path is depicted in the Florida Atlas & Gazetteer as a perennial stream that flows west directly into the Hillsborough River. At the time of the site visit, water depth was about 3 feet.  Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: 100 linear feet 6 width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters:
3.	Non-RPWs <sup>8</sup> that flow directly or indirectly into TNWs. (Wetland 25A/25B)  Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply):  Tributary waters: 100 linear feet 4 width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. (Wetland 21A/21B)  Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetland 21A/21B is a perennial RPW with a freshwater marsh fringe that directly abuts the RPW.
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.82 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. (Wetlands 15, 20A/20B, 23A/23B)  Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this

8See Footnote # 3.

conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: 2.27 acres.

D.

	6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C. Provide estimates for jurisdictional wetlands in the review area: acres.
	7. Impoundments of jurisdictional waters.   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.  Demonstrate that impoundment was created from "waters of the U.S.," or  Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  Demonstrate that water is isolated with a nexus to commerce (see E below).
E.	ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain:  Other factors. Explain:
	Identify water body and summarize rationale supporting determination:
	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters:  Wetlands: acres.
F.	NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):  If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.  Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.  Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).  Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:  Other: (explain, if not covered above):  .
	Provide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource: .  Wetlands: acres.
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):  Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).  Lakes/ponds: acres.  Other non-wetland waters: acres. List type of aquatic resource:  Wetlands: 4.21 acres. (Wetlands 16 through 19, 22A/22B, 24, and 26 through 30A/30B)

 $<sup>^{9}\,\</sup>text{To}$  complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>&</sup>lt;sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

# **SECTION IV: DATA SOURCES.**

٠	SUPI	*ORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked
	and	requested, appropriately reference sources below):
	$\boxtimes$	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
	$\boxtimes$	Data sheets prepared/submitted by or on behalf of the applicant/consultant.
	43377770	Office concurs with data sheets/delineation report.
		Office does not concur with data sheets/delineation report.
		Data sheets prepared by the Corps:
	П	Corps navigable waters' study:
	$\boxtimes$	U.S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org.
	20000000	☑ USGS NHD data.
		SUSGS 8 and 12 digit HUC maps.
		U.S. Geological Survey map(s). Cite scale & quad name:.
		USDA Natural Resources Conservation Service Soil Survey. Citation:
		National wetlands inventory map(s). Cite name: USFWS, HRC 2008; www.fgdl.org.
		State/Local wetland inventory map(s):
		FEMA/FIRM maps: .
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	$\boxtimes$	Photographs: Aerial (Name & Date): AerialExpress 2008.
		or 🗌 Other (Name & Date):
		Previous determination(s). File no. and date of response letter:
		Applicable/supporting case law: .
		Applicable/supporting scientific literature:
	$\boxtimes$	Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land
	cove	er data, 2004.

## **B. ADDITIONAL COMMENTS TO SUPPORT JD:**

# APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTI	ON	1:	BA	CK	GR	OUND	INF	ORM	IA	TI	Oi	٧

Α.	REPORT COMPLETION DATE FOR	APPROVED JURISDICTIONAL	DETERMINATION (	(JD)
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B.	DISTRICT OFFICE, FILE NAME, AND NUMBER:				
C.	PROJECT LOCATION AND BACKGROUND INFORMATION:  State: Florida County/parish/borough: Polk City: Kathleen  Center coordinates of site (lat/long in degree decimal format): Lat. 28.178942° N, Long82.039663° W.  Universal Transverse Mercator:  Name of nearest waterbody: Hillsborough River and tributaries  Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: none  Name of watershed or Hydrologic Unit Code (HUC): Intermittent Stream/03100205  Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.  Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.				
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):  Office (Desk) Determination. Date: December 15, 2009.  Field Determination. Date(s): September 28-29, 2009.				
SECTION II: SUMMARY OF FINDINGS A. RHA SECTION 10 DETERMINATION OF JURISDICTION.					
	waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required]  Waters subject to the ebb and flow of the tide.  Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:				
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.				
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]				
	1. Waters of the U.S.  a. Indicate presence of waters of U.S. in review area (check all that apply):  TNWs, including territorial seas  Wetlands adjacent to TNWs  Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs  Non-RPWs that flow directly or indirectly into TNWs  Wetlands directly abutting RPWs that flow directly or indirectly into TNWs  Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs  Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs  Impoundments of jurisdictional waters  Isolated (interstate or intrastate) waters, including isolated wetlands  b. Identify (estimate) size of waters of the U.S. in the review area:  Non-wetland waters: linear feet: width (ft) and/or acres.				
	Non-wetland waters: linear feet: width (ft) and/or acres.  Wetlands: acres.				
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):				

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 32-33 through 36 are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. Wetlands 32-33 and 35 are freshwater marsh and mixed forested

Non-regulated waters/wetlands (check if applicable):<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>&</sup>lt;sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

3 Supporting documentation is presented in Section III.F.

wetlands that are hydrologically connected to each other but are not hydrologically connected to RPWs or TNWs. Wetland 36 is a freshwater marsh and cypress dome wetland with a first order intermittent stream at the southwest portion of the wetland. The intermittent stream flows to the west, connecting with other first order intermittent streams and cypress domes, eventually terminating approximately four miles to the west without joining RPWs or TNWs.

## SECTION III: CWA ANALYSIS

## A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TN	W	

Identify TNW:

Summarize rationale supporting determination:

#### 2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

## B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under Rapanos have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

## 1. Characteristics of non-TNWs that flow directly or indirectly into TNW

# 

Project waters are Pick List river miles from TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters are Pick List river miles from RPW.  Project waters are Pick List aerial (straight) miles from TNW.  Project waters are Pick List aerial (straight) miles from RPW.  Project waters cross or serve as state boundaries. Explain:.
	Identify flow route to TNW <sup>5</sup> :.  Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply):  Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate):  Average width: feet  Average depth: feet  Average side slopes: Fick List.
	Primary tributary substrate composition (check all that apply):  Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain:. Tributary geometry: Pick List Tributary gradient (approximate average slope):
(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: Other information on duration and volume:.
	Surface flow is: Pick List. Characteristics: .
	Subsurface flow: Pick List. Explain findings:  Dye (or other) test performed:
	Tributary has (check all that apply):  Bed and banks  OHWM <sup>6</sup> (check all indicators that apply):  clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list):  Discontinuous OHWM. <sup>7</sup> Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):  High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics  Mean High Water Mark indicated by: Survey to available datum; Physical markings; U vegetation lines/changes in vegetation types.

<sup>&</sup>lt;sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 32-33 - 36 tidal gauges other (list): (iii) Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
Other environmentally-sensitive spe Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain:. Wetland quality. Explain:. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain: Surface flow is: Pick List Characteristics: Both confined (within ditch banks) and sheetflow (non-ditched areas). Subsurface flow: Pick List. Explain findings: Dye (or other) test performed: Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are **Pick List** aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain. (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known: (iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:. Habitat for: ☐ Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

#### C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:.
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

# D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:  TNWs: linear feet width (ft), Or, acres.  Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs.  Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:  Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

	Provide estimates for jurisdictional waters in the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
3.	Non-RPWs <sup>8</sup> that flow directly or indirectly into TNWs.  Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply):  Tributary waters: linear feet width (ft).  Other non-wetland waters: acres.  Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:  Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.  Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.  Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.  Demonstrate that impoundment was created from "waters of the U.S.," or  Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  Demonstrate that water is isolated with a nexus to commerce (see E below).
DEC SUC	LATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce.

E.

 <sup>8</sup>See Footnote # 3.
 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 32-33 - 36 Interstate isolated waters. Explain: Other factors. Explain: Identify water body and summarize rationale supporting determination: Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: 3.39 acres. (Wetlands 32-33 through 36) SECTION IV: DATA SOURCES. A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org. USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: USFWS, HRC 2008; www.fgdl.org. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): AerialExpress 2008. or Other (Name & Date): Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land cover data, 2004.

B. ADDITIONAL COMMENTS TO SUPPORT JD: