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

- 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. 28.163425° N, Long82.039909° M.
	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): Channelized 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

- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
 - Office (Desk) Determination. Date: December 15, 2009.
 - Field Determination. Date(s): September 29-30, 2009.

SECTION II: SUMMARY OF FINDINGS

different JD form.

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Ar	end navigable waters of the U.S. within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the
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:

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 ² (RPWs) that flow directly or indirectly into TNWs (Wetlands 37, 42)	
		Non-RPWs that flow directly or indirectly into TNWs	
	\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands 38, 40, 42)	
	\boxtimes	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (Wetland 41)	
		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: 220 (total) linear feet: 21 (total) width (ft) and/or acres. Wetlands: 6.28 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):3

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 39 and 43 are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

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 waterbody⁴ 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 37, 42)

(i) General Area Conditions:

Watershed size: 2,920 acres
Drainage area: 2,920 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 10-15 river miles from TNW.

Project waters are 2-5 river miles from RPW.

Project waters are 5-10 aerial (straight) miles from TNW.

Project waters are 2-5 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

⁴ 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 TNW5: Wetlands 37 and 42 consist of first order intermittent RPWs that flow southwest and join together, and flow south into Blackwater Creek. Blackwater Creek flows west, joining the Hillsborough River, a TNW. Tributary stream order, if known: First. (b) General Tributary Characteristics (check all that apply): □ Natural Tributary is: Artificial (man-made), Explain: Manipulated (man-altered). Explain: Based on review of aerial photography, most of the stream bed appears to be channelized. Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 2 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 % 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 ☑ OHWM⁶ (check all indicators that apply): □ clear, natural line impressed on the bank
 □ the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation ☐ shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events water staining 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: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. ☐ tidal gauges other (list):

⁵ 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. ⁶A 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. ⁷Ibid.

	(iii)	Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Unknown. tify specific pollutants, if known:
	(iv)	\square	ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Cypress domes; freshwater marsh 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:
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Wetlands 38, 40, 41, 42)
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: 6.08 acres Wetland type. Explain: Freshwater marshes, cattle pond. Wetland quality. Explain: Fair; impacted by cattle grazing and trampling. Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Wetlands 38, 40, and 42 directly abut first order intermittent RPWs that join together to the west and flow west-southwest to Blackwater Creek. Blackwater Creek flows west, joining the Hillsborough River, a TNW.
			Surface flow is: Overland sheetflow Characteristics: Overland sheetflow to intermittent RPWs.
			Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting (Wetlands 38, 40, and 42 directly abut intermittent streams.) ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: Wetland 41 is connected to a mixed forested wetland by a
ditch	n, an	d the	mixed forested wetland is connected to the intermittent RPW through a ditch. Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are 10-15 river miles from TNW. Project waters are 5-10 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	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water was moderately clear. tify specific pollutants, if known:
	(iii)	\square	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%. 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: 4
Approximately (6.08) 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 38 - Y	0.58		
Wetland 40 - Y	1.42		
Wetland 41 - N	1.04		
Wetland 42 - Y	3.04		

Summarize overall biological, chemical and physical functions being performed: Wetlands 38, 40, 41, and 42 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 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: Wetland 41 provides hydrologic detention and attenuation while also filtering pollutants. This wetland is 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 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 Hillsborough 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 37 - 43
	TNWs: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres.
2.	 RPWs that flow directly or indirectly into TNWs. (Wetlands 37, 42) 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, Wetlands 37 and 42 contain intermittent streams.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 220 (total) linear feet 21 (total) width (ft). Other non-wetland waters: Identify type(s) of waters:
3.	Non-RPWs ⁸ 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 38, 40, 42) 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: Wetlands 38 and 40 directly abut streams located outside of the review area that are classified as intermittent. Freshwater marsh wetlands within Wetland 42 directly abut the intermittent RPW delineated as Wetland 42 within the review area.
	Provide acreage estimates for jurisdictional wetlands in the review area: 5.14 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. (Wetland 41) 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: 1.04 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).

 ⁸See 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:
	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: 1.58 acres. (Wetlands 39, 43)
	CTION 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.

¹⁰ 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*.

	U.S. Geological Survey map(s). Cite scale & quad name:.
	USDA Natural Resources Conservation Service Soil Survey. Citation:
\boxtimes	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)
図	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:
図	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:	BA	CKGRO	UND	INF	ORMA	ATION

A.	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. 28.144043° N, Long82.041935° 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): Channelized 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
D.	different JD form. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: December 15, 2009. ☐ Field Determination. Date(s): September 30 – October 1, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	we ware an "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	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 waters ² (RPWs) that flow directly or indirectly into TNWs (Wetland 45, 49/49A, 54) Non-RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Impoundments of jurisdictional waters

Non-wetland waters: 440 (total) linear feet: 18 (total) width (ft) and/or

Wetlands: 1.78 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Detentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 44, 46, 47/47A, 50/50A, 53, 55 and 56 are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland 45, 54)

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (Wetland 51)

acres.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

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 waterbody⁴ 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 45, 49/49A, 54)

(i) General Area Conditions:

Watershed size: 2,572 acres
Drainage area: 2,572 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 10-15 river miles from TNW. Project waters are 2-5 river miles from RPW.

Project waters are 10-15 aerial (straight) miles from TNW.

Project waters are 2-5 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

⁴ 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 TNW5: Wetlands 45, 49/49A, and 54 consist of first order intermittent RPWs that flow southwest and joins Blackwater Creek, a RPW. Blackwater Creek flows west, joining the Hillsborough River, a TNW. Tributary stream order, if known: First. (b) General Tributary Characteristics (check all that apply): □ Natural Tributary is: Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on review of aerial photography, some of the stream beds appears to be channelized. Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 2 feet Average side slopes: Vertical (1:1 or less). Primary tributary substrate composition (check all that apply): ☐ Silts Sands ☐ Concrete Cobbles
Bedrock ☐ Gravel ☐ Muck ✓ 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% 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 OHWM⁶ (check all indicators that apply): 🛛 clear, natural line impressed on the bank 🖾 the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation ☐ shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour multiple observed or predicted flow events water staining abrupt change in plant community other (list): ☐ Discontinuous OHWM.⁷ 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: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. ☐ tidal gauges other (list):

⁵ 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. ⁶A 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. ⁷Ibid.

	(iii)	 Chemical Characteristics: Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general water (e.g., water color is clear, discolored, oily film; wate	racteristics, etc.).
	(iv)	Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Cypress domes; freshwater marsh in transmission line right of w Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:	ay.
2.	Cha	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Wetlands 45,	51, 54)
	(i)	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 1.59 acres Wetland type. Explain: Freshwater marsh and mixed forested wetlands. Wetland quality. Explain: Fair; most areas impacted by cattle grazing and trampling. 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 Wetlands 45 and 54 direct ttent RPW and Wetland 51 is hydrologically connected through adjacent wetlands and a ditch to an intermittent RPWs flow southwest into Blackwater Creek, which flows west to the Hillsborough River, a Technique	ermittent RPW.
		Surface flow is: Overland sheefflow Characteristics:	
		Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:	
		(c) Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting (Wetlands 45 and 54) ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: Wetland 51 is connected to the intermittee	nt DPW through
a dit	tch.	The intermittent RPW flows southwest into Blackwater Creek, which flows west to the Hillsborough I Ecological connection. Explain: Separated by berm/barrier. Explain:	
		(d) Proximity (Relationship) to TNW Project wetlands are 10-15 river miles from TNW. Project waters are 10-15 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 was characteristics; etc.). Explain: Water was moderately clear. Identify specific pollutants, if known:	atershed
	(iii)	i) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): forested wetland, 150 feet. Vegetation type/percent cover. Explain: emergent and forested wetland/95%. 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 (1.59) 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 45 - Y	1.02		
Wetland 51 - N	0.10		
Wetland 54 – Y	0.47		

Summarize overall biological, chemical and physical functions being performed: Wetlands 45, 51, and 54 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 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: Wetland 51 provides hydrologic detention and attenuation while also filtering pollutants. This wetland is 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 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 Hillsborough River.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size	estimates in rev	iew area:
	TNWe	linear feet	width (ft) Or	acres		

Project: Assessm	Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines ent Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 44 - 56
	Wetlands adjacent to TNWs: acres.
2.	RPWs that flow directly or indirectly into TNWs. (Wetlands 45, 49/49A, 54) 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 RPWs at Wetlands 45, 49/49A, and 54 are intermittent.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 440 (total) linear feet 18 (total) width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ 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 45, 54) 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: Freshwater marsh wetlands within Wetlands 45 and 54 directly abut intermittent RPWs delineated as Wetlands 45 and 54 within the review area.
	Provide acreage estimates for jurisdictional wetlands in the review area: 1.49 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. (Wetland 51) 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: 0.10 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).

 $^{^8 \}rm See$ Footnote # 3. $^9 \rm \, To$ 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:
	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: 0.67 acres. (Wetlands 44, 46, 47/47A, 50/50A, 53, 55 and 56)
SEC	CTION 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:.

¹⁰ 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:
C	\boxtimes	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)
C	X	Photographs: Aerial (Name & Date): AerialExpress 2008.
		or ☐ Other (Name & Date): .
		Previous determination(s). File no. and date of response letter:
	20.35	Applicable/supporting case law: .
		Applicable/supporting scientific literature: .
	Ø	Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land
С	ove	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: BA	CKGROUND INFORMATION	i

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

DISTRICT OFFICE FILE NAME AND NUMBER

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. 28.12763° N, Long82.039918° 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): Intermittent Ditch/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 16, 2009. Field Determination. Date(s): October 1-2 & 5-7, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	ere Areino "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the

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.

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	TIC
Ι.	waters	or the	U.S.

review area. [Required]

1.	vv	aters of	the U.S.
	a.	Indica	ite presence of waters of U.S. in review area (check all that apply): 1
			TNWs, including territorial seas
			Wetlands adjacent to TNWs
		\boxtimes	Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs (Wetlands 62, 65)
			Non-RPWs that flow directly or indirectly into TNWs
		\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands 61, 65)
			Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands 57, 58, 60,
			68)
			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.		fy (estimate) size of waters of the U.S. in the review area:
		Non-v	vetland waters: 200 (total) linear feet: 12 (total) width (ft) and/or 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):³

Wetlands: 2.37 acres.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below. ² 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.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 59, 63, 64, 66, and 67 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 waterbody⁴ 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 62, 65)

(i)	General	l Area	Cond	itions

Watershed size: 2,318 acres
Drainage area: 2,318 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 2 tributaries before entering TNW.

Project waters are 10-15 river miles from TNW. Project waters are 2-5 river miles from RPW.

Project waters are 10-15 aerial (straight) miles from TNW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters are 2-5 aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: N/A.
	Identify flow route to TNW ⁵ : Wetlands 62 and 65 consist of first order intermittent non-RPWs that join together and flow west through a channelized ditch into Blackwater Creek. Blackwater Creek flows west, joining the Hillsborough River, a TNW. Tributary stream order, if known: First.
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: .
bed appears to	Manipulated (man-altered). Explain: Based on review of aerial photography, most of the stream be channelized.
oca appears to	
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 2 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation shelving the presence of wrack line sediment sorting sediment sorting sediment sorting sediment deposition multiple observed or predicted flow events water staining other (list): Discontinuous OHWM. ⁷ 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;

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 57 - 68 physical markings/characteristics vegetation lines/changes in vegetation types. 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: Unknown. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Freshwater marsh in transmission line right of way; few patches of mixed forested wetlands and upland hardwood-conifer forests, but mostly residential. ☐ Habitat for: Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: 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 (Wetlands 57, 58, 60, 61, 65, 68) (i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 2.33 acres Wetland type. Explain: Freshwater marsh and mixed forested wetland. Wetland quality. Explain: Fair; surrounded by residential area. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Surface flow is: Overland sheetflow Characteristics: Overland sheetflow to non-RPW. Subsurface flow: Unknown. Explain findings: Dye (or other) test performed: Wetland Adjacency Determination with Non-TNW: ☑ Directly abutting (Wetlands 61 and 65 directly abut an intermittent RPW.) Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Wetlands 57, 58, 60, and 68 are adjacent to mixed forested wetlands, which are adjacent to intermittent RPWs outside of the review area. Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 10-15 river miles from TNW. Project waters are 10-15 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): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%. Habitat for: ☐ Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:

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3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 6 Approximately (2.33) 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 57 - N	0.17		
Wetland 58 – N	0.76		
Wetland 60 - N	0.44		
Wetland 61 – Y	0.20		
Wetland 65 – Y	0.33		
Wetland 68 - N	0.43		

Summarize overall biological, chemical and physical functions being performed: Wetlands 57, 58, 60, 61, 65, and 68 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: Due to the distance from the Hillsborough River and because the non-RPWs are intermittent, it is not expected that the non-RPWs (Wetlands 62 and 65) and adjacent wetlands (including Wetland 61) have a significant effect on the chemical, physical, or 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 57, 58, 60, and 68 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, and in

combination with adjacent wetlands, could have a significant effect on 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. (Wetlands 62, 65) 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 RPWs at Wetlands 62 and 65 are intermittent.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 200 (total) linear feet 12 (total) width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ 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 61, 65) 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: According to aerial photography, Wetland 61 directly abuts an intermittent RPW located outside of the review area. Freshwater marsh wetlands within Wetland 65 directly abut the intermittent RPW delineated as Wetland 65 within the review area.
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.53 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. (Wetlands 57, 58, 60, 68) 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: 1.80 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

D.

⁸See Footnote # 3.

	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. If 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: 0.8 acres. (Wetlands 59, 63, 64, 66, and 67)
SE	CTION 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.

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.

	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:
\boxtimes	U.S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org.
	☐ 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:
\boxtimes	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: Acrial (Name & Date): AcrialExpress 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.	BACKGROUND	INFORMATION
OPALIDIN II	DAURURUU III	HACADOM A LIANA

- 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. 28.112127° N, Long82.039574° M.
	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): Kathleen 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 17, 2009.
 - Field Determination. Date(s): October 7, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There A	e no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the
review as	rea. [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.

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):

 TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs (Wetlands 69, 72)
 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: 215 (total) linear feet: 16 (total) width (ft) and/or 0.05 acres. Wetlands: 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):3

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 70, 71, and 73 are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

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.

TNW 1.

Identify TNW:

Summarize rationale supporting determination:

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 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 69, 72)

General Area Conditions:

Watershed size: 3,972 acres Drainage area: 3,972 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 2 tributaries before entering TNW.

Project waters are 10-15 river miles from TNW. Project waters are 2-5 river miles from RPW.

Project waters are 10-15 aerial (straight) miles from TNW. Project waters are 2-5 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

flows west and joins Blackwater Creek. Wetland 72 is a first order intermittent RPW that flows west and also joins Blackwater Creek. Blackwater Creek flows west, joining the Hillsborough River, a TNW. Tributary stream order, if known: First. (b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural Artificial (man-made). Explain: Wetland 69 is a roadside ditch that runs along Deeson Road. Manipulated (man-altered). Explain: Based on review of aerial photography, most of the stream bed of the intermittent RPW of Wetland 72 appears to be channelized. Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 2 feet Average side slopes: Vertical (1:1 or less). Primary tributary substrate composition (check all that apply): ☐ Silts Sands Gravel ☐ Concrete Cobbles ☐ 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% 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 OHWM⁶ (check all indicators that apply): □ clear, natural line impressed on the bank
 □ the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation ☐ shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): ☐ Discontinuous OHWM.⁷ 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: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. ☐ tidal gauges

Identify flow route to TNW5: Wetland 69 is a ditch that flows east to an intermittent RPW. The intermittent RPW

other (list):

⁵ 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.

⁶A 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.

⁷Ibid.

	(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:
wet		Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Freshwater marsh in transmission line right of way; few patches of mixed forested and upland hardwood-conifer forests, but mostly residential. Habitat for: Federally Listed species. Explain findings:
		 ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
2.	Cha	aracteristics 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:. Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c) 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.	Cha	aracteristics 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:

- 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:
- 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:
- 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):

	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. (Wetlands 69, 72) 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 at Wetland 72 is intermittent. Based on aerial photography and field observations, Wetland 69 (ditch) is also intermittent.

	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 215 (total) linear feet 16 (total) width (ft), 0.05 acres. Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ 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).
SUC SUC SUC	DLATED [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. Interstate isolated waters. Explain:

E.

 ⁸See Footnote # 3.
 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 10 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.

Ass	Sessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 69 - 73 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 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: 2.1 acres. (Wetlands 70, 71, and 73)
<u>SE</u>	CTION 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: Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land cover data, 2004.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>

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:	BACKGROUND	INFORMATION
SECTION I.	DACKUKUUND	

A. REPORT COMPL	ETION DATE FOR	APPROVED	JURISDICTIONAL	. DETERMINATION (JI	. 1) 1
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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. 28.098607° N, Long82.039499° 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): Channelized 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 17, 2009. ☐ Field Determination. Date(s): October 8, 2009.
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ware are are are are are are are are are
В. (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 waters ² (RPWs) that flow directly or indirectly into TNWs (Wetlands 74A, 74B, 75) Non-RPWs that flow directly or indirectly into TNWs (Wetland 78) Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland 76) 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: 285 (total) linear feet: 16 (total) width (ft) and/or acres. Wetlands: 0.25 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 74C and 77 are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

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.

TNW

Identify TNW:

Summarize rationale supporting determination:

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 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.

- Characteristics of non-TNWs that flow directly or indirectly into TNW (Wetlands 74A, 74B, 75, 78)
 - (i) General Area Conditions:

Watershed size: 3,296 acres Drainage area: 3,296 acres

Average annual rainfall: 52 inches Average annual snowfall: 0 inches

- (ii) Physical Characteristics:
 - Relationship with TNW: (a)

☐ Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 10-15 river miles from TNW. Project waters are 1-2 river miles from RPW.

Project waters are 10-15 aerial (straight) miles from TNW. Project waters are 1-2 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

and joins Blackwater Creek. Wetland 75 is an intermittent ditch, and Wetland 78 is non-RPW (ditch) that flows north, connecting to Wetland 75. Wetland 75 joins the intermittent RPW of Wetlands 74A and 74B. The intermittent RPW flows west-northwest and joins Blackwater Creek. Blackwater Creek flows west and joins the Hillsborough 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 review of aerial photography, most of the stream beds appear to be channelized. Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 2 feet Average side slopes: Vertical (1:1 or less). Primary tributary substrate composition (check all that apply): Sands Silts Cobbles] Concrete ☐ 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% 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 ☑ OHWM⁶ (check all indicators that apply): □ clear, natural line impressed on the bank
 □ the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting ☐ leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events □ water staining 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: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types.

Identify flow route to TNW5: Wetlands 74A and 74B is a first order intermittent RPW that flows west-northwest

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 74A - 78 ☐ 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: Unknown. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Freshwater marsh in transmission line right of way; few patches of mixed forested wetlands and upland hardwood-conifer forests, but mostly residential. ☐ Habitat for: ☐ Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: 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 (Wetland 76) (i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 0.12 acres Wetland type. Explain: Freshwater marsh. Wetland quality. Explain: Fair; surrounded by residential area. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Surface flow is: Overland sheetflow Characteristics: Overland sheetflow to RPW. Subsurface flow: Unknown. 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 10-15 river miles from TNW. Project waters are 10-15 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): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent/95%. ☐ Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u> Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands 74A - 78</u>

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 1 Approximately (0.12) 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 76 - N 0.12

Summarize overall biological, chemical and physical functions being performed: Wetland 76 provides hydrologic detention and attenuation while also filtering pollutants. This wetland is 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, this wetland provides 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: Wetland 78 provides hydrologic detention and attenuation while also filtering pollutants. This wetland is 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, this wetland provides 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 Hillsborough River.
- 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 A	djacent Wetlands.	Check all that apply	and provide size estimates in review area
	TNWe	linear feet	width (ft) Or	acree

	Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines ent Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 74A - 78
	Wetlands adjacent to TNWs: acres.
2.	 RPWs that flow directly or indirectly into TNWs. (Wetlands 74A, 74B, 75) 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 RPWs at Wetlands 74A and 74B are intermittent. Based on field observations, the RPW at Wetland 75 is intermittent.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 180 (total) linear feet 12 (total) width (ft), 0.08 acres. Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. (Wetland 78) 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: 105 linear feet 4 width (ft), 0.05 acres. Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. (Wetland 76) 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: According to aerial photography, Wetland 76 directly abuts an intermittent RPW (Wetland 75).
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.12 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).

 ⁸See Footnote # 3.
 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands 74A - 78</u>

¹⁰ 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.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands 74A - 78</u>

\boxtimes	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
COV	ver data 2004

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 79 – 90, 99, 119 - 129

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.

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- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- DISTRICT OFFICE, FILE NAME, AND NUMBER:

ъ.	DISTRICT OFFICE, FILE NAME, AND NUMBER.
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Florida County/parish/borough: Polk, Hillsborough City: Kathleen area Center coordinates of site (lat/long in degree decimal format): Lat. 28.08257° N, Long82.052787° W (Wetlands 79-90, 99). Lat. 28.081626°N, Long82.140627°W (Wetlands 119-129). 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): Blackwater Creek/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 18, 2009. Field Determination. Date(s): October 12-13, 20-21, 2009.
	CTION II: SUMMARY OF FINDINGS 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	re 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 waters ² (RPWs) that flow directly or indirectly into TNWs (Wetlands 79, 80, 119, 126, 127, 128) Non-RPWs that flow directly or indirectly into TNWs (Wetlands 124, 125) Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands 119, 120, 126, 127, 128, 129) 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
	h Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-wetland waters: 892 (total) linear feet: 76 (total) width (ft) and/or

2. Non-regulated waters/wetlands (check if applicable):³

acres.

Wetlands: 6.53 acres.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands 79 – 90, 99, 119 - 129</u>

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 81 through 90, 99, and 121 through 123 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 waterbody⁴ 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 (Intermittent RPWs at Wetlands 80, 119, 126, 127, and 128; intermittent non-RPWs at Wetlands 124 and 125)
 - (i) General Area Conditions:

Watershed size: 19,729 acres
Drainage area: 19,729 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 2 tributaries before entering TNW.

Project waters are 5-10 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

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Project waters are 5-10 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: Identify flow route to TNW5: Wetland 80 is an intermittent RPW that flows north and joins Blackwater Creek. Wetlands 119 and 126 consist of intermittent RPWs that flow north and join together into another intermittent RPW that flows north and joins Blackwater Creek. Wetlands 124 and 125 are intermittent non-RPWs that flow north and join the intermittent RPW of Wetland 126. Wetlands 127 and 128 are part of the same intermittent RPW, which flows north into two intermittent RPWs, and joins Blackwater Creek. Blackwater Creek flows west and joins the Hillsborough River, a TNW. Tributary stream order, if known: First. General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on review of aerial photography, portions of the intermittent RPWs and intermittent non-RPWs have been channelized. Tributary properties with respect to top of bank (estimate): Average width: 8 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: 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 OHWM⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the observed. \boxtimes the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line shelving vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): ☐ Discontinuous OHWM. Explain:

⁵ 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.

⁶A 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.

⁷Ibid.

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			If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
	(iii)	Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Unknown. ntify specific pollutants, if known:
	(iv)	Bio	Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Freshwater marsh 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:
2.		ract , 129	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Wetlands 119, 120, 126, 127,
	(i)		General Wetland Characteristics: Properties: Wetland size: 6.32 acres Wetland type. Explain: Freshwater marsh. Wetland quality. Explain: Fair; wetland surrounded by pasture or residential. Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain:
			Surface flow is: Overland sheetflow Characteristics: Overland sheetflow to RPW.
			Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
		(c)	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 5-10 river miles from TNW. Project waters are 5-10 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: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water was mostly clear. titify specific pollutants, if known:
	(iii	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent/95% Habitat for:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

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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: 6
Approximately (6.32) 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 119 - Y	0.21		
Wetland 120 – Y	0.14		
Wetland 126 – Y	2.47		
Wetland 127 – Y	0.46		
Wetland 128 – Y	0.16		
Wetland 129 - Y	2.88		

Summarize overall biological, chemical and physical functions being performed: Wetlands 119, 120, and 126 through 129 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: Wetlands 124 and 125 are intermittent non-RPWs (ditches) that flow north and join the intermittent RPW of Wetland 126, which flows north into another intermittent RPW that flows north and joins Blackwater Creek. Wetlands 124 and 125 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, and in combination with adjacent wetlands, could have a significant effect on the physical, chemical, and biological integrity of the Hillsborough River.

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Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands 79 – 90, 99, 119 - 129</u>

- 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:

	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. (Wetlands 79, 80, 119, 126, 127, 128) ☑ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Wetland 79 is perennial, according to USGS NHD data. ☑ 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, Wetland 80, 119, 126, 127, and 128 are intermittent.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 692 (total) linear feet 64 (total) width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. (Wetlands 124, 125) 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: 200 (total) linear feet 12 (total) 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 119, 120, 126, 127, 128, 129) 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: Based on review of aerial photography, Wetlands 119, 120, 126, 127, 128, 129 directly abut intermittent RPWs. Wetland 120 directly abuts the intermittent RPW delineated as Wetland 119 in the review area, and Wetland 129 directly abuts the intermittent RPW delineated as Wetland 128 in the review area.
	Provide acreage estimates for jurisdictional wetlands in the review area: 6.32 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 adjacen and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

conclusion is provided at Section III.C.

⁸See Footnote # 3.

Ass	sessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 79 – 90, 99, 119 - 129
	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 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: 1.94 acres. (Wetlands 81 through 90, 99, 121 through 123)

SECTION IV: DATA SOURCES.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines
Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 79 – 90, 99, 119 - 129

A.	SUPI	PORTING 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.
		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: .
	\boxtimes	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)
	\boxtimes	Photographs: Aerial (Name & Date): AerialExpress 2008.
	1011444	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: .

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 91 - 94, 100 - 104

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
SECTION I:	BACKGROUND	INFURWIATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- DISTRICT OFFICE, FILE NAME, AND NUMBER:

C.	PROJECT LOCATION AND BACKGROUND INFORMATION:				
	State: Florida County/parish/borough: Hillsborough City: Kathleen area				
	Center coordinates of site (lat/long in degree decimal format): Lat. 28.082327° N, Long82.07067° M (Wetlands 91-94)				
	Lat. 28.082092°N, Long82.094479°W (Wetlands 100-104).				
	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): Itchepackasassa Creek/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):				
υ.	NEVIEW FERTORINED FOR SITE EVALUATION (CHECK ALL INALAFILI);				

D

- Field Determination. Date(s): October 13-14, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Ar	eno "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the
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:

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 waters² (RPWs) that flow directly or indirectly into TNWs (Wetland 93) Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands 91, 92, 94) 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: 100 linear feet: 15 width (ft) and/or

Wetlands: 1.86 acres.

- c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
- Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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 91 - 94, 100 - 104

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 100 through 104 are not jurisdictional because they are stormwater retention ponds that 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 waterbody⁴ 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 (Intermittent RPW at Wetlands 91, 92)

(i) General Area Conditions:

Watershed size: 10,034 acres
Drainage area: 10,034 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 tributaries before entering TNW.

Project waters are 10-15 river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 5-10 aerial (straight) miles from TNW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
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Project waters are 1 (or less) aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: Identify flow route to TNW5: The intermittent RPW at Wetlands 91 and 92 flows north to a canal, which flows southwest into the Itchepackasassa Creek. The Itchepackasassa Creek flows north into Blackwater Creek, and the Blackwater Creek flows west to the Hillsborough River, a TNW. 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: 3 feet Average depth: 3 feet Average side slopes: 2:1. Primary tributary substrate composition (check all that apply): Silts \boxtimes Sands Concrete Cobbles ☐ Grave! 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: Meandering Tributary gradient (approximate average slope): 2% 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 ☑ OHWM⁶ (check all indicators that apply): clear, natural line impressed on the bank the presence of litter and debris destruction of terrestrial vegetation changes in the character of soil ☐ shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting ☐ leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): ☐ Discontinuous OHWM.⁷ 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: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types.

⁵ 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.

⁶A 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.

⁷Ibid.

	reas: <u>Polk-Hillsborough-Pinellas Transmission Line</u> <u>Polk-Hillsborough-Pinellas Transmission Line</u> <u>Wetlands 91 - 94, 100 - 104</u>
	☐ 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: Water was mostly clear. Identify specific pollutants, if known:
(iv)	Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Freshwater marsh 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:
2. Cha	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Wetlands 91, 92)
(i)	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 1.72 acres Wetland type. Explain: Freshwater marsh. Wetland quality. Explain: Fair; surrounded by pasture. Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Surface flow is: Overland sheetflow
	Characteristics: Overland sheetflow to RPW. Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:
	(c) Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are 10-15 river miles from TNW. Project waters are 5-10 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 mostly clear. 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: emergent/95% 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)

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All wetland(s) being considered in the cumulative analysis: 2
Approximately (1.72) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u> <u>Size (in acres)</u> <u>Directly abuts? (Y/N)</u> <u>Size (in acres)</u>

Wetland 91 - Y 0.46 Wetland 92 - Y 1.26

Summarize overall biological, chemical and physical functions being performed: Wetlands 91 and 92 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 provides 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:
- D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and Ad	jacent 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 93 and intermittent RPW at Wetlands 91, 92))

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 91 - 94, 100 - 104 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Wetland 93 is a perennial RPW, Itchepackasassa Creek, which, according to USGS NHD data, 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: The RPW at Wetlands 91 and 92 is intermittent, according to USGS NHD data. This intermittent RPW is located outside of the review area. Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 100 linear feet 15 width (ft). Other non-wetland waters: Identify type(s) of waters: Non-RPWs8 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: Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. (Wetlands 91, 92, 94) 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 94 directly abuts Itchepackasassa Creek, based on aerial photography and field observations. 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: Wetlands 91 and 92 directly abut an intermittent RPW, based on aerial photography and field observations. Provide acreage estimates for jurisdictional wetlands in the review area: 1.8 acres. 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. 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.9 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).

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⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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Provide estimates for jurisdictional waters in the review area (check all that apply):	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:
Tributary waters: linear feet width (ft).	Identify water body and summarize rationale supporting determination:
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. 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: 0.93 acres. (Wetlands 100 - 104) 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. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U. S. G	Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
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: 0.93 acres. (Wetlands 100 - 104) 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/elineation 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:.	 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:
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: 0.93 acres. (Wetlands 100 - 104) 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:.	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:
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. 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:.	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:
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:.	SECTION IV: DATA SOURCES.
	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:.

¹⁰ 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.

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:

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:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 91 - 94, 100 - 104

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 95 - 98

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.	$\mathbf{R}\mathbf{\Lambda}$	CKGROUND	INFORMA	TION
OCALIUM II	1)/1	A.DATRADIAL		

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- DISTRICT OFFICE, FILE NAME, AND NUMBER:

C.	PROJECT LOCATION AND BACKGROUND INFORMATION:					
	State: Florida County/parish/borough: Hillsborough City: Kathleen area					
	Center coordinates of site (lat/long in degree decimal format): Lat. 28.08257° N, Long82.052787° 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): Midway Road 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 18, 2009.
 - Field Determination. Date(s): October 14, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Ar	e no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the
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.

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.

Explain:

Indi	Indicate presence of waters of U.S. in review area (check all that apply): 1					
	TNWs, including territorial seas					
	Wetlands adjacent to TNWs					
\boxtimes	Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs (Wetlands 95/95A, 97, 98)					
	Non-RPWs that flow directly or indirectly into TNWs					
\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland 95/95A)					
	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					
т.	die (die d.)					

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 300 (total) linear feet: 32 (total) width (ft) and/or acres. Wetlands: 0.92 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetland 96 is not jurisdictional because it is hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands 95 - 98</u>

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 waterbody⁴ 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 (Intermittent ditches at Wetlands 95/95A, 97)

(i) General Area Conditions:

Watershed size: 2,405 acres
Drainage area: 2,405 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 4 tributaries before entering TNW.

Project waters are 10-15 river miles from TNW.
Project waters are Project waters are 5-10 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:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

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west into the East Canal. The East Canal flows north and becomes the Itchepackasassa Creek, which flows north to the Blackwater Creek. The Blackwater Creek flows west and joins the Hillsborough River, a TNW. Tributary stream order, if known: First. (b) General Tributary Characteristics (check all that apply): ☐ Natural Tributary is: Artificial (man-made). Explain: Both are man-made ditches made to drain freshwater marsh wetlands. ☐ Manipulated (man-altered). Explain: Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 2 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% 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 OHWM⁶ (check all indicators that apply): □ clear, natural line impressed on the bank
 □ the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation ☐ shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events water staining 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: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. tidal gauges other (list):

Identify flow route to TNW5: The intermittent ditches at Wetlands 95/95A and 97 flow north to a ditch that flows

⁵ 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. ⁶A 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. ⁷Ibid.

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All wetland(s) being considered in the cumulative analysis: 1

	(iii)		emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).				
			Explain: Water was mostly clear.				
		Identify specific pollutants, if known:					
	(iv)	Bio!	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width):				
			Wetland fringe. Characteristics: Freshwater marsh in transmission line right of way.				
		Ш	Habitat for:				
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:				
			Other environmentally-sensitive species. Explain findings:				
			Aquatic/wildlife diversity. Explain findings:				
2.			eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Freshwater marsh wetlands intermittent ditch in Wetland 95/95A)				
	(i)		sical Characteristics:				
		(a)	General Wetland Characteristics:				
			Properties: Wetland size: 0.81 acres				
			Wetland type. Explain: Freshwater marsh.				
			Wetland quality. Explain: Fair; ditched.				
			Project wetlands cross or serve as state boundaries. Explain:				
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain:				
			Surface flow is: Overland sheetflow Characteristics: Overland sheetflow to intermittent ditch.				
			Subsurface flow: Unknown. Explain findings: Dye (or other) test performed:				
		(c)	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 10-15 river miles from TNW.				
			Project waters are 5-10 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters.				
			Estimate approximate location of wetland as within the 100 - 500-year floodplain.				
		۵.					
	(ii)		emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed				
		Ciia	characteristics; etc.). Explain: Water was mostly clear.				
		Ider	ntify specific pollutants, if known:				
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply):				
			Riparian buffer. Characteristics (type, average width):				
		\boxtimes	Vegetation type/percent cover. Explain: emergent/95%				
		Ш	Habitat for: Federally Listed species. Explain findings: .				
			Fish/spawn areas. Explain findings:				
			Other environmentally-sensitive species. Explain findings:				
			Aquatic/wildlife diversity. Explain findings:				
3.	Cha	ract	eristics of all wetlands adjacent to the tributary (if any)				

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Approximately (0.81) 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 95/95A - Y

0.81

Summarize overall biological, chemical and physical functions being performed: Wetland 95/95A provides hydrologic detention and attenuation while also filtering pollutants. This wetland is 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, this wetland provides 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:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1.	TNWs and	Adjacent Wetlands.	Check all that	apply and prov	ide size estim	ates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetland:	s adjacent to TNWs:	acres.	•		

2. RPWs that flow directly or indirectly into TNWs. (Wetlands 95/95A, 97, 98)

Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Wetland 98 is perennial, based on field observations, USGS NHD data, and the Florida Atlas & Gazetteer.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 95 - 98 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. Wetlands 95/95A and 97 are intermittent ditches, based on field observations. Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 300 (total) linear feet 32 (total) width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Non-RPWs8 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: Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. (Wetland 95/95A) 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: Freshwater marsh wetlands within Wetland 95/95A directly abut an intermittent ditch. Provide acreage estimates for jurisdictional wetlands in the review area: 0.81 acres. 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. 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.

Impoundments of jurisdictional waters.9

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.

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 95 - 98 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. 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: 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: 0.08 acres. (Wetland 96) 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:

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
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Applicable/supporting scientific literature:

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:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 106 - 118

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.

SECT	ION I:	BACKGROUN	D 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: Hillsborough City: Kathleen area Center coordinates of site (lat/long in degree decimal format): Lat. 28.081919° N, Long82.111798° N 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): East Canal/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 18, 2009. Field Determination. Date(s): October 19-20, 2009.
SE A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 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 lew 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 (Wetlands 110A, 112A/112B, 118) Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands 111, 112A/112B) 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: 360 (total) linear feet: 50 (total) width (ft) and/or acres. Wetlands: 0.9 acres.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands 106 through 109 and 113 through 117 are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands 106 - 118</u>

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 waterbody⁴ 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.

 Characteristics of non-TNWs that flow directly or indirectly into TNW (Intermittent RPW at Wetlands 110A, 112A/112B, 118)

(i) General Area Conditions:

Watershed size: 6,696 acres
Drainage area: 6,696 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 2 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 5-10 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:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

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Griffin Road. At Knights Griffin Road, it flows west and joins East Canal that flows north into Blackwater Creek. The Blackwater Creek flows west to the Hillsborough 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: All or portions of the intermittent RPWs have been channelized. **Tributary** properties with respect to top of bank (estimate): Average width: 10 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: 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% 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 ☑ OHWM⁶ (check all indicators that apply): □ clear, natural line impressed on the bank
 □ the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation ☐ shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events □ water staining abrupt change in plant community other (list): ☐ Discontinuous OHWM.⁷ 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: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; physical markings; fine shell or debris deposits (foreshore) physical markings/characteristics vegetation lines/changes in vegetation types.

Identify flow route to TNW⁵: Wetland 118 is the East Canal. Wetland 112A/112B is an intermittent RPW that flows northwest into East Canal. Wetland 110A is an intermittent ditch that flows south and west along Knights

⁵ 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. ⁶A 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. ⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 106 - 118 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: Water was mostly clear. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Freshwater marsh 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: Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (Wetlands 111, 112A/112B) (i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 0.81 acres Wetland type. Explain: Freshwater marsh. Wetland quality. Explain: Fair; surrounded by pasture. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: Surface flow is: Overland sheetflow Characteristics: Overland sheetflow to RPW. Subsurface flow: Unknown. 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 5-10 river miles from TNW. Project waters are 5-10 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 mostly clear. 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: emergent/95% 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)

Project: <u>Progress Energy Florida</u>, Inc. Levy Nuclear Plant – Transmission Lines Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands 106 - 118</u>

All wetland(s) being considered in the cumulative analysis: 2 Approximately (0.81) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u> <u>Size (in acres)</u> <u>Directly abuts? (Y/N)</u> <u>Size (in acres)</u>

Wetland 111 - Y 0.03 Wetland 112A/112B - Y 0.78

Summarize overall biological, chemical and physical functions being performed: Wetlands 111 and 112A/112B 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 provides 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:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	Adjacent Wetlands.	Check all that apply	and provide	size estimates	in review as	rea:
	TNWs:	linear feet	width (ft), Or,	acres.			
	Wetlands	adjacent to TNWs:	acres.				

2. RPWs that flow directly or indirectly into TNWs. (Wetlands 110A, 112A/112B, 118)

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 106 - 118 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: The RPWs at Wetlands 110A, 112A/112B, and 118 are intermittent, according to USGS NHD data. Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 360 (total) linear feet 50 (total) width (ft). Other non-wetland waters: acres Identify type(s) of waters: Non-RPWs⁸ 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: Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. (Wetlands 111, 112A/112B) 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: Wetlands 111 and 112A/112B are contiguous and directly abut an intermittent RPW, based on aerial photography and field observations. Provide acreage estimates for jurisdictional wetlands in the review area: 0.81 acres. 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. 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. Impoundments of jurisdictional waters.9 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

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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⁸See Footnote # 3.

¹⁰ 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 106 - 118 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 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: Other non-wetland waters: acres. List type of aquatic resource: Wetlands: 2.77 acres. (Wetlands 106 through 109 and 113 through 117) **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.

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or Other (Name & Date):

Previous determination(s). File no. and date of response letter:

Applicable/supporting case law:

Applicable/supporting scientific literature:

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:

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
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Α.	REPORT COMPLETION DATE FOR APPROVEI) JURISDICTIONAL	DETERMINATION (JD)

B.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Florida County/parish/borough: Polk City: Kathleen area Center coordinates of site (lat/long in degree decimal format): Lat. 28.079777° N, Long82.16011° 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): Two Hole Branch/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 18, 2009. Field Determination. Date(s): October 22, 2009.
SEG A.	CTION II: SUMMARY OF FINDINGS 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. 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: Wetland 130 is not jurisdictional because it is hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs.

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

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.

TNW

Identify TNW:

Summarize rationale supporting determination:

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 waterbody4 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.

Characteristics of non-TNWs that flow directly or indirectly into TNW

(1)	General	l Area	Conditions

Watershed size: acres Drainage area: acres

Average annual rainfall: inches Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through Pick List tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.

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:.

⁴ 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 ⁵ :. 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: Pick 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 ⁶ (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. 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:
(iii) Ch	nemical Characteristics:

⁵ 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. ⁶A 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. ⁷Ibid.

		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 species. Explain findings: Aquatic/wildlife diversity. Explain findings:
2.	Cha	aracteristics 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:
		(c) 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.	Cha	Aracteristics 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).

		Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines ent Area: Polk-Hillsborough-Pinellas Transmission Line Wetland 130
		Other non-wetland waters: acres. Identify type(s) of waters: .
	3.	Non-RPWs ⁸ 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).
Е.	DE SUC	DLATED [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. Interstate isolated waters. Explain: Other factors. Explain:
	Ide	ntify water body and summarize rationale supporting determination:

 ⁸See Footnote # 3.
 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 10 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.

	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: 0.01 acres. (Wetland 130)
	CTION IV: DATA SOURCES. 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:. 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: 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:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands 131, 132, DJ and DL through EH

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

b. Identify (estimate) size of waters of the U.S. in the review area:

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

Wetlands: Wetlands 131, 132, DM, DO, DY, DZ, EA, ED, EEa, EG, and EH totaling 5.17 acres of Waters of the U.S.

acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):

acres total)

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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).

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands DL, DN, DP, DQ, DS, DT, DU, DV, DX, EB, EC and EF are not jurisdictional because they are artificial stormwater ponds that are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. Wetlands DJ, DR and DW are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. These wetlands are isolated and are not expected to have any significant effects on the physical, chemical or biological integrity of the Hillsborough River TNW or its tributaries.

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 waterbody⁴ 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

(i) General Area Conditions:

Watershed size: 8,824.2 acres
Drainage area: 8,824.2 acres
Average annual rainfall: 52 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

³ Supporting documentation is presented in Section III.F.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	☐ Tributary flows through 2 and 4 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 5-10 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.
	Identify flow route to TNW^5 : Based on a desktop review one perennial RPW (Wetland DM) and three intermittent RPWs (Wetlands 131, DZ and EG) cross the project boundaries. These RPWs flow directly or indirectly to the Hillsborough River, a TNW. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Some portions appear natural and others appear ditched. Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream appear 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 (4:1 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: Pick List perennial and intermittent flows Estimate average number of flow events in review area/year: continuous and 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation shelving the presence of wack line sediment sorting sediment 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: May be less evident where ditched.

⁵ 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.

⁶A 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.

⁷Ibid.

			High Tide Line indicated by: oil or scum line along shore objects survey to available datum; physical markings/characteristics physical markings/characteristics wegetation lines/changes in vegetation types.			
	(iii)	Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Unknown. ntify specific pollutants, if known:			
	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Somewhat diverse due to variety of systems that the RPWs traverse, but surrounded by a lot of agricultural lands.			
2.	Cha	Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW				
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: 1.63 acres total (Wetlands EA, ED, and EEa) Wetland type. Explain: Emergent/forested Wetland quality. Explain: Fair to good based on their location within or connected to larger overall forested wetland stream system. Project wetlands cross or serve as state boundaries. Explain:			
		(b)	General Flow Relationship with Non-TNW: Flow is: Perrenial and intermittent flow. Explain: Based on a desktop review one perennial RPW (Wetland DM) and three intermittent RPWs (Wetlands 131, DZ and EG) cross the project boundaries. These RPWs flow directly or indirectly to the Hillsborough River, a TNW. Wetlands EA, ED and EEa are all adjacent to an intermittent RPW and connected to it via ditches, culverts and roadside swales. Wetlands 132, DO, DY and EH directly abut intermittent RPWs that flow directly or indirectly into the Hillsborough River 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 (Wetlands 132, DO, DY and EH: 3.22 acres total)			
			Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: Wetlands EA, ED, and EEa (1.63 acres total) are located adjacent to an intermittent RPW and connected to it via ditches, culverts and roadside swales ☐ Ecological connection. Explain:			
		(d)	Proximity (Relationship) to TNW Project wetlands are 5-10 river miles from TNW. Project waters are 5-10 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)	Che	emical 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):

Riparian buffer. Characteristics (type, average width):

Vegetation type/percent cover. Explain: emergent and forested wetland/95%.

Habitat for:

Federally Listed species. Explain findings:

Gher environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

Aquatic/wildlife diversity. Explain findings:

Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 11 - Wetlands 131, 132, DM, DO, DY, DZ, EA, ED, EEa, EG, and EH totaling 5.17 acres are being classified as adjacent to or abutting an RPW.

Approximately 11 wetlands totaling (5.17 acres) are being considered in the cumulative analysis (Wetlands 131, 132, DM, DO, DY, DZ, EA, ED, EEa, EG, and EH)

For each wetland, specify the following:

Directly abuts? (Y/N) Si	ize (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland 131 (Y- RPW itself)	0.04	Wetland EA (N)	0.03
Wetland 132 (Y)	0.45	Wetland ED (N)	0.17
Wetland DM (Y- RPW itself)	0.05	Wetland EEa (N)	1.43
Wetland DO (Y)	0.71	Wetland EG (Y- RPW itself	0.06
Wetland DY (Y)	0.11	Wetland EH (N)	1.95
Wetland DZ (Y- RPW itself)	0.17	. ,	

Summarize overall biological, chemical and physical functions being performed: Wetlands 131, 132, DM, DO, DY, DZ, EA, ED, EEa, EG, and EH provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-RPWs that form a contiguous to semi-contiguous connection to the Hillsborough River. As part of a larger system, these wetlands provide some habitat, foraging, and refugia for wildlife utilization.

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:
- 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 EA, ED, and EEa (1.63 acres total) are located adjacent to an intermittent RPW and connected to it via ditches, culverts and roadside swales. These wetlands are expected to have a significant effect on the physical, chemical and biological integrity of the Hillsborough River TNW, and therefore have a significant nexus with the Hillsborough River TNW.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL

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: Based on a desktop review one perennial RPW (Wetland DM) crosses the project boundaries. This RPW flows directly or indirectly to the Hillsborough River, a TNW per the USGS National Hydrography Dataset (last updated May 2006). 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: Three intermittent RPWs (Wetlands 131, DZ and EG) also cross the project boundaries. These RPWs flow directly or indirectly to the Hillsborough River, a TNW per the USGS National Hydrography Dataset (last updated May 2006).		
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: DM (0.05 acres), 131 (0.04acres), DZ (0.17acres), EG (0.06 acres): approx. 100, 100, 210, 100 linear feet by approx. 6, 15, 24, 10 width (ft). Other non-wetland waters: Identify type(s) of waters:		

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

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

linear feet

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):

Non-RPWs⁸ that flow directly or indirectly into TNWs.

Tributary waters:

Other non-wetland waters: Identify type(s) of waters:

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:

width (ft).

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: Based on a desktop review one perennial RPW (Wetland DM) and three intermittent RPWs (Wetlands 131, DZ and EG) cross the project boundaries. These RPWs flow directly or indirectly to the Hillsborough River, a TNW per the USGS National Hydrography Dataset (last updated May 2006). Wetlands

THAT APPLY):

⁸See Footnote # 3.

132, DO, DY and EH directly abut intermittent RPWs that flow directly or indirectly into the Hillsborough River TNW.

Provide acreage estimates for jurisdictional wetlands in the review area: Wetlands 132, DO, DY and EH: 3.22 acres total

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. Based on a desktop review one perennial RPW (Wetland DM) and three intermittent RPWs (Wetlands 131, DZ and EG) cross the project boundaries. These RPWs flow directly or indirectly to the Hillsborough River, a TNW per the USGS National Hydrography Dataset (last updated May 2006). Wetlands EA, ED and EEa are all located adjacent to an intermittent RPW and connected to it via ditches, culverts and roadside swales. Provide acreage estimates for jurisdictional wetlands in the review area: Wetlands EA, ED, and EEa: 1.63 acres total
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).
DE SU	DLATED [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. Interstate isolated waters. Explain: Other factors. Explain:
Ide	ntify water body and summarize rationale supporting determination:
	vide 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):

E.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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 131, 132, DJ and DL through EH 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). Stormwater retention ponds DL, DN, DP, DQ, DS, DT, DU, DV, DX, EB, EC and EF and Wetlands DJ, DR and DW are isolated from the nearest RPW and TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of the Hillsborough River TNW. Therefore they are being classified as isolated. 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: Stormwater retention ponds DL, DN, DP, DQ, DS, DT, DU, DV, DX, EB, EC and EF and Wetlands DJ, DR and DW: 2.43 acres total **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 \(\subseteq \text{ Other (Name & Date):} \) Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

B. ADDITIONAL COMMENTS TO SUPPORT JD:

cover data, 2004.

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.

	<u>FION I: BACKGROUND INFORMATION</u> REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
B. 1	DISTRICT OFFICE, FILE NAME, AND NUMBER:
:	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Florida County/parish/borough: Pinellas and Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.071411° N, Long82.621979° N. Universal Transverse Mercator: Name of nearest waterbody: Double Branch Creek and tributaries
]	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Double Branch Bay Name of watershed or Hydrologic Unit Code (HUC): Double Branch/03100206 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.
	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: January 20, 2010. Field Determination. Date(s): September 21-25, 2009.
	TION II: SUMMARY OF FINDINGS THA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the warea. [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:
В. С	WA SECTION 404 DETERMINATION OF JURISDICTION.
	e 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 are uired

1. Waters of the U.S.

	accid o	·			
a.	a. Indicate presence of waters of U.S. in review area (check all that apply): 1				
		TNWs, including territorial seas			
		Wetlands adjacent to TNWs			
	\boxtimes	Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs (Wetland S)			
		Non-RPWs that flow directly or indirectly into TNWs			
	\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands H, J, K and V)			
	\boxtimes	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (With a Significant			
		Nexus: Wetlands W and X, With no Significant Nexus: Wetlands A, B, C, D, E, F, N, U)			
		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

Wetlands: Wetlands H, J, K, S,V, W and X, totaling 3.33 acres of Waters of the U.S.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands G, I, L, M, P, R and T are not jurisdictional because they are artificial stormwater ponds that are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. Wetlands O, Q, Y, Z, AA, BB, CC, DD, EE, FF, GG, HH and II are hydrologically isolated from TNWs and RPWs that flow directly into TNWs. Also, Wetlands A, B, C, D, E, F, N and U are not expected to have a significant nexus with Double Branch Creek due to their distance and isolation from the Creek and its tributaries. Uplands, roads and development also separate them from the nearest RPW.

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 waterbody⁴ 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

(i)	Gen	eral A	rea (^nnd	itions.
11	i Gen	CI ai F	vita v	Junu	ILIUHS.

Watershed size: 17,230.3 acres
Drainage area: 17,230.3 acres
Average annual rainfall: 52 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 1 tributary before entering TNW.

⁴ 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 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.
	Identify flow route to TNW ⁵ : Based on a desktop review, Wetlands H, J and K are hydrologically connected through wetlands to an unnamed perrenial tributary and Wetland V to an unnamed intermittent tributary that flow into Double Branch Creek, a TNW. Wetlands W and X appear to have either a directly hydrologic connection or an indirect hydrologic connection through shallow groundwater flows to an unnamed, intermittent tributary that flows into Double Branch Creek, a TNW. Tributary stream order, if known:
(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 appear to be ditched and culverted.
	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: Pick List perennial and intermittent flows Estimate average number of flow events in review area/year: continuous and 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation shelving the presence of wrack line sediment sorting sediment sorting sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched.

⁵ 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.
⁶A 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.
⁷Ibid.

2.

		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Mean High Water Mark indicated by: survey to available datum; physical markings; physical markings/characteristics wegetation lines/changes in vegetation types. vegetation lines/changes in vegetation types.
(iii)	Cha	emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Unknown. httify specific pollutants, if known:
(iv)	Bio	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: ☐ Federally Listed species. Explain findings: May provide foraging areas for wood storks. ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the RPWs
Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: 14.64 acres Wetland type. Explain: Emergent. Wetland quality. Explain: Fair to good based on their location within or connected to larger overall forested wetland systems. Project wetlands cross or serve as state boundaries. Explain:
	(b)	General Flow Relationship with Non-TNW: Flow is: Perennial and Intermittent flow. Explain:
		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:
		Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting (Wetlands H, J and K directly abut a perennial stream. Wetland V directly abuts an intermittent stream.) ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: Wetlands W and X appear to have either a directly hydrologic connection or an indirect hydrologic connection through shallow groundwater flows to an unnamed, intermittent tributary that flows into Double Branch Creek, a TNW.
Ц	Ecol	ogical connection. Explain: Separated by berm/barrier. Explain:
	(d)	Proximity (Relationship) to TNW Project wetlands are 5-10 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: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water was moderately clear. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

(iii) Biol	ogical Characteristics. Wetland supports (check all that apply):
	Riparian buffer. Characteristics (type, average width):
\boxtimes	Vegetation type/percent cover. Explain: emergent and forested wetland/95%.
	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: 15 wetlands are being classified as adjacent to or abutting RPWs.

Approximately 15 wetlands totaling (14.64 acres) 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 A (N)	3.87	Wetland J (Y)	0.98
Wetland B (N)	2.99	Wetland K (Y)	0.04
Wetland C (N)	0.26	Wetland N (N)	1.77
Wetland D (N)	0.51	Wetland S (Y- S is an R)	PW) 0.13
Wetland E (N)	0.23	Wetland U (N)	0.36
Wetland F (N)	1.32	Wetland V (Y)	0.60
Wetland H (Y)	0.05	Wetland W (N)	0.71
		Wetland X (N)	0.82

Summarize overall biological, chemical and physical functions being performed: These wetlands provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and non-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 utilization.

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: Due to the distance from Double Branch Creek and the nearest RPW that flows into Double Branch Creek, Wetlands A, B, C, D, E, F, N and U are not expected to have a significant effect on the physical, chemical or biological integrity of Double Branch Creek. Wetlands W and X are in close proximity to a perennial RPW that flows into Double Branch Creek and may be connected to this RPW through shallow groundwater flows. Therefore Wetlands W and X are expected to have a significant physical, chemical and biological effect on Double Branch Creek.

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALI
	THAT APPLY):

ГН	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. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Per the USGS-National Hydrography Data Set (NHD) last updated May 2006: Perennial RPW streams flow directly abutting wetlands H, J and K and continues south directly or indirectly into the Double Branch Creek TNW. Wetland S is a perennial RPW that flows directly or indirectly into the Double Branch Creek TNW. 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: An intermittent stream RPW flows through Wetland V per the same USGS NHD.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 188, 126 and 77 linear feet 21.5, 25 and an unknown width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
3.	Non-RPWs ⁸ 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: .
1.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. These include wetlands H, J, K and V. 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 H, J and K directly abut a perennial stream that flows directly or indirectly into the Double Branch Creek TNW per the USGS National Hydrography Dataset.
	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 V directly abuts an intermittent stream that flows directly or indirectly into the Double Branch Creek per the USGS National Hydrography Dataset.

Provide acreage estimates for jurisdictional wetlands in the review area: 0.60 acres (Wetland V).

⁸See Footnote # 3.

	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: 1.53 acres (Wetlands W and X).
	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 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.	DE SU	DLATED [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. Interstate isolated waters. Explain: Other factors. Explain:
	Ide	ntify water body and summarize rationale supporting determination:
		vide 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.	"M nea any isol	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 igratory Bird Rule" (MBR). Wetlands G, I, L, M, P, R and T consist of stormwater retention ponds that are isolated from the trest RPW and TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of TNW, therefore they are being classified as isolated. Wetlands O, Q, Y, Z, AA, BB, CC, DD, EE, FF, GG, HH and II are lated from the nearest RPW and TNW and are not expected to have any significant effects on the physical, chemical or logical integrity of any TNW, therefore they are being classified as isolated.
		Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Wetlands A, B, C, D, E, F, N and U are adjacent to a perennial stream and an intermittent stream, but are separated from them by considerable amounts of uplands, development and roads, therefore they are being classified as isolated. Other: (explain, if not covered above):

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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.

				warea, where the <u>sole</u> potential basis of jurisdiction is the MBR ecies, use of water for irrigated agriculture), using best professional
	gment (check all that apply):	, ,		,
	Non-wetland waters (i.e., rivers, s	streams):	linear feet	width (ft).
. 📙	Lakes/ponds: acres.			
		acres. List type	of aquatic res	ource: .
ш	Wetlands: acres.			
				v area that do not meet the "Significant Nexus" standard, where such
- Juneary	ading is required for jurisdiction (cl		oly): linear feet.	
	Non-wetland waters (i.e., rivers, s Lakes/ponds: acres.	streams):	ilnear leet,	width (ft).
		acres. List type		
\boxtimes), Q, Y, Z, AA,	BB, CC, DD,	, EE, FF, GG, HH and II, A, B, C, D, E, F, N and U = 20.68 acres
tota	l.			
SECTIO	N IV: DATA SOURCES.			
	_			
				ly - checked items shall be included in case file and, where checked
	requested, appropriately reference			* 1/ 10 1
	Maps, plans, plots or plat submitt			
M	Data sheets prepared/submitted by			t/consultant.
	Office concurs with data sheet Office does not concur with data			
	Data sheets prepared by the Corps		ation report.	
吊	Corps navigable waters' study:	s		
岗	U.S. Geological Survey Hydrolog	ric Atlas: LISGS	2006: www.f	fadl ora
KA	☐ USGS NHD data.	sic Atlas. 0303	2000, www.1	igui.org.
	☐ USGS 8 and 12 digit HUC ma	nns		
	U.S. Geological Survey map(s).		d name:	•
ā	USDA Natural Resources Conser			Citation:
	National wetlands inventory map			
	State/Local wetland inventory ma		,	, , ,
	FEMA/FIRM maps: .	• • •		
	100-year Floodplain Elevation is:	(National	Geodectic Ve	ertical Datum of 1929)
\boxtimes	Photographs: Aerial (Name &	Date): AerialEx	xpress 2008.	
	or 🔲 Other (Name &			
	Previous determination(s). File n	o. and date of re	esponse letter:	
	Applicable/supporting case law:	•		
	Applicable/supporting scientific l			
\boxtimes): Florida Atlas	& Gazetteer,	2006; Southwest Florida Water Management District land use/land
cov	er data, 2004.			

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

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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.

	<u>CTION I: BACKGROUND INFORMATION</u> 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: Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.087355° N., Long82.577428° N. Universal Transverse Mercator: Name of nearest waterbody: Lower Rocky Creek and tributaries Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lower Rocky Creek Name of watershed or Hydrologic Unit Code (HUC): Slough/03100206 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 18, 2009. Field Determination. Date(s): September 24, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew 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.

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 ² (RPWs) that flow directly or indirectly into TNWs		
		Non-RPWs that flow directly or indirectly into TNWs		
	\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland JJ)		
	\boxtimes	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (With a Significant		
		Nexus: KK and LL)		
		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

Wetlands: Wetlands JJ, KK and LL, totaling 1.01 acres of Waters of the U.S.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):3

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetland MM is not jurisdictional because it is an artificial stormwater pond that is 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 waterbody⁴ 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

(*)	O	A	O
(1)	t-enerat	A rea	Conditions:

Watershed size: 790.7 acres
Drainage area: 790.7 acres
Average annual rainfall: 52 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

ГHУ	sicai Characteristi	ics:
(a)	Relationship with	TNW:
	☐ Tributary flow:	s directly into TNW.
	Tributary flows	s through 4 tributaries before entering TNW.
	_ ,	
	Project waters are	Pick List 5-10 river miles from TNW.
		Pick List 2-5 river miles from RPW.
		2-5 aerial (straight) miles from TNW.

⁴ 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: N/A. Identify flow route to TNW5: Based on a desktop review, Wetland JJ is hydrologically connected through wetlands to an unnamed intermittent tributary that flow into Lower Rocky Creek, a TNW. Wetlands KK and LL appear to have either a directly hydrologic connection or an indirect hydrologic connection through shallow groundwater flows to the unnamed, intermittent tributary that flows into Lower Rocky Creek, a TNW. Tributary stream order, if known: General Tributary Characteristics (check all that apply): ☑ Natural Some portions appear natural and others appear ditched. Tributary is: Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream appear to be ditched and culverted. 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 Muck Muck ☐ Gravel ✓ Vegetation. Type/% cover: Herbaceous/50% Bedrock 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 % Tributary provides for: Pick List perennial and intermittent flows 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 OHWM⁶ (check all indicators that apply): clear, natural line impressed on the bank the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation ☐ shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour $\overline{\boxtimes}$ sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched. If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings;

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands JJ - MM physical markings/characteristics vegetation lines/changes in vegetation types. ☐ 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: Unknown. 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: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the RPW Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 1.01 acres Wetland type. Explain: Emergent. Wetland quality. Explain: Fair based on their location within or connected to larger overall forested wetland systems but poor due to infestation with exotic water primrose and air potato and location immediately adjacent to a highway, commercial development and plant nursery- high nutrients and fertilizer runoff. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: 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 JJ directly abuts an intermittent stream. Discrete wetland hydrologic connection. Explain: Wetlands KK and LL appear to have either a directly hydrologic connection or an indirect hydrologic connection through shallow groundwater flows to an unnamed, intermittent tributary that flows into Lower Rocky Creek, a TNW. Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 5-10 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): Riparian buffer. Characteristics (type, average width):

□ Vegetation type/percent cover. Explain: emergent and forested wetland/95%.

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 wetlands are being classified as adjacent to or abutting RPWs. One stormwater pond is being classified as isolated.

Approximately 3 wetlands totaling (1.01 acres) 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 JJ (Y)	0.08		
Wetland KK (N)	0.51		
Wetland LL (N)	0.42		

Summarize overall biological, chemical and physical functions being performed: These wetlands provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-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 utilization.

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 KK and LL are in close proximity to an intermittent RPW that flows into Lower Rocky Creek and

may be connected to this RPW through shallow groundwater flows. Therefore Wetlands KK and LL are expected to have a significant physical, chemical and biological effect on Lower Rocky Creek.

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 ⁸ 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. This includes Wetland JJ. 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 JJ (the overall larger wetland) directly abuts an intermittent stream that flows directly or indirectly into the Lower Rocky Creek per the USGS National Hydrography Dataset. Provide acreage estimates for jurisdictional wetlands in the review area: Wetland JJ = 0.08 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. Wetlands KK and LL are in close proximity to an intermittent RPW that flows into Lower Rocky Creek and may be connected to this RPW through shallow groundwater flows. Therefore Wetlands KK and LL are expected to have a significant physical, chemical and biological effect on Lower Rocky Creek.		
		Provide acreage estimates for jurisdictional wetlands in the review area: 0.93 acres (Wetlands KK and LL).		

⁸See Footnote # 3.

	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). Wetland MM is a stormwater retention pond that is isolated from the nearest RPW and TNW and is not expected to have any significant effects on the physical, chemical or biological integrity of any TNW. Therefore it is being classified as isolated.
	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: .

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

10 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.

⊠ Wetlands: Stormwater retention pond MM = 0.30 acres.

SECTION IV: DATA SOURCES.

A.	SUPI	PORTING 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.
		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: .
	\boxtimes	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)
	\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:	BACKGROUND I	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: Hillsborough City:
	Center coordinates of site (lat/long in degree decimal format): Lat. 28.092021° N, Long82.564609° W.
	Universal Transverse Mercator:
	Name of nearest waterbody: Lower Rocky Creek and tributaries
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lower Rocky Creek
	Name of watershed or Hydrologic Unit Code (HUC): Lower Rocky Creek/03100206
	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 18, 2009.
 - Field Determination. Date(s): September 25-29, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

review ar	rea. [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.

	 the U.S. the presence of waters of U.S. in review area (check all that apply): 1
а.	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 QQ, UU/VV, WW and XX) Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (With a Significant
	Nexus: Wetlands NN, OO and PP) 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.	fy (estimate) size of waters of the U.S. in the review area: vetland waters: linear feet: width (ft) and/or acres.

Wetlands: Wetlands NN, OO, PP, QQ, UU/VV, WW, XX totaling 4.94 acres of Waters of the U.S.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands RR, SS, TT and YY are not jurisdictional because they are artificial stormwater ponds that 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 waterbody⁴ 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

(i) General Area Conditions:
Watershed size: 7,400.1 acres
Drainage area: 7,400.1 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 4 tributaries before entering TNW.

Project waters are Pick List 5-10 river miles from TNW.
Project waters are Pick List 2-5 river miles from RPW.
Project waters are 2-5 aerial (straight) miles from TNW.

⁴ 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: N/A. Identify flow route to TNW5: Based on a desktop review, Wetland QQ, UU/VV, WW and XX are hydrologically connected through wetlands to an unnamed intermittent tributary that flow into Lower Rocky Creek, a TNW. Wetlands NN, OO and PP appear to have either a directly hydrologic connection or an indirect hydrologic connection through shallow groundwater flows to the unnamed, intermittent tributary that flows into Lower Rocky Creek, a TNW. Tributary stream order, if known: (b) General Tributary Characteristics (check all that apply): Natural Some portions appear natural and others appear ditched. Tributary is: Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream appear to be ditched and culverted. 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): Sands ⊠ Silts 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: Pick List perennial flows 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 OHWM⁶ (check all indicators that apply): 🛛 clear, natural line impressed on the bank 🔲 the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away multiple observed or predicted flow events water staining abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched. If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum;

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands NN - YY fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. ☐ 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: Unknown. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Mabitat for: Federally Listed species. Explain findings: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the RPW 2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW **Physical Characteristics:** General Wetland Characteristics: Properties: Wetland size: 4.94 acres (Wetlands NN, OO, PP, QQ, UU/VV, WW and XX) Wetland type. Explain: Emergent Wetland quality. Explain: Fair to good based on their location within or connected to larger overall forested wetland systems. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Perrenial flow. Explain: 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: Wetland Adjacency Determination with Non-TNW: Directly abutting (Wetlands QQ, UU/VV, WW and XX directly abut a perrenial stream.) ☑ Not directly abutting Discrete wetland hydrologic connection. Explain: Wetlands NN, OO and PP appear to have either a directly hydrologic connection or an indirect hydrologic connection through shallow groundwater flows to an unnamed, intermittent tributary that flows into Lower Rocky Creek, a TNW. ☐ Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 5-10 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): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%. 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: 8 wetlands are being classified as adjacent to or abutting RPWs.

Approximately 8 wetlands totaling (4.94 acres) are being considered in the cumulative analysis (Wetlands NN, OO, PP, OO, UU/VV, WW and XX)

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland NN (N)	0.50	Wetlands UU/VV (Y)	0.82
Wetland OO (N)	2.27	Wetland WW (Y)	0.43
Wetland PP (N)	0.25	Wetland XX (Y)	0.14
Wetland QQ (Y)	0.60		

Summarize overall biological, chemical and physical functions being performed: These wetlands provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-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 utilization.

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 NN, OO and PP are in close proximity to a perennial RPW that flows into Lower Rocky Creek and may be connected to this RPW through shallow groundwater flows. Therefore Wetlands NN, OO and PP are expected to have a significant physical, chemical and biological effect on Lower Rocky Creek.

	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. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: A perennial stream RPW flows directly through Wetland UU/VV and directly or indirectly into the Lower Rocky Creek TNW per the USGS National Hydrography Dataset (last updated May 2006). It is included in the boundaries and acreage of Wetland UU/VV (RPW + UU/VV = 0.82 acres total). 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 ⁸ 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 QQ, UU/VV, WW andXX directly abut a perennial stream that flows directly or indirectly into the Lower Rocky Creek per the USGS National Hydrography Dataset- last updated May 2006
	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: 1.99 acres (Wetlands QQ, UU/VV, WW andXX).
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. Wetlands NN, OO and PP are in close proximity to a perennial RPW that flows into Lower Rocky Creek and may be connected to this RPW through shallow groundwater flows. Therefore Wetlands NN, OO and PP are expected to have a significant physical, chemical and biological effect on Lower Rocky Creek.

D.

⁸See Footnote # 3.

Provide acreage estimates for jurisdictional wetlands in the review area: 3.02 acres (Wetlands NN, OO and PP).

	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.	DE SU IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	DLATED [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. Interstate isolated waters. Explain: Other factors. Explain:
	Ide	ntify water body and summarize rationale supporting determination:
		vide 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.	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	In-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 igratory Bird Rule" (MBR). Wetlands RR, SS, TT and YY are stormwater retention ponds that are isolated from the nearest wand TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of the wer Rocky Creek or any other TNW. Therefore they are being classified as isolated.
		Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:. Other: (explain, if not covered above):
	fact	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR cors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (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

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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.

	wide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such
<u>a fi</u>	nding 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:
\boxtimes	Wetlands: Total of 1.53 acres (Stormwater retention ponds RR, SS, TT and YY)
SECTION	<u>DN IV: DATA SOURCES.</u>
A. SUP	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked
	requested, appropriately reference sources below):
\boxtimes	
岗	Data sheets prepared/submitted by or on behalf of the applicant/consultant.
15.73	Office concurs with data sheets/delineation report.
	Office does not concur with data sheets/delineation report.
	Data sheets prepared by the Corps: .
d	Corps navigable waters' study: .
岗	U.S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org.
1672	USGS NHD data.
	USGS 8 and 12 digit HUC maps.
	U.S. Geological Survey map(s). Cite scale & quad name:.
眉	USDA Natural Resources Conservation Service Soil Survey. Citation:
岗	National wetlands inventory map(s). Cite name: USFWS, HRC 2008; www.fgdl.org.
台	State/Local wetland inventory map(s):
	FEMA/FIRM maps: .
一	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
岗	Photographs: Aerial (Name & Date): AerialExpress 2008.
KW	or Other (Name & Date):
	Previous determination(s). File no. and date of response letter:
固	Applicable/supporting case law: .
崮	Applicable/supporting scientific literature: .
岗	Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land
***************************************	er data, 2004.
-01	

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: BACKGROUND INFORMATION

Α.	REPORT COMPLETION	DATE FOR APPROVEI) HIRISDICTIONAL	. DETERMINATION (.I

71.	REFORT COMPLETION DATE FOR ATTROVED JURISDICTIONAL DETERMINATION (5D).
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Florida County/parish/borough: Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.093347° N, Long82.550108° W. Universal Transverse Mercator: Name of nearest waterbody: Lower Rocky Creek and tributaries Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lower Rocky Creek Name of watershed or Hydrologic Unit Code (HUC): Halfmoon Lake Drain/03100206 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 18, 2009. Field Determination. Date(s): September 29, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
revi	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 iew 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:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
	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 quired]
	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 waters ² (RPWs) that flow directly or indirectly into TNWs (Stream portion of Wetland AB) Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland AB) 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. Wetlands: Wetland AB totaling 1.16 acres of Waters of the U.S.
	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 ZZ, AD, AE, AF and AG are not jurisdictional because they are artificial stormwater ponds that are

Non-regulated waters/wetlands (check if applicable):3

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. Wetland AC is not jurisdictional because it is separated from the nearest RPW and TNW by expansive uplands and residential development and is not expected to have any significant effects on the physical, chemical or biological integrity of the Lower Rocky Creek TNW.

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:

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 waterbody⁴ 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

(i) General Area Conditions:

Watershed size: 743.8 acres
Drainage area: 743.8 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 4 tributaries before entering TNW.

Project waters are **PickList** 5-10 river miles from TNW. Project waters are **PickList** 2-5 river miles from RPW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	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.
	Identify flow route to TNW ⁵ : Based on a desktop review, Wetland AB directly abuts and flows into to an unnamed perrenial tributary that flows into Lower Rocky Creek, a TNW. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Some portions appear natural and others appear ditched. Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of acrial photography, portions of the stream appear to be ditched and culverted.
	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: Pick List perennial flows Estimate average number of flow events in review area/year: Continuous flow all year-perrenial 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation shelving the presence of wrack line sediment sorting sediment 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: May be less evident where ditched.
	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 vegetation lines/changes in vegetation types.

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands ZZ - AG 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: Unknown. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Mabitat for: Federally Listed species. Explain findings: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the RPW Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 1.16 acres (Wetland AB) Wetland type. Explain: Emergent Wetland quality. Explain: Fair to good based on its location within and connected to larger overall forested wetland and stream systems. Project wetlands cross or serve as state boundaries. Explain: General Flow Relationship with Non-TNW: Flow is: **Perrenial flow**. Explain: 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: Wetland Adjacency Determination with Non-TNW: Directly abutting (Wetlands AB abuts a perrenial stream. ☐ Not directly abutting Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 5-10 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): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%. 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: 1 wetland is being classified as abutting an RPW. 5 stormwater retention ponds are being classified as isolated and one Wetland ditch is being classified as isolated. Approximately 1 wetland totaling (1.16 acres) is being considered in the cumulative analysis (Wetland AB)

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Wetland AB (Y)

1.16

Summarize overall biological, chemical and physical functions being performed: Wetland AB and its associated perennial stream provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-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 utilization.

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:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands ZZ - AG TNWs: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres. 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: A perennial stream RPW flows directly through Wetland AB and directly or indirectly into the Lower Rocky Creek TNW per the USGS National Hydrography Dataset (last updated May 2006). It is included in the boundaries and acreage of Wetland AB (1.16 acres total). 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: Identify type(s) of waters: Non-RPWs8 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: 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: Wetland AB directly abuts a perennial stream that flows directly or indirectly into the Lower Rocky Creek per the USGS National Hydrography Dataset-last updated May 2006 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: 1.16 acres (Wetland AB). 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: 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.

⁸See Footnote # 3.

	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). Wetlands ZZ, AD, AE, AF and AG are stormwater retention ponds that are isolated from the nearest RPW and TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of the Lower Rocky Creek or any other TNW. Therefore they are being classified as isolated. Wetland ditch AC connects to one very small off-site isolated forested wetland, but neither of these wetlands have any hydrologic connection to an RPW or TNW and are separated from the nearest RPW by extensive uplands and residential development. Wetland AC is not expected to have any significant effect on the physical, chemical or biological integrity of the Lower Rocky Creek TNW or any other TNW, and therefore is considered isolated.
	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: Total of 1.14 acres (Stormwater retention ponds ZZ, AD, AE, AF and AG and wetland ditch AC)

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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.

SUP	PORTING 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.
	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:
\boxtimes	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:
\boxtimes	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)
M	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
cov	ver 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(CTION I: BACKGROUND 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: Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.096756° N, Long82.541431° W. Universal Transverse Mercator:
	Name of nearest waterbody: Lower Rocky Creek and tributaries
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lower Rocky Creek
	Name of watershed or Hydrologic Unit Code (HUC): Lake Le Clare Drain/03100206
	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 20, 2009.
	Field Determination. Date(s): September 30, 2009.
SE	CTION II: SUMMARY OF FINDINGS
	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew 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: .
В.	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): 1
	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. Wetlands:
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
	2. Non-regulated waters/wetlands (check if applicable): ³
	Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Stormwater retention ponds AH, AJ, AK and stormwater management ditch AI are not jurisdictional because

they are artificial stormwater ponds and a ditch that are hydrologically isolated from TNWs and RPWs that flow

Boxes checked below shall be supported by completing the appropriate sections in Section III below.
 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.

directly or indirectly into TNWs. They are not expected to have any significant effects on the physical, chemical or biological integrity of the Lower Rocky Creek TNW.

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 waterbody⁴ 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

(i)	General Area Conditions:		
	Watershed size: acres		
	Drainage area: acres		
	Average annual rainfall: inches		
	Average annual snowfall: inches		
(ii) Physical Characteristics:			
` '	(a) Relationship with TNW:		
	Tributary flows directly into TNW.		
	☐ Tributary flows through tributaries before entering TNW.		
	Project waters are Pick List river miles from TNW.		
	Project waters are Pick List river miles from RPW.		
	Project waters are aerial (straight) miles from TNW.		
	Project waters are aerial (straight) miles from RPW.		

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters cross or serve as state boundaries. Explain:.
	Identify flow route to TNW ⁵ :. 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:
	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:. Presence of run/riffle/pool complexes. Explain:. Tributary geometry: Tributary gradient (approximate average slope):
(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Describe flow regime: Other information on duration and volume:.
	Surface flow is:. Characteristics:
	Subsurface flow: Explain findings: Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (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 shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ 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:

⁽iii) Chemical Characteristics:

⁵ 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.

⁶A 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.

⁷Ibid.

		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) B	iological 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 species. Explain findings: Aquatic/wildlife diversity. Explain findings		
2.	Chara	ecteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW		
		hysical Characteristics: a) General Wetland Characteristics: Properties: Wetland size: Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:		
	(l	b) General Flow Relationship with Non-TNW: Flow is: . Explain: .		
		Surface flow is: Characteristics: Both confined (within ditch banks) and sheetflow (non-ditched areas). Subsurface flow: Explain findings:		
		Dye (or other) test performed:		
		Wetland Adjacency Determination with Non-TNW: Directly abutting. Discrete wetland hydrologic connection. Explain: cological connection. Explain:		
	(.	Separated by berm/barrier. Explain:		
	(1	h) Proximity (Relationship) to TNW Project wetlands are river miles from TNW. Project waters are aerial (straight) miles from TNW. Flow is from: Estimate approximate location of wetland as within the floodplain.		
	C	Chemical Characteristics: characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:. clentify specific pollutants, if known:		
	(iii) B C C	iological 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.	A analys			
		or 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 ⁸ 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:
	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:
	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.	ISO	PLATED [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

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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 AH - AK 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). Wetlands AH, AJ and AK and stormwater management ditch AI are isolated from the nearest TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of the Lower Rocky Creek or any other TNW. Therefore they are being classified as isolated. 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: Total of 2.61 acres (Wetlands AH, AJ and AK and stormwater management ditch AI) **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):

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

	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
COV	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.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	State: Florida County/parish/borough: Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.103506° N, Long82.532761° W. Universal Transverse Mercator: Name of nearest waterbody: Brushy Creek, Lower Rocky Creek and tributaries
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lower Rocky Creek Name of watershed or Hydrologic Unit Code (HUC): Drainage ditches/03100206 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 20, 2009. Field Determination. Date(s): October 1, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	were 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 "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 ditch AN) □ Non-RPWs that flow directly or indirectly into TNWs □ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetlands AM and AO) □ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (With a Significant Nexus: Wetland AL) □ 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:

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

linear feet:

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

acres.

width (ft) and/or

Wetlands: Wetlands AL, AM, AN and AO, totaling 3.04 acres of Waters of the U.S.

Non-wetland waters:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

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 waterbody⁴ 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

(i) General Area Conditions:

Watershed size: 770.4 acres
Drainage area: 770.4 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 4 tributaries before entering TNW.

Project waters are Pick List 5-10 river miles from TNW.
Project waters are Pick List 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.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

connected to an unnamed intermittent tributary that flows into Brushy Creek and then into Lower Rocky Creek, a TNW. Wetland AL has a directly hydrologic connection to the unnamed, intermittent tributary that flows into Brushy Creek and then Lower Rocky Creek, a TNW. Tributary stream order, if known: (b) General Tributary Characteristics (check all that apply): Natural Some portions appear natural and others appear ditched. Tributary is: Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream appear to be ditched and culverted. **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): Sands Silts ☐ Concrete Cobbles ☐ Gravel Muck ✓ Vegetation. Type/% cover: Herbaceous/50% ☐ Bedrock 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) Tributary provides for: Pick List intermittent flows 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 ☑ OHWM⁶ (check all indicators that apply): □ clear, natural line impressed on the bank
 □ the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation ☐ shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour multiple observed or predicted flow events water staining abrupt change in plant community other (list): ☑ Discontinuous OHWM. Explain: May be less evident where ditched. If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): Mean High Water Mark indicated by: High Tide Line indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types.

Identify flow route to TNW5: Based on a desktop review, Wetlands AM, AN and AO are are hydrologically

☐ tidal gauges ☐ other (list):

⁵ 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. ⁶A 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. ⁷Ibid.

	Cl	hemical Characteristics: haracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Unknown. entify specific pollutants, if known:
		ological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the RPW
2.	Charac	eteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
		ysical Characteristics: General Wetland Characteristics: Properties: Wetland size: 3.04 acres Wetland type. Explain: Emergent. Wetland quality. Explain: Fair based on their location within or connected to larger overall forested wetland stream system. Project wetlands cross or serve as state boundaries. Explain:
	(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain:
		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 AM, AN and AO directly abut an intermittent stream. ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: Wetland AL appears to have a directly hydrologic connection through a culvert to an unnamed, intermittent tributary that flows into Brushy Creek and then into Lower Rocky Creek, a TNW.
	☐ Eco	ological connection. Explain: Separated by berm/barrier. Explain:
	(d)	Proximity (Relationship) to TNW Project wetlands are 5-10 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.
	Ch	nemical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water was moderately clear. entify specific pollutants, if known:
	(iii) Bi	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%. 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: 4 wetlands are being classified as adjacent to or abutting RPWs.

Approximately 4 wetlands totaling (3.04 acres) 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 AL (N)	0.89		
Wetland AM (Y)	1.94		
Wetland AN (Y)	0.02		
Wetland AO (Y)	0.19		

Summarize overall biological, chemical and physical functions being performed: These wetlands provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-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 utilization.

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: Wetland AL is in close proximity to an intermittent RPW that flows into Brushy Creek and then Lower Rocky Creek and is connected to this RPW through a culvert. Therefore Wetlands AL is expected to have a significant physical, chemical and biological effect on Lower Rocky Creek.
- 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: Wetland AN and a portion of Wetland AM consist of RPWs that flow at least seasonally. They were observed flowing in the field in October and have ordinary high water marks. The RPW on the west side of Wetland AM is evident as a drainage ditch on the USGS National Hydrography Dataset-last updated May 2006.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 125 and 215 linear feet and 7 and 4 width (ft). Other non-wetland waters: Identify type(s) of waters: .
3.	Non-RPWs ⁸ 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. This includes Wetlands AM and AO. 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: Wetlands AM and AO directly abut intermittent streams that flow directly or indirectly into the Brushy Creek and then into Lower Rocky Creek per the USGS National Hydrography Dataset. Provide acreage estimates for jurisdictional wetlands in the review area: Wetlands AM and AO = 2.13 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. Wetland AL is in close proximity to, and connected through a culvert to an intermittent RPW that flows into Brushy Creek and then Lower Rocky Creek, a TNW. Therefore Wetlands AL is expected to have a significant physical, chemical and biological effect on Lower Rocky Creek.
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.89 acres (Wetland AL).
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.

⁸See Footnote # 3.

Provide estimates for jurisdictional wetlands in the review area: acres. Impoundments of jurisdictional waters.9 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. 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): width (ft). linear feet Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: 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:

SECTION IV: DATA SOURCES.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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.

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:.
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.
Mational 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:
or 🗌 Other (Name & Date):
Previous determination(s). File no. and date of response letter:
Applicable/supporting case law: Applicable/supporting scientific literature:
Applicable/supporting scientific literature: .
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:

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

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

С.	PROJECT LOCATION AND BACKGROUND INFORMATION:
	State: Florida County/parish/borough: Hillsborough City:
	Center coordinates of site (lat/long in degree decimal format): Lat. 28.107719° N. Long82.519676° N.
	Universal Transverse Mercator:
	Name of nearest waterbody: Brushy Creek, Lower Rocky Creek and tributaries
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lower Rocky Creek
	Name of watershed or Hydrologic Unit Code (HUC): Brushy Creek/03100206
	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):
υ.	Office (Desk) Determination. Date: December 20, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

Field Determination. Date(s): October 1, 2009.

There Ar	e no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the
review ar	ea. [<i>Required</i>]
	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.

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. Require

1.

Explain:

red]	
	ers of the U.S.
a. I	ndicate presence of waters of U.S. in review area (check all that apply): 1
L	TNWs, including territorial seas
	Wetlands adjacent to TNWs
	Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs
Ī	Non-RPWs that flow directly or indirectly into TNWs
Ĭ	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland AQ)
	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (With a Significant
_	Nexus: Wetlands AR and AS)
Г	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
Ť	Impoundments of jurisdictional waters
ř	Isolated (interstate or intrastate) waters, including isolated wetlands
L	1 soluted (interstate of intrastate) waters, including isolated weithings
h I	dentify (estimate) size of waters of the U.S. in the review area:
v	Vetlands: Wetlands AQ, AR and AS totaling 0.42 acres of Waters of the U.S.
c. Lin	nits (boundaries) of jurisdiction based on: 1987 Delineation Manual

2. Non-regulated waters/wetlands (check if applicable):3

Elevation of established OHWM (if known):

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands AP and AW are not jurisdictional because they are artificial stormwater ponds that 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.

Identify TNW:

Summarize rationale supporting determination:

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 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

(i) General Area Conditions:

Watershed size: 5,145.4 acres Drainage area: 5,145.4 acres Average annual rainfall: 52 inches Average annual snowfall: 0 inches

(ii) Phy (a)

y	ysicai Characteristic	S:
	Relationship with T	NW:
	☐ Tributary flows	directly into TNW.
	Tributary flows	through 4 tributaries before entering TNW.
	Project waters are	Pick List 5-10 river miles from TNW.
		Pick List 2-5 river miles from RPW.
	Project waters are	2-5 aerial (straight) miles from TNW.

A 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: N/A. Identify flow route to TNW5: Based on a desktop review, Wetland AQ is hydrologically connected to Brushy Creek and then into Lower Rocky Creek, a TNW. Wetlands AR and AS appear to have either a directly hydrologic culvert connection or an indirect hydrologic connection through shallow groundwater flows to Brushy Creek and which then flows into Lower Rocky Creek, a TNW. Tributary stream order, if known: (b) General Tributary Characteristics (check all that apply): Natural Some portions appear natural and others appear ditched. Tributary is: Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream appear to be ditched and culverted. 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): Sands Silts ☐ Concrete ☐ Cobbles ☐ Gravel Muck Muck ✓ Vegetation. Type/% cover: Herbaceous/50% ☐ Bedrock 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: Pick List perennial flows Estimate average number of flow events in review area/year: continuous flow- perennial 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 OHWM⁶ (check all indicators that apply): clear, natural line impressed on the bank \boxtimes the presence of litter and debris changes in the character of soil destruction of terrestrial vegetation shelving the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched. If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; physical markings; fine shell or debris deposits (foreshore)

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands AP - AS, AW physical markings/characteristics vegetation lines/changes in vegetation types. ☐ 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: Unknown. 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: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the RPW Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (i) Physical Characteristics: General Wetland Characteristics: (a) Properties: Wetland size: 0.42 acres (Wetlands AQ, AR and AS) Wetland type. Explain: Emergent and forested Wetland quality. Explain: Fair to good based on their location within or connected to larger overall forested wetland stream system. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: **Perrenial flow**. Explain: 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: Wetland Adjacency Determination with Non-TNW: Directly abutting (Wetlands AQ directly abuts a perrenial stream. Not directly abutting Discrete wetland hydrologic connection. Explain: Wetlands AR and AS appear to have either a directly hydrologic culvert connection or an indirect hydrologic connection through shallow groundwater flows to Brushy Creek a perennial tributary that flows into Lower Rocky Creek, a TNW. Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 5-10 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): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%. Habitat for: Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:	
Other environmentally-sensitive species.	Explain findings:
Aquatic/wildlife diversity. Explain finding	ngs: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 3 wetlands are being classified as adjacent to or abutting RPWs. 3 wetlands totaling (0.41 acres) are being considered in the cumulative analysis (AQ, AR and AS)

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland AQ (Y)	0.28		
Wetland AR (N)	0.001		
Wetland AS (N)	0.13		

Summarize overall biological, chemical and physical functions being performed: These wetlands provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-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 utilization.

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 AR and AS are in close proximity and connected via culverts to a perennial RPW (Brushy Creek) that flows into Lower Rocky Creek, A TNW. Therefore Wetlands wetlands AR and AS are expected to have a significant physical, chemical and biological effect on Lower Rocky Creek, a TNW.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK AL 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: A perennial stream RPW (Brushy Creek) flows directly through Wetland AQ and then directly or indirectly into the Lower Rocky Creek TNW per the USGS National Hydrography Dataset (last updated May 2006). This small portion of Brushy Creek is included in the boundaries and acreage of wetland AQ (0.28 acres total). 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 ⁸ 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 AQ directly abuts a perennial stream (Brushy Creek) that flows directly or indirectly into the Lower Rocky Creek per the USGS National Hydrography Dataset-last updated May 2006
		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: 0.28 acres (Wetland AQ).
	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. Wetlands AR and AS are in close proximity to a perennial RPW (Brushy Creek) that flows into Lower Rocky Creek and are connected to this RPW through culverts and shallow groundwater flows. Therefore Wetlands AR and AS are expected to have a significant physical, chemical and biological effect on Lower Rocky Creek TNW.
		Provide acreage estimates for jurisdictional wetlands in the review area: 0.13 acres (Wetlands AR and AS).

⁸See Footnote # 3.

	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.	DE SU	CLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION 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. Interstate isolated waters. Explain: Other factors. Explain:
	Ide	entify water body and summarize rationale supporting determination:
		ovide 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.	□ ⊠ "M and	ON-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 ligratory Bird Rule" (MBR). Wetlands AP and AW are stormwater retention ponds that are isolated from the nearest RPW dt TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of the Lower cky Creek or any other TNW. Therefore they are being classified as isolated.
		Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:. Other: (explain, if not covered above):
	fac	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR tors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (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
		ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such inding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
¹⁰ 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.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands AP – AS, AW	
Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: Total of 0.30 acres (Stormwater retention ponds AP and AW)	
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	ed
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.	
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.	
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:	
Applicable/supporting scientific literature: Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/lan	А
cover data, 2004.	u

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands AT-1/AT-2 - AV, AX - BF

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	DRMATION
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- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- DISTRICT OFFICE, FILE NAME, AND NUMBER:

ъ.	DioThiel of Fiel, File White, And Northbern
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Florida County/parish/borough: Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.116993° N. Long82.491455° W. Universal Transverse Mercator: Name of nearest waterbody: Drainage Canal then Brushy Creek then Lower Rocky Creek and tributaries
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lower Rocky Creek Name of watershed or Hydrologic Unit Code (HUC): Drainage Canal/03100206 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 21, 2009. Field Determination. Date(s): October 1-5, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the

SE

review ar	ea. [Required]									
	Waters subjec	t to the ebb and	flow of the tide.							
	Waters are pre	esently used, or	have been used in t	he past, or may	be susceptib	ole for use to tra	nsport interst	ate or fore	ign comm	erce
	Explain:									

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	s of the U.S.
a. Ind	icate presence of waters of U.S. in review area (check all that apply): 1
	TNWs, including territorial seas
	Wetlands adjacent to TNWs
\boxtimes	Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs (Wetlands AT-1/AT-2, AU and AY)
	Non-RPWs that flow directly or indirectly into TNWs
\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland AZ, BA, BC, BD and BE)
. \square	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. Ide	ntify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: Wetlands AT-1/AT-2, AU, AY AZ, BA, BC, BD and BE totaling 4.30 acres of Waters of the U.S.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

A Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands AV and BF are not jurisdictional because they are artificial stormwater ponds that are

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands AT-1/AT-2 - AV, AX - BF

hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. Wetlands AX and BBa are also 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 waterbody⁴ 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
 - (i) General Area Conditions:

Watershed size: 2,844.3 acres
Drainage area: 2,844.3 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 4 tributaries before entering TNW.
 Project waters are Pick List 5-10 river miles from TNW.
 Project waters are Pick List 2-5 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.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands AT-1/AT-2 - AV, AX - BF

Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW⁵: Based on a desktop review, Wetlands AT-1/AT-2 and AU are portions of a major drainage canal that flows into Brushy Creek and then into Lower Rocky Creek, a TNW. Wetland AY is a portion

drainage canal that hows into brushy Creek and then into Lower Rocky Creek, a 1144. Wettand A 1 is a portio
of a roadside ditch that flows south through a wetland to the same major drainage canal that flows into Brushy
Creek and then into Lower Rocky Creek, a TNW.

	Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Some portions of Brushy Creek appear natural and others appear ditched. Artificial (man-made). Explain: Manipulated (man-altered). Explain: The RPW drainage canal appears man-made.
	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: PickList perennial and intermittent flows Estimate average number of flow events in review area/year: continuous flow-perennial and 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil changes in the character of soil destruction of terrestrial vegetation the presence of wrack line vegetation matted down, bent, or absent sediment sorting leaf litter disturbed or washed away scour sediment deposition multiple observed or predicted flow events abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched.
	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; vegetation lines/changes in vegetation types.

☐ tidal gauges

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands AT-1/AT-2 - AV, AX - BF other (list): (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): Wetland fringe. Characteristics: Habitat for: ☑ Federally Listed species. Explain findings: Drainage canal provides foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Moderately diverse due to larger overall forested wetland systems surrounding the downstream Brushy Creek RPW. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW **Physical Characteristics:** (a) General Wetland Characteristics: Properties: Wetland size: Wetlands AT-1/AT-2, AU, AY AZ, BA, BC, BD and BE totaling 4.30 acres Wetland type. Explain: Emergent and forested Wetland quality. Explain: Fair to good based on their location within or connected to larger overall forested wetland stream system. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Perrenial flow. Explain: 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: Wetland Adjacency Determination with Non-TNW: Directly abutting (Wetlands AZ, BA, BC, BC, BD and BE directly abuts a perrenial stream). ☐ Not directly abutting Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 5-10 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): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%. ☐ 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: 4 wetlands are being classified as directly abutting RPWs that drain directly or indirectly into TNWs (Wetlands AZ, BA, BC, BD and stormwater retention area BE). 3 wetlands are being classified as RPWs (Wetlands AT-1/AT-2, AU and AY).

Approximately 7 wetlands totaling 4.30 acres are being considered in the cumulative analysis (Wetlands AT-1/AT-2, AU, AY AZ, BA, BC, BD and BE).

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland AT-1/AT-2 (Y- it is a	n RPW) 0.22		
Wetland AU (Y- it is an RPW)	0.02		
Wetland AY(Y- it is an RPW)	0.02		
Wetland AZ (Y)	0.15		
Wetland BA (Y)	0.41		
Wetland BC (Y)	0.47		
Wetland BD (Y)	2.76		
Wetland BE (Y)	0.25		

Summarize overall biological, chemical and physical functions being performed: These wetlands provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-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 utilization.

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 AR and AS are in close proximity and connected via culverts to a perennial RPW (Brushy Creek)

that flows into Lower Rocky Creek, a TNW. Therefore Wetlands AR and AS are expected to have a significant physical, chemical and biological effect on Lower Rocky Creek, a TNW.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL

TH	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. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: A perennial stream RPW (drainage ditch- Wetlands AT-1/AT-2 and AU) flows directly into Brushy Creek another RPW and then into the Lower Rocky Creek TNW per the USGS National Hydrography Dataset (last updated May 2006). 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: RPW Roadside ditch AY may have intermittent, seasonal flows based on the fact that it is connected to larger forested wetlands upstream and downstream and flows into a major drainage ditch RPW that appears to be perennial based on its size and amount of flow observed in October 2009.
	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 ⁸ 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 AZ, BA, BC, BD and BE directly abut a perennial stream (a drainage ditch) that flows directly or indirectly into Brushy Creek and then into the Lower Rocky Creek TNW per the USGS National Hydrography Dataset-last updated May 2006
	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: Wetlands AZ, BA, BC, BD and stormwater retention area BE = 4.04 acres. Jurisdictional wetland RPWs AT-1/AT-2, AU and AY within the project area = 0.26 acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

⁸See Footnote # 3.

Asse	ssment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands AT-1/AT-2 - AV, AX - BF
	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:
	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). Wetlands AV and BF are stormwater retention ponds that are isolated from the nearest RPW and TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of the Lower Rocky Creek or any other TNW. Therefore they are being classified as isolated. Wetlands AX and BBa are isolated from the nearest RPW and TNW and are not expected to have any significant effect on the physical, biological or chemical integrity of any TNW, therefore they are being considered isolated. They are separated by extensive uplands, roads and residential development from the nearest RPW.
	Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:. Other: (explain, if not covered above):

 ⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 10 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.

facto judg	vide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional general (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
a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ading 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: Total of 0.80 acres of isolated wetlands (Stormwater retention ponds AV and BF and Wetlands AX and BBa)
SECTIO	N IV: DATA SOURCES.
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked 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: Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land or 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:	BACKGROUND	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: Hillsborough City:
	Center coordinates of site (lat/long in degree decimal format): Lat. 28.119480° N. Long82.473467° N.
	Universal Transverse Mercator:
	Name of nearest waterbody: Brushy Creek, Lower Rocky Creek and tributaries
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lower Rocky Creek
	Name of watershed or Hydrologic Unit Code (HUC): Lake Drainage Ditch/03100206
	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 20, 2009.
 - Field Determination. Date(s): October 5-6, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Ar	e no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the
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:

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.

•	waters of the c.s.			
	a.	Indica	ate 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 ² (RPWs) that flow directly or indirectly into TNWs	
			Non-RPWs that flow directly or indirectly into TNWs	
		\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland BH)	
		\boxtimes	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs (With a Significant	
			Nexus: Wetland BI)	
			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. Wetlands: Wetlands BH and BI totaling 0.61 acres of Waters of the U.S.

- c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
- Non-regulated waters/wetlands (check if applicable):3

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetland BK is not jurisdictional because it is an artificial stormwater pond that is hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. Wetland ditch BG, and wetlands BJ and BL are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. These areas are isolated and are not expected to have any significant effects on the physical, chemical or biological integrity of the Lower Rocky Creek TNW.

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 waterbody⁴ 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

(i)	General	Area	Cond	itions

Watershed size: 1,478.0 acres
Drainage area: 1,478.0 acres
Average annual rainfall: 52 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a)	Relatio	nship	with	TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters are 10-15 river miles from TNW. Project waters are 1 or less river miles from RPW. Project waters are 5-10 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.
	Identify flow route to TNW ⁵ : Based on a desktop review, Wetland BH is hydrologically connected to Brushy Creek indirectly through a perrenial RPW stream and and then through drainage ditches into Brushy Creek and then Lower Rocky Creek, a TNW. Wetland BI may have an indirect hydrologic connection through shallow groundwater flows to this same perennial RPW that Wetland BH is connected to. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Some portions appear natural and others appear ditched. Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream appear to be ditched and culverted.
	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: Flow: Tibutary provides for: Pick List perennial and intermittent flows Estimate average number of flow events in review area/year: continuous - perennial and intermittent 6-10 flow event 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):
	Sed and banks OHWM6 (check all indicators that apply): Clear, natural line impressed on the bank Changes in the character of soil Changes in the presence of litter and debris Changes in the character of soil Changes in the presence of litter and debris Changes in the
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BG - BL High Tide Line indicated by: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. 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: Unknown. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: \boxtimes Habitat for: ☐ Federally Listed species. Explain findings: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the RPW Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW **Physical Characteristics:** (a) General Wetland Characteristics: Properties: Wetland size: 0.61 acres (Wetlands BH and BI) Wetland type. Explain: Emergent/forested-wetland scrub FLUCFCS code 631 Wetland quality. Explain: Fair to good based on their location within or connected to larger overall forested wetland stream system. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Perrenial and intermittent flow. Explain: 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 BH directly abuts a perrenial stream). Not directly abutting Discrete wetland hydrologic connection. Explain: Wetland BI appears to have an indirect hydrologic connection through shallow groundwater flows to an unnamed perennial RPW which flows into a perennial drainage canal then into Brushy Creek, a perennial tributary that flows into Lower Rocky Creek, a TNW. ☐ Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 10-15 river miles from TNW. Project waters are 5-10 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):

	Riparian buffer. Characte Vegetation type/percent of Habitat for: Federally Listed specie Fish/spawn areas. Expl Other environmentally Aquatic/wildlife divers	over. Explain: emergent es. Explain findings: ain findings: -sensitive species. Expla	and forested wetland/95%.	·
3.	RPWs (Wetlands BH and BI) BK). 2 wetlands and 1 wetlan	d in the cumulative analys. 1 stormwater retention d ditch are being classifie	f any) sis: 2 wetlands are being classified n pond is being classified as isola d as isolated (Wetlands BG, BJ and ng considered in the cumulative and	ted (Stormwater retention pond l BL).
	For each wetland, specify the for	ollowing:		
	Directly abuts? (Y/N) Wetland BH (Y) Wetland BI (N)	Size (in acres) 0.30 0.31	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: These wetlands provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-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 utilization.

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 BH is in close proximity to a an unnamed perennial RPW that flows into another perennial drainage canal RPW which flows into another perennial RPW named Brushy Creek and then into Lower Rocky Creek, A TNW. Therefore Wetland BI is expected to have a significant physical, chemical and biological effect on Lower Rocky Creek, a TNW.

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: An unnamed perennial stream RPW flows into a perennial drainage canal which flows into another perennial RPW (Brushy Creek) which flows directly or indirectly into the Lower Rocky Creek TNW per the USGS National Hydrography Dataset (last updated May 2006). 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 ⁸ 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: Wetland BH directly abuts an unnamed perennial stream that flows indirectly into the Lower Rocky Creek per the USGS National Hydrography Dataset- last updated May 2006		
		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: 0.30 acres (Wetland BH).		

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. Wetland BI is in close proximity to an unnamed perennial RPW that flows into indirectly into Lower Rocky Creek. Wetland BI may be connected to this unnamed RPW through shallow groundwater

Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

⁸See Footnote # 3.

Creek TNW. Provide acreage estimates for jurisdictional wetlands in the review area: 0.31 acres (Wetland BI). 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. Impoundments of jurisdictional waters.9 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: 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). Wetland BK is a stormwater retention pond that is isolated from the nearest RPW and TNW and is not expected to have any significant effects on the physical, chemical or biological integrity of the Lower Rocky Creek or any other TNW. Wetland ditch BG and wetlands BJ and BL are therefore being classified as isolated. 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

flows. Therefore Wetland BI is expected to have a significant physical, chemical and biological effect on Lower Rocky

judgment (check all that apply):

Lakes/ponds:

Non-wetland waters (i.e., rivers, streams):

acres.

width (ft).

linear feet

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ 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.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BG - BL	
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 su 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: Total of 1.30 acres (Stormwater retention pond BK, wetland ditch BG and wetlands BJ and BL)	ch
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. 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): AerialExpress 2008. Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/lanc cover 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 A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
В.	
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Florida County/parish/borough: Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.119595° N, Long82.463429° N. Universal Transverse Mercator: Name of nearest waterbody: Chapman Lake or Sweetwater Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: None Name of watershed or Hydrologic Unit Code (HUC): Chapman Lake Outlet/03100206 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 20, 2009. Field Determination. Date(s): October 6, 2009.
	CCTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
Th	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

b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or

Isolated (interstate or intrastate) waters, including isolated wetlands

Impoundments of jurisdictional waters

Wetlands:

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

A Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands BM, BN, BO and BP are not jurisdictional because they are hydrologically isolated from TNWs and

acres.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

> RPWs that flow directly or indirectly into TNWs. They are not expected to have any significant effects on the physical, chemical or biological integrity of any 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.

TNW

Identify TNW:

Summarize rationale supporting determination:

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 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

(i)	General	Area	Conditions

Watershed size: acres Drainage area: acres

Average annual rainfall: 52 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

Relationship with TNW: (a)

☐ Tributary flows directly into TNW.

Tributary flows through --- tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.

Project waters are **Pick List** river miles from RPW.

Project waters are aerial (straight) miles from TNW.

Project waters are aerial (straight) miles from RPW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

		Project waters cross or serve as state boundaries. Explain: N/A.		
		Identify flow route to TNW ⁵ :. 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:		
		Primary tributary substrate composition (check all that apply): Silts Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Herbaceous/50% Other. Explain:		
		Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: N/A. Tributary geometry: Tributary gradient (approximate average slope):		
	(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Describe flow regime: Other information on duration and volume:.		
		Surface flow is: Characteristics:		
		Subsurface flow: Explain findings: . Dye (or other) test performed: .		
		Tributary has (check all that apply): Bed and banks OHWM ⁶ (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 sediment sorting sediment deposition destruction of terrestrial vegetation the presence of wrack line sediment sorting scour multiple observed or predicted flow events abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched.		
		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 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.		
(iii)	Che	emical Characteristics:		

⁵ 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.

⁶A 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.

⁷Ibid.

		Explain: Unknown. dentify specific pollutants, if known:
	(iv) I	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 species. Explain findings: Aquatic/wildlife diversity. Explain findings
2.	Char	acteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
		Physical Characteristics: a) General Wetland Characteristics: Properties: Wetland size: Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Explain: Surface flow is: Characteristics: Both confined (within ditch banks) and sheetflow (non-ditched areas).
	,	Subsurface flow: Explain findings: Dye (or other) test performed:
		c) Wetland Adjacency Determination with Non-TNW: Directly abutting. Not directly abutting Discrete wetland hydrologic connection. Explain: cological connection. Explain: Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are river miles from TNW. Project waters are aerial (straight) miles from TNW. Flow is from: Estimate approximate location of wetland as within the floodplain.
	` (Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:. dentify specific pollutants, if known:
	(iii)]]] [Biological Characteristics. Wetland supports (check all that apply): River Representation of the property o
3.	analy	Acteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Approximatelyis being considered in the cumulative sis 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 ⁸ 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:
	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:
	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).
E.		PLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY

SUCH WATERS (CHECK ALL THAT APPLY):10

See Footnote # 3.

To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

To 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.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BM - BP 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): linear feet Tributary waters: 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). Wetlands BM, BN, BO and BP are isolated from the nearest TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of Lower Rocky Creek, Sweetwater Creek, the Hillsborough River or any other TNWs. Therefore they are being classified as isolated. 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): width (ft). linear feet. П Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: Total of 4.51 acres (Wetlands BM, BN, BO and BP) 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):

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BM - BP

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:

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:

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 ID Form Instructional Guidebook

1 1113	s form should be completed by following the instructions provided in Section 17 of the 3D 1 of in instructional Guidebook.
	<u>CTION I: BACKGROUND INFORMATION</u> 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: Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.119750° N, Long82.448853° N. Universal Transverse Mercator: Name of nearest waterbody: Thirteen Mile Creek and tributaries, then Cypress Creek, then the Hillsborough River Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hillsborough River Name of watershed or Hydrologic Unit Code (HUC): Thirteen Mile Creek/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 20, 2009. Field Determination. Date(s): October 6-7, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 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:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
	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 are quired]
	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 waters ² (RPWs) that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland BS) 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

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or

Wetlands: Wetland BS totaling 2.72 acres of Waters of the U.S.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetland BR is not jurisdictional because it is an artificial stormwater pond that is hydrologically isolated

acres.

Boxes checked below shall be supported by completing the appropriate sections in Section III below.
 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.

from TNWs and RPWs that flow directly or indirectly into TNWs. Wetlands BQ and BT are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. These wetlands are isolated and are not expected to have any significant effects on the physical, chemical or biological integrity of the Thirteen Mile Creek, Cypress Creek or the Hillsborough River TNW.

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 waterbody⁴ 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

(i) General Area Conditions: Watershed size: 1,686.7 acres Drainage area: 1,686.7 acres Average annual rainfall: 52 inches

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.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters are 5-10 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.
	Identify flow route to TNW ⁵ : Based on a desktop review Wetland BS directly abuts an unnamed perennial tributary stream that flows into the Thirteen Mile Creek RPW which flows into Cypress Creek RPW and then through wetlands to the Hillsborough River, a TNW. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Some portions appear natural and others appear ditched. Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream appear 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: Pick List perennial flows Estimate average number of flow events in review area/year: perennial 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank character of soil destruction of terrestrial vegetation the presence of wrack line shelving destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched.
	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;

⁵ 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. ⁶A 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. ⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BQ - BT physical markings/characteristics vegetation lines/changes in vegetation types. 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: Unknown. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Mabitat for: Federally Listed species. Explain findings: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the RPW Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (i) Physical Characteristics: General Wetland Characteristics: (a) Properties: Wetland size: 2.72 acres (Wetland BS) Wetland type. Explain: Emergent/forested-wetland scrub FLUCFCS code 631 Wetland quality. Explain: Fair to good based on their location within or connected to larger overall forested wetland stream system. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: **Perrenial flow**. Explain: 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: Wetland Adjacency Determination with Non-TNW: Directly abutting (Wetland BS directly abuts a perennial stream). Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 5-10 river miles from TNW. Project waters are 5-10 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): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%. 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: 1 wetland is being classified as adjacent to or abutting an RPW (Wetland BS). 1 stormwater retention pond (BR) and 2 wetlands are being classified as isolated (Wetlands BQ and BT).

Approximately 1 wetlands totaling (2.72 acres) is being considered in the cumulative analysis (Wetland BS)

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Wetland BS (Y) 2.72

Summarize overall biological, chemical and physical functions being performed: Wetland BS provides hydrologic detention and attenuation while also filtering pollutants. This wetland is also part of a larger network of wetlands and RPWs and non-RPWs that form a contiguous to semi-contiguous connection to TNWs in the region. As part of a larger system, this wetland provides some habitat, foraging, and refugia for wildlife utilization.

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: An unnamed perennial RPW flows into the Thirteen Mile Creek perennial RPW which flows into the Cypress Creek RPW and then through wetlands to the Hillsborough River TNW per the USGS National Hydrography Dataset (last updated May 2006). 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: approx. 110 linear feet by approx. 58 width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ 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: Wetland BS directly abuts an unnamed perennial stream that flows into the Thirteen Mile Creek perennial RPW which flows into the Cypress Creek RPW and then through wetlands to the Hillsborough River TNW per the USGS National Hydrography Dataset (last updated May 2006).
	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: 2.72 acres (Wetland BS).
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:
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

⁸See Footnote # 3.

	ject: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines sessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BQ - BT
	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). Stormwater retention pond BR and Wetlands BQ and BT are isolated from the nearest RPW and TNW by extensive uplands and residential development and are not expected to have any significant effects on the physical, chemical or biological integrity of the Hillsborough River TNW. Therefore they are being classified as isolated.
	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: Total of 0.80 acres (Stormwater retention pond BR and Wetlands BQ and BT)

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
¹⁰ 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.	SUP	*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:
	Ø	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.
	П	Data sheets prepared by the Corps:
	П	Corps navigable waters' study:
		U.S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org.
	20000000	☑ 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)
	\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: .

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BU - BW, CA - CO

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 INFORMA	HOIL	'n	٧
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- 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: Hillsborough City:
	Center coordinates of site (lat/long in degree decimal format): Lat. 28.114213° N. Long82.410250° N.
	Universal Transverse Mercator:
	Name of nearest waterbody: Cypress Creek and then the Hillsborough River
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hillsborough River
	Name of watershed or Hydrologic Unit Code (HUC): Cypress Creek/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
	different ID form

- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
 - Office (Desk) Determination. Date: December 21, 2009.
 - Field Determination. Date(s): October 7-12, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Ar	re no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the
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: .

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.	a. Indicate presence of waters of U.S. in review area (check all that apply): 1					
		TNWs, including territorial seas				
		Wetlands adjacent to TNWs				
	\boxtimes	Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs				
		Non-RPWs that flow directly or indirectly into TNWs				
	\boxtimes	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.	b. Identify (estimate) size of waters of the U.S. in the review area:					
	Non-v	wetland waters: linear feet: width (ft) and/or acres.				
	Wetla	nds: Total of 13.61 acres (Wetlands CA, CB, CCa, CD, CE, CF, CG, CH, CI, CK/CL, CM, CN and CO)				

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

A Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetlands BU, BV, BW, and CJ are not jurisdictional because they are hydrologically isolated from TNWs and

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

RPWs that flow directly or indirectly into TNWs. They are not expected to have any significant effects on the physical, chemical or biological integrity of any 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 waterbody⁴ 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

(i) General Area Conditions:

Watershed size: 49,238.3 acres
Drainage area: 49,238.3 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 2 tributaries before entering TNW.

Project waters are Pick List 5-10 river miles from TNW.

Project waters are Pick List 1 or less river miles from RPW.

Project waters are 5-10 aerial (straight) miles from TNW.

Project waters are 1 or less aerial (straight) miles from RPW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

	Project waters cross or serve as state boundaries. Explain: N/A.
	Identify flow route to TNW ⁵ :. The RPW consist of a portion of the Cypress Creek perennial stream which flows through wetlands to the Hillsborough River TNW. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: Cypress Creek is culverted to the south where it crosses under a narrow filled road along another transmission line easement.
	Tributary properties with respect to top of bank (estimate): Average width: feet 2.5 Average depth: feet 2.5 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:. Presence of run/riffle/pool complexes. Explain: N/A. Tributary geometry: relatively straight Tributary gradient (approximate average slope): 2%
(c)	Flow: Tributary provides for: Pick List Perennial Estimate average number of flow events in review area/year: perennial-continuous and 6-10
	Describe flow regime: Other information on duration and volume:.
	Surface flow is:. Characteristics: Confined .
	Subsurface flow: Explain findings: Unknown. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (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. 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 Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.

⁵ 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.

⁶A 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. 7lbid.

			Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines Polk-Hillsborough-Pinellas Transmission Line Wetlands BU – BW, CA - CO
			other (list):
	(iii)	Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Unknown. httify specific pollutants, if known:
	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: May provide foraging habitat for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings Moderately diverse due to larger overall forested wetland systems nearby, adjacent and downstream.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		rsical Characteristics: <u>General Wetland Characteristics:</u> Properties: Wetland size: Total of 13.61 acres (Wetlands CA, CB, CCa, CD, CE, CF, CG, CH, CI, CK/CL, CM, CN and CO)
			Wetland type. Explain: Emergent and forested Wetland quality. Explain: Fair to good based on their location within, adjacent to, or near larger overall forested wetland systems.
			Project wetlands cross or serve as state boundaries. Explain: .
		(b)	General Flow Relationship with Non-TNW: Flow is: Explain: Perennial.
			Surface flow is: Confined Characteristics: Both confined (within ditch banks) and sheetflow (non-ditched areas).
			Subsurface flow: Explain findings: Unknown. Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting (Wetlands CA, CB, CCa, CD, CE, CF and CN directly abut a perennial stream). ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: (Wetlands CG, CH, CI, CK, CL, CM and CO appear to have a hydrologic connection through shallow groundwater flows to Cypress Creek RPW which flows through
			wetlands to the Hillsborough River TNW.) ☑ Ecological connection. Explain: Wetlands CG, CH, CI, CK, CL, CM and CO together with the surrounding wetlands of Cypress Creek may provide foraging habitat for listed wading birds. ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are 5-10 river miles from TNW. Project waters are aerial 5-10 (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the floodplain. 100 - 500-year floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:. Water was moderately clear attify specific pollutants, if known:
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95% Habitat for:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BU - BW, CA - CO

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 13 wetlands are being considered in the cumulative analysis Total of 13.61 acres (Wetlands CA, CB, CCa, CD, CE, CF, CG, CH, CI, CK/CL, CM, CN and CO) For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts?	(Y/N)	Size (in acres)
CA (Y)	1.50	CH (N)	0.78	
CB (Y)	0.20	CI (N)	1.03	
CCa (Y)	0.98	CK/CL (N)	2.01	
CD (Y)	2.05	CM (N)	1.97	
CE (Y)	1.71	CN (Y)- RPW	itself0.03	
CF (Y)	0.62	CO (N)	0.50	
CG (N)	0.23	• •		

Summarize overall biological, chemical and physical functions being performed: These wetlands provide hydrologic detention and attenuation while also filtering pollutants. These wetlands are also part of a larger network of wetlands and RPWs and non-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 utilization.

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 CG, CH, CI, CK/CL, CM, CO are in close proximity to a perennial RPW that flows into Cypress Creek which flows through wetlands to the Hillsborough River TNW. Therefore these wetlands are expected to have a significant physical, chemical and biological effect on the Hillsborough River.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines
Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BU – BW, CA - CO

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: Wetland CN (roadside ditch) is connected through culverts to wetlands to the south that connect to the Cypress Creek RPW. This ditch contains hydrophytic vegetation and hydric soils.	
		Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: 95- Cypress Creek linear feet 25-30- Cypress Creek width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .	
	3.	Non-RPWs ⁸ 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 CA, CB, CCa, CD, CE, CF directly abut a perennial Cypress Creek stream that flows through wetlands to the Hillsborough River per the USGS National Hydrography Dataset.	
		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: 7.06 acres (Wetlands CA, CB, CCa, CD, CE, CF)	
	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. Wetlands CG, CH, CI, CK/CL, CM, CO are in close proximity to a perennial RPW that flows into Cypress Creek which flows through wetlands to the Hillsborough River TNW. Therefore these wetlands are expected to have a significant physical, chemical and biological effect on the Hillsborough River.	

Provide acreage estimates for jurisdictional wetlands in the review area: 6.52 acres (CG, CH, CI, CK/CL, CM and CO)

⁸See Footnote # 3.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands BU – BW, CA - CO</u>

	6. We	Wetlands adjacent to non-RPWs that flow directly or indirectly into 1 NWs. 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.
	Pro	vide estimates for jurisdictional wetlands in the review area: acres.
		poundments of jurisdictional waters. ⁹ 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.	DEGRA SUCH V whice from whice Inter	TED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY WATERS (CHECK ALL THAT APPLY): 10 ch are or could be used by interstate or foreign travelers for recreational or other purposes. In which fish or shellfish are or could be taken and sold in interstate or foreign commerce. The are or could be used for industrial purposes by industries in interstate commerce. The state isolated waters. Explain: The proof of the country of
	Identify	water body and summarize rationale supporting determination:
	Trib Othe	estimates for jurisdictional waters in the review area (check all that apply): utary waters: linear feet width (ft). er non-wetland waters: acres. dentify type(s) of waters: . lands: acres.
F.	☐ If p We Rev ☐I "Migrato any sign Hillsbor	JRISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): otential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers tland Delineation Manual and/or appropriate Regional Supplements. iew 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 bry Bird Rule" (MBR). Wetlands BU, BV, BW, and CJ are isolated from the nearest TNW and are not expected to have ifficant effects on the physical, chemical or biological integrity of Lower Rocky Creek, Sweetwater Creek, the rough River or any other TNWs. Therefore they are being classified as isolated. BW is a stormwater retention pond. to located over a half mile from the nearest RPW with no connection to it.
		ters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:. er: (explain, if not covered above):
	factors (injudgment) Nor Lak	acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional t (check all that apply): n-wetland waters (i.e., rivers, streams): linear feet width (ft). tes/ponds: acres. ter non-wetland waters: acres. List type of aquatic resource: tlands: acres

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
¹⁰ 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.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands BU – BW, CA - CO</u>

Provide	e acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such
<u>a f</u> indin	g is required for jurisdiction (check all that apply):
·	on-wetland waters (i.e., rivers, streams): linear feet, width (ft).
***************************************	kes/ponds: acres.
	her non-wetland waters: acres. List type of aquatic resource:
⊠ W	etlands: Total of 0.28 acres (Wetlands BU, BV, BW, and CJ)
SECTION 1	IV: DATA SOURCES.
550110	
A. SUPPOI	RTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked
	uested, appropriately reference sources below):
⊠ M:	aps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
	ata 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.
Da 🔲	ata sheets prepared by the Corps:
Co	orps navigable waters' study: .
	S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org.
_	USGS NHD data.
	USGS 8 and 12 digit HUC maps.
	S. Geological Survey map(s). Cite scale & quad name:.
	SDA Natural Resources Conservation Service Soil Survey. Citation:
⊠ Na	tional wetlands inventory map(s). Cite name: USFWS, HRC 2008; www.fgdl.org.
Stage St	ate/Local wetland inventory map(s): .
	EMA/FIRM maps: .
	0-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
🛛 Ph	otographs: Aerial (Name & Date): AerialExpress 2008.
-	or Other (Name & Date):
	evious determination(s). File no. and date of response letter:
,	pplicable/supporting case law: .
-	oplicable/supporting scientific literature:
	her information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land
cover d	ata, 2004.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BX and BZ

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.

CECTION I.	DACKCDOUND	INDODMATION
SECTION I:	BACKGRUUND	INFORMATION

- REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C.	PROJECT LOCA	ATION AND BACKGROUND INFORMATION:
	State: Florida	County/parish/borough: Hillsborough City:
	Center coordinates	of site (lat/long in degree decimal format): Lat. 28.119355° N, Long82.426702°
		Universal Transverse Mercator:

Name of nearest waterbody: Cypress Creek, then the Hillsborough River

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hillsborough River

Name of watershed or Hydrologic Unit Code (HUC): Lake Hanna Outlet/03100205

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

The 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.

W.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: December 21, 2009.
- Field Determination. Date(s): October 7, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Ar	e no "navigable waters of the U.S."	within Rivers and Harbors	Act (RHA) jurisdiction	(as defined by 33 CFR page 1)	art 329) in the
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:

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.	Indica	te presence of waters of U.S. in review area (check all that apply):
		TNWs, including territorial seas
		Wetlands adjacent to TNWs
		Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs
		Non-RPWs that flow directly or indirectly into TNWs
	\boxtimes	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs (Wetland BZ)
		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. Wetlands: Wetland BZ totaling 3.25 acres of Waters of the U.S.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetland BX is not jurisdictional because it is an artificial stormwater pond that is hydrologically isolated

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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: <u>Progress Energy Florida</u>, Inc. Levy Nuclear Plant – Transmission Lines
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from TNWs and RPWs that flow directly or indirectly into TNWs. These wetland is isolated and is not expected to have any significant effects on the physical, chemical or biological integrity of the Cypress Creek RPW or the Hillsborough River TNW.

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 waterbody⁴ 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

(i) General Area Conditions:
Watershed size: 8,274.1 acres
Drainage area: 8,274.1 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 5-10 aerial (straight) miles from TNW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

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	Project waters are 1 (or less) aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: N/A.
	Identify flow route to TNW ⁵ : Based on a desktop review Wetland BZ directly abuts an unnamed intermittent tributary stream that flows into the Cypess Creek RPW which flows through wetlands to the Hillsborough River, a TNW. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Some portions appear natural and others appear ditched. Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream appear 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: .
t,	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: Pick List intermittent flows 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation shelving destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting sediment deposition multiple observed or predicted flow events water staining abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched.
	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; vegetation lines/changes in vegetation types.

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BX and BZ 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: Unknown. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Mabitat 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 larger overall forested wetland systems surrounding the RPW Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW (i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: 3.25 acres (Wetland BZ) Wetland type. Explain: Emergent/forested- wetland scrub FLUCFCS code 631 Wetland quality. Explain: Fair to good based on its location within or connected to larger overall forested wetlands downstream. Project wetlands cross or serve as state boundaries. Explain: General Flow Relationship with Non-TNW: Flow is: intermittent flow. Explain: Per USGS National Hydrographic Dataset- last updated May 2006 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: Wetland Adjacency Determination with Non-TNW: Directly abutting (Wetland BZ directly abuts an intermittent stream). ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are 5-10 river miles from TNW. Project waters are 5-10 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): Riparian buffer. Characteristics (type, average width): ∀ Vegetation type/percent cover. Explain: emergent and forested wetland/95%. ☐ Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:

Aquatic/wildlife diversity. Explain findings:

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3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 1 wetland is being classified as adjacent to or abutting an RPW (Wetland BZ). 1 stormwater retention pond (Wetland BX) is being classified as isolated.

Approximately 1 wetlands totaling (3.25 acres) is being considered in the cumulative analysis (Wetland BZ)

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Wetland BZ (Y) 3.2

Summarize overall biological, chemical and physical functions being performed: Wetland BZ provides hydrologic detention and attenuation while also filtering pollutants. This wetland is also part of a larger network of wetlands and RPWs and non-RPWs that form a contiguous to semi-contiguous connection to TNWs in the region. As part of a larger system, this wetland provides some habitat, foraging, and refugia for wildlife utilization.

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:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BX and BZ TNWs: linear feet width (ft), Or, acres. Wetlands adjacent to TNWs: acres. 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: An unnamed intermittent RPW flows into the Cypress Creek RPW and then through wetlands to the Hillsborough River TNW per the USGS National Hydrography Dataset (last updated May 2006). Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: (ft). Other non-wetland waters: acres. Identify type(s) of waters: Non-RPWs⁸ 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: 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: Wetland BZ directly abuts an unnamed intermittent stream that flows into an unnamed intermittent RPW which flows into the Cypress Creek RPW and then through wetlands to the Hillsborough River TNW per the USGS National Hydrography Dataset (last updated May 2006). Provide acreage estimates for jurisdictional wetlands in the review area: 3.25 acres (Wetland BZ). 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: 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.

⁸See Footnote # 3.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BX and BZ

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. If 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). Stormwater retention pond BX is isolated from the nearest RPW and TNW by extensive uplands and residential development and is not expected to have any significant effects on the physical, chemical or biological integrity of the Hillsborough River TNW. Therefore it is being classified as isolated.
	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: Total of 0.30 acres (Stormwater retention pond BX)

SECTION IV: DATA SOURCES.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
¹⁰ 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.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines
Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands BX and BZ

A.	SUP	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked
		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.
		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: .
	\boxtimes	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: .
	\boxtimes	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
	COV	er data. 2004.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines</u> Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands CP and CQ

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: BACKGROUN	ID INFORMATION
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A. REPORT C	OMPLEHON	DAILFUR	APPROVED	JURISDICTIONAL	DETERMINATION (JD
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	(02)
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER:
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Florida County/parish/borough: Hillsborough City: Center coordinates of site (lat/long in degree decimal format): Lat. 28.101757° N., Long82.386125° W. Universal Transverse Mercator: Name of nearest waterbody: Trout Creek and the Hillsborough River Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Hillsborough River Name of watershed or Hydrologic Unit Code (HUC): Trout Creek/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 21, 2009. Field Determination. Date(s): October 12, 2009.
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the riew 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:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
	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 are equired]
	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 waters ² (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 (With a Significant Nexus: Wetland CP) 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. Wetlands: Wetland CP totaling 0.72 acres of Waters of the U.S.
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

^{2.} Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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.

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Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetland CQ is not jurisdictional because it is hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. Wetland CQ is isolated and is not expected to have any significant effects on the physical, chemical or biological integrity of the Hillsborough River TNW.

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 waterbody⁴ 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

(i) General Area Conditions: Watershed size: 14,964.5 acres

Drainage area: 14,964.5 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 1 tributary before entering TNW.

Project waters are 1-2 river miles from TNW. Project waters are 1-2 river miles from RPW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u> Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands CP and CQ</u>

Project waters are 1-2 aerial (straight) miles from TNW. Project waters are 1-2 aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain: N/A.

Identify flow route to TNW⁵: Based on a desktop review, Wetland CP appears to be hydrologically connected to Trout Creek indirectly through culverts and adjacent wetlands. Trout Creek (a perennial RPW) and adjacent wetlands and a perrenial RPW SWFWMD ditch flow through wetlands to the Hillsborough River TNW. If nothing else Wetland CP is adjacent to an RPW which flows directly or indirectly to the Hillsborough River TNW.

	Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Some portions appear natural and others appear ditched. Artificial (man-made). Explain: Manipulated (man-altered). Explain: Based on a review of aerial photography, portions of the stream/ditch appear to be ditched and culverted.
	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: Pick List perennial flows Estimate average number of flow events in review area/year: continuous - perennial 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 ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation shelving destruction of terrestrial vegetation the presence of wrack line vegetation matted down, bent, or absent sediment sorting sediment sorting sediment deposition multiple observed or predicted flow events abrupt change in plant community other (list): Discontinuous OHWM. Explain: May be less evident where ditched.
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Mean High Water Mark indicated by:

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands CP and CQ ☐ survey to available datum; ☐ physical markings; oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics vegetation lines/changes in vegetation types. ☐ 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: Unknown. Identify specific pollutants, if known: (iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): ■ Wetland fringe. Characteristics: Mabitat for: Federally Listed species. Explain findings: May provide foraging areas for wood storks. Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Diverse due to larger overall forested wetland systems surrounding the Trout Creek RPW Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW **Physical Characteristics:** General Wetland Characteristics: Properties: Wetland size: 0.72 acres (Wetland CP) Wetland type. Explain: Emergent Wetland quality. Explain: Fair to good based on their location within or connected to larger overall forested wetland system but poor due to high levels of exotic water primrose overgrowing the wetland. Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Perrenial flow. Explain: Based on a desktop review, Wetland CP appears to be hydrologically connected to Trout Creek indirectly through culverts and adjacent wetlands. Trout Creek (a perennial RPW) and adjacent wetlands and a perrenial RPW SWFWMD ditch flow through wetlands to the Hillsborough River TNW. If nothing else Wetland CP is adjacent to an RPW which flows directly or indirectly to the Hillsborough River TNW. Surface flow is: Confined Characteristics: Both confined (within ditch banks) and sheetflow (non-ditched areas). Subsurface flow: Unknown. Explain findings: Dve (or other) test performed: (c) 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 1-2 river miles from TNW. Project waters are 1-2 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):

Riparian buffer. Characteristics (type, average width):

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✓ Vegetation type/percent co	over. Explain: emergent	wetland/95%.	
☐ Habitat for:			
☐ Federally Listed specie	es. Explain findings:		
☐ Fish/spawn areas. Exp	lain findings: .		
Other environmentally	-sensitive species. Expla	in findings: .	
☐ Aquatic/wildlife divers	sity. Explain findings:	•	
perennial flow(Wetland CP).	1 wetland is being classi ling (0.72 acres) is being	sis: I wetland is being classified a fied as isolated (Wetlands CQ). considered in the cumulative analy	•
<u>Directly abuts? (Y/N)</u> Wetland CP (N)	Size (in acres) 0.72	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: This wetland provides hydrologic detention and attenuation while also filtering pollutants. This wetland is also part of a larger network of wetlands and RPWs and non-RPWs that form a contiguous to semi-contiguous connection to TNWs in the region. As part of a larger system, this wetland provides some habitat, foraging, and refugia for wildlife utilization.

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:.

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: Based on a desktop review, Wetland CP appears to be hydrologically connected to Trout Creek indirectly through culverts and adjacent wetlands. Trout Creek (a perennial RPW) and adjacent wetlands and a perrenial RPW SWFWMD ditch flow through wetlands to the Hillsborough River TNW. If nothing else Wetland CP

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is adjacent to an RPW which flows directly or indirectly to the Hillsborough River TNW. Therefore Wetland CP is expected to have a significant physical, chemical and biological effect on the Hillsborough River, a TNW.

Đ.		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. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Based on a desktop review, Trout Creek (a perennial RPW) and adjacent wetlands and a perrenial RPW SWFWMD ditch flow through wetlands to the Hillsborough River TNW per the USGS National Hydrography Dataset (last updated May 2006). 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 ⁸ 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:
	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. Wetland BI is in close proximity to an unnamed perennial RPW that flows into indirectly into Lower Rocky Creek. Wetland BI may be connected to this unnamed RPW through shallow groundwater flows. Therefore Wetland BI is expected to have a significant physical, chemical and biological effect on Lower Rocky Creek TNW.
		Provide acreage estimates for jurisdictional wetlands in the review area: 0.72 acres (Wetland CP)

⁸See Footnote # 3.

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	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.	DE SU	DLATED [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. Interstate isolated waters. Explain: Other factors. Explain:
	Ide	entify water body and summarize rationale supporting determination:
	Pro	ovide 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.	⊠ ⊠ ''M sig	ON-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 digratory Bird Rule" (MBR). Wetland CQ is isolated from the nearest RPW and TNW and is not expected to have any inficant effects on the physical, chemical or biological integrity of the Hillsborough River or any other TNW. Wetland CQ is prefore being classified as isolated.
		Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:. Other: (explain, if not covered above):
	fac	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR tors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (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:
		ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such nding is required for jurisdiction (check all that apply):

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.

	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: 0.11 acres (Wetland CQ)
SECTIO	ON IV: DATA SOURCES.
A SUP	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked
	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.
L'A	Office concurs with data sheets/delineation report.
	Office does not concur with data sheets/delineation report.
	Data sheets prepared by the Corps: .
冒	Corps navigable waters' study: .
岗	U.S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org.
Kan	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:
同	100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	Photographs: Aerial (Name & Date): AerialExpress 2008.
4	or Other (Name & Date):
	Previous determination(s). File no. and date of response letter:
	Applicable/supporting case law: .
	Applicable/supporting scientific literature: .
$\overline{\boxtimes}$	Other information (please specify): Florida Atlas & Gazetteer, 2006; Southwest Florida Water Management District land use/land
cove	er data, 2004.

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B. ADDITIONAL COMMENTS TO SUPPORT JD: .

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands CR-DDa

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:	BAC	CKGROUND	INFORMA	TION
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- REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

\mathbf{c}	PROJECT I	OCATION	AND BACKGROUND	INFORMATION:

State: Florida County/parish/borough: Hillsborough City:

Center coordinates of site (lat/long in degree decimal format): Lat. 28.088765° N, Long. -82.350249° 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): Hillsborough River/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 21, 2009.

Field Determination. Date(s): October 12-14, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review 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.

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.

ì.	Indicate presence	of waters of U	J.S. in	review area	(check all that app	ly): 1

TNWs, including territorial seas (Wetland CT- the Hillsborough River)

Wetlands adjacent to TNWs (CV, CW, CX, CY, CZ, DB, DC and DDa)

Relatively permanent waters2 (RPWs) that flow directly or indirectly into TNWs (Wetlands CU, CS and DA)

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

Wetlands: Total of 7.44 acres (Wetlands CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DDa)

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Wetland CR is a stormwater retention pond and is not jurisdictional because it is hydrologically isolated from

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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: <u>Progress Energy Florida</u>, <u>Inc. Levy Nuclear Plant – Transmission Lines</u>
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TNWs and RPWs that flow directly or indirectly into TNWs. Wetland CR is not expected to have any significant effects on the physical, chemical or biological integrity of any 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: Hillsborough River including Wetland CT which is a portion of the Hillsborough River.

Summarize rationale supporting determination: The Hillsborough River is a navigable waterway that is and has been used for interstate commerce and flows into Tampa Bay and then Waters of the Gulf of Mexico.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Wetlands CV, CW, CX, CY, CZ, DB, DC and DDa are wetlands considered adjacent to the Hillsborough River TNW. Wetlands CV, CW, CX, CY and DB are directly connected to larger portions of their respective wetlands which directly abut the Hillsborough River. Wetlands CZ, DC and DDa are located adjacent to the Hillsborough River, but do not abut it. They are separated by a very short distances of uplands including one separated by a road and two separated by forested uplands. They may or may not have shallow groundwater flows to the TNW or its abutting wetlands, but they are in close enough proximity that they are expected to contribute to the physical, biological and chemical integrity of the Hillsborough River TNW. During a flood or storm event, they could easily carry nutrients or pollutants to the adjacent Hillsborough River TNW. They may also provide foraging areas for wading birds and wildlife in the area.

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 waterbody⁴ 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

(i) General Area Conditions:

Watershed size: acres
Drainage area: acres

Average annual rainfall: inches Average annual snowfall: inches

(ii) Physical Characteristics:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

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(a)	Relationship with TNW: Tributary flows directly into TNW. Tributary flows through tributaries before entering TNW.
	Project waters are Pick List river miles from TNW. Project waters are Pick List river miles from RPW. Project waters are aerial (straight) miles from TNW. Project waters are aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain:
	Identify flow route to TNW ⁵ :. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: Cypress Creek is culverted to the south where it crosses under a narrow filled road along another transmission line easement.
	Tributary properties with respect to top of bank (estimate): Average width: feet Average depth: feet Average side slopes:
	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: Tributary gradient (approximate average slope):
(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year:
	Describe flow regime: Other information on duration and volume:.
	Surface flow is:. Characteristics:
	Subsurface flow: Explain findings: Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (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. Explain:

⁵ 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.

⁶A 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.

⁷Ibid.

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			High Tide Line indicated by: High Tide Line indicated by: Oil or scum line along shore objects In physical markings/characteristics Diddle gauges Other (list): High Tide Line indicated by: Mean High Water Mark indicated by: Survey to available datum; physical markings; vegetation lines/changes in vegetation types.
	(iii)	Cha	emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: ntify specific pollutants, if known:
	(iv)	Bio	logical 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 species. Explain findings: Aquatic/wildlife diversity. Explain findings
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size:
			Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: . Explain:
			Surface flow is: Characteristics: Both confined (within ditch banks) and sheetflow (non-ditched areas).
			Subsurface flow: Explain findings Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting (☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: Wetlands ☐ Separated by berm/barrier. Explain:
	•	(d)	Proximity (Relationship) to TNW Project wetlands are river miles from TNW. Project waters are aerial (straight) miles from TNW. Flow is from: Estimate approximate location of wetland as within the floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: emergent and forested wetland/95%

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands CR-DDa ☐ Habitat for: ☐ Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Approximately -- wetlands 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):
 - TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:
 ▼ TNWs: 100 linear feet 140 width (ft), Or, 0.41 acres.
 ▼ Wetlands adjacent to TNWs: 6.79 acres. (Wetlands CV, CW, CX, CY, CZ, DB, DC and DDa)
 - 2. RPWs that flow directly or indirectly into TNWs.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands CR-DDa</u>

	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Wetland ditch CS is a perennial ditch managed by the SWFWMD and is indicated as a perennial stream on the USGS National Hydrography Dataset- last updated May 2006. It flows directly into the Hillsborough River TNW.
	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: Wetland RPW ditche CU flows directly into the Hillsborough River TNW as well, but appears to be intermittent in nature. Wetland RPW ditch DA connects two forested wetlands, the downstream of which directly abuts the Hillsborough River TNW. Wetland ditch DA appears to be an intermittent RPW. Both ditches are evident on aerial photographs and contained hydric vegetation and soils.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: CS, CU, DA: 240, 150, 100 linear feet CS, CU, DA: 20, 9, 6 width (ft). Other non-wetland waters: Identify type(s) of waters:
3.	Non-RPWs ⁸ 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:
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:
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.

⁸See Footnote # 3.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands CR-DDa

	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). Wetland CR is a stormwater retention pond isolated from the nearest TNW and is not expected to have any significant effects on the physical, chemical or biological integrity of the Hillsborough River TNW. Therefore it is being classified as isolated.
	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: Total of 0.32 acres (Stormwater retention pond CR)

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):

 ⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
 10 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.

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\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.		
	Office concurs with data sheets/delineation report.		
1000	Office does not concur with data sheets/delineation report.		
	Data sheets prepared by the Corps: .		
	Corps navigable waters' study:		
\boxtimes	U.S. Geological Survey Hydrologic Atlas: USGS 2006; www.fgdl.org.		
	☑ USGS NHD data.		
	☑ USGS 8 and 12 digit HUC maps.		
Ш	U.S. Geological Survey map(s). Cite scale & quad name:.		
Ш	USDA Natural Resources Conservation Service Soil Survey. Citation:		
\boxtimes	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	cover data, 2004.		

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands DE- DI and DK

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

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C	PROJECT I	OCATION	AND BACKGROUND	INFORMATION:
••	INVOESTI	A/C/A	AUT DAG AUTOUIT	HAROKINIA LION:

State: Florida County/parish/borough: Hillsborough City:

Center coordinates of site (lat/long in degree decimal format): Lat. 28.264952° N. Long. -82.264952° W.

Universal Transverse Mercator:

Name of nearest waterbody: Flint Creek and tributaries

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Flint Creek and then the Hillsborough

Name of watershed or Hydrologic Unit Code (HUC): Flint Creek/03100205

Marcheck 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 21, 2009.

Field Determination. Date(s): October 15, 2009.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There Are "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review 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: Flint Creek and the Hillsborough River are navigable waterways and have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

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.

и.	. Indicate presence of waters of 0.5. In review area (check all that apply):		
	\boxtimes	TNWs, including territorial seas (Wetland DF- Flint Creek)	
	\boxtimes	Wetlands adjacent to TNWs (Wetland DE)	
		Relatively permanent waters ² (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.
Wetlands: Total of 0.73 acres (Wetlands DE and DF)

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² 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: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands DE- DI and DK</u>

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: Stormwater retention pond DK and Wetlands DG, DH and DI are not jurisdictional because they are hydrologically isolated from TNWs and RPWs that flow directly or indirectly into TNWs. They are not expected to have any significant effects on the physical, chemical or biological integrity of any 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: Flint Creek TNW including Wetland DF which is a portion of the Flint Creek. The Flint Creek TNW flows into the Hillsborough River TNW.

Summarize rationale supporting determination: Flint Creek and the Hillsborough River are navigable waterways that are and/or have been used for interstate commerce. The Hillsborough River flows into Tampa Bay and then into the Gulf of Mexico.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Wetland DE is adjacent to the Hillsborough River TNW and may have a shallow groundwater flow connection to it.

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 waterbody⁴ 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

(i) General Area Conditions:

Watershed size: acres
Drainage area: acres

Average annual rainfall: inches Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

Project: <u>Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines</u>
Assessment Area: <u>Polk-Hillsborough-Pinellas Transmission Line Wetlands DE- DI and DK</u>

	☐ Tributary flows through tributaries before entering TNW.
	Project waters are Pick List river miles from TNW. Project waters are Pick List river miles from RPW. Project waters are aerial (straight) miles from TNW. Project waters are aerial (straight) miles from RPW. Project waters cross or serve as state boundaries. Explain:.
	Identify flow route to TNW ⁵ :. Tributary stream order, if known:
(b)	General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain: Cypress Creek is culverted to the south where it crosses under a narrow filled road along another transmission line easement.
	Tributary properties with respect to top of bank (estimate): Average width: feet Average depth: feet Average side slopes:
	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: Tributary gradient (approximate average slope):
(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year:
	Describe flow regime: Other information on duration and volume:.
	Surface flow is:. Characteristics:
	Subsurface flow:. Explain findings: Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (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 sediment sorting sediment down, bent, or absent leaf litter disturbed or washed away sediment deposition multiple observed or predicted flow events water staining 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):

⁵ 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.

⁶A 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.

⁷Ibid.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands DE-DI and DK High Tide Line indicated by: Mean High Water Mark indicated by: oil or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings; physical markings/characteristics vegetation lines/changes in vegetation types. ☐ 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 species. Explain findings: Aquatic/wildlife diversity. Explain findings Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW **Physical Characteristics:** (a) General Wetland Characteristics: Properties: Wetland size: Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: . Explain: Surface flow is: Characteristics: Both confined (within ditch banks) and sheetflow (non-ditched areas). Subsurface flow: Explain findings Dye (or other) test performed: (c) Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting (☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Wetlands Separated by berm/barrier. Explain: (d) Proximity (Relationship) to TNW Project wetlands are river miles from TNW. Project waters are aerial (straight) miles from TNW. Flow is from: . Estimate approximate location of wetland as within the 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:

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands DE- DI and DK				
		☐ 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 wetlands 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.	SIC	SNIFICANT NEXUS DETERMINATION		
	by a of a wet Cor of v wet trib	ignificant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity in TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent lands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. siderations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow eater in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent lands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a butary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or side of a floodplain is not solely determinative of significant nexus.		
		we connections between the features documented and the effects on the TNW, as identified in the Rapanos Guidance and cussed 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?		
	Not bel	te: the above list of considerations is not inclusive and other functions observed or known to occur should be documented ow:		
	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.		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: 30 width (ft), by 100 feet length Or, 0.21 acres. (Wetland DF) Wetlands adjacent to TNWs: 0.52 acres. (Wetland DE)		
	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: Non-RPWs8 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 Other non-wetland waters: acres. Identify type(s) of waters: 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: 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: 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. Impoundments of jurisdictional waters.9 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).

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines

Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands DE- DI and DK

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant – Transmission Lines
Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands DE- DI and DK

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). Stormwater retention pond DK and wetlands DG, DH and DI are isolated from the nearest TNW and are not expected to have any significant effects on the physical, chemical or biological integrity of Flint Creek or the Hillsborough River TNWs. Therefore they are being classified as isolated.
	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: Total of 1.92 acres (Stormwater retention pond DK and Wetlands DG, DH and DI)
SE(CTION 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.

¹⁰ 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.

Project: Progress Energy Florida, Inc. Levy Nuclear Plant - Transmission Lines
Assessment Area: Polk-Hillsborough-Pinellas Transmission Line Wetlands DE- DI and DK

	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:
\boxtimes	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
cov	er data, 2004.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Site/Project Name	Application Numbe	r		Assessment Area Name or Number			
Progress Energy Florida, Inc./Levy N Transmission Lines/PHP Transmi					Wetlands 51, 52, 93, 98, 118, S, DF		
FLUCCs code 510 - Streams and Waterways	Further classifica	ion (optional) Impa			at or Mitigation Site?	Assessment Area Size 0.78 acres (51=0.10, 52=0.15, 93=0.06, 98=0.07, 118=0.06, S=0.13, DF=0.21)	
Basin/Watershed Name/Number Affect	ed Waterbody (Clas	ss)	Special Classificati	on (i.e.C	OFW, AP, other local/state/federal	designation of importance)	
Tampa Bay (03100206) and Hillsborough River (03100205)			None				
Geographic relationship to and hydrologi	connection with	wetlands, other su	urface water, uplai	nds			
Hydrologically connected to other wetland and cleared transmission line ROW	ds/surface waters	outside the transr	mission line ROW	. Surro	ounded by upland and v	vetland forest, pasture,	
Assessment area description							
Streams and waterways vegetated with r (Cephalanthus occidentalis), sedges (Cy punctatum), pickerelweed (Pontederia co styraciflua), red maple (Acer rubrum), ar mutica), wild taro (Colocasia esculenta),	perus sp.), coasta ordata), wax myrtl nd laurel oak (Que	al plain willow (Sa le (<i>Myrica cerifera</i> ercus laurifolia). C	<i>lix caroliniana</i>), liv), cinnamon fern (re oak (Osmu	(Quercus virginiana), s Inda cinnamomea), swe	martweed (<i>Polygonum</i> etgum (<i>Liquidambar</i>	
Significant nearby features			Uniqueness (co landscape.)	nsider	ing the relative rarity in	relation to the regional	
Existing transmissi	on line ROW		Not unique				
Functions			Mitigation for pre	vious	permit/other historic use	:	
Widlife habitat, water conveyance, flo	od attenuation, ac	quifer recharge	N/A				
Anticipated Wildlife Utilization Based on that are representative of the assessmen be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Wading birds, raccoon, fish, various	amphibians and I	herpetofauna	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).				
Observed Evidence of Wildlife Utilization	(List species dire	ctly observed, or o	I other signs such a	s track	ks, droppings, casings, r	nests, etc.):	
gloss	y ibis, white ibis, d	downy woodpecke	r, bluegill, mosqui	tofish,	apple snails		
Additional relevant factors: Assessment conducted by:			Assessment date	e(s):			
M. Arrants, J. Styer, S. Rizzo, K. Bullock			9/25/09, 10/6/2009				

Site/Proje	ect Name			Application Number		Assessment Area	a Name or Number		
	ogress Energy		c./Levy Nuclear Plant -				, 52, 93, 98, 118, S, DF		
		Lines/PHF	P Transmission Line		<u> </u>				
Impact or	Mitigation			Assessment conducted by: Assessment date:) :		
		Impact -	Fill	M. Arrants, J. Styer, S. Rizzo	, K. Bullock	9/25/	2009, 10/6/2009		
Scori	ng Guidance	\neg	Optimal (10)	Moderate(7)	Mi	nimal (4)	Not Present (0)		
	coring of each			Condition is less than		HOLT TESETT (0)			
	is based on wl		Condition is optimal and	fully supports optimal, but sufficient to wetland/surface water we					
	suitable for th								
• .	etland or surfa	ice	functions	wetland/surface	fu	ınctions	water functions		
Wate	er assessed			waterfunctions			<u> </u>		
	0(6)(a) Location andscape Supp or		Individual parameter scores: disturbance from surrounding paragrass; c) Wildlife access cleared landscape; d) function other habitats; e) Impacts to cleared transmission line RC	port variable is somewhat redu a) Support to wildlife listed in g development; b) Invasive exe to and from outside = 7, sligh ons that benefit fish & wildlife d wildlife listed in Part 1 by outsi DW; f) Hydrologically connected areas on assessment area = 7	Part 1 by or otic species tly decrease ownstream- ide land use d areas dow	utside habitats = 7 = 7, minimal cove ed due to limitation distance or barrie s = 7, somewhat instream of asses	 slightly reduced due to erage of wild taro and is imposed by surrounding rs = 7, areas adjacent to reduced due to surroundin sment area = 8; g) 		
	(b)Water Envi n/a for upland		development; b) water level ideposition = 8, limited erosio of assessment area; g) hydrohydrological requirements = degradation = 7, some indica somewhat elevated nutrients	levels and flows = 8, typical of indicators = 7; c) soil moisture on noted; e) evidence of fire his plogic stress on vegetation = 7 7, foraging habitat; i) vegetativation of high nutrients, exotic significant due to algal growth at ave, wave energy, currents and	= 8, consist story = N/A; , minimal; h e species to pecies; j) dir nd nuisance	ent with expected f) vegetation com) use by animal speciant of and assigned to be expected by the control of t	; d) soil erosion or munity zonation = 8, typica pecies with specific ociated with water quality f water quality = 7,		
	(c)Community Vegetation an		parameter scores: a) plant comaintenance typically remover or other invasive plant species	riable is slightly reduced due to ommunity species in the canop es shrub/canopy stratum, non- es = 7, moderate coverage of p	oy, shrub, or desirable w paragrass, w	ground stratum = etland species provild taro, rattlebox	7, transmission line esent; b) invasive exotics ; c) regeneration and		
2. E	Benthic Comm	unity		ransmission line ROW is main ty and quality of coarse woody					
			• · · · · · · · · · · · · · · · · · · ·	a, somewhat reduced due to m					
v/o pres o	or		alteration of community struc	cture by routine maintenance; I	n) topograph	nic features = 7, ty	pical of system, altered		
current		with	due to ROW clearing; i) siltat	tion or algal growth in submerg	jed aquatic į	plant communities	s = N/A		
7		0							
Score = s	um of above sc	ores/30 (if	If preservation as mitig	ation,		For impact asses			
	lands, divide by	20)	Preservation adjustme	nt factor =		delta x acres = -0			
current	e	with				and 93); -0.70 x 0			
r w/o pre	i	with	Adjusted mitigation del	ta =		and DF); total of FL of 0.09	v. 13 acres and		
0.70		0			total	1 2 01 0.03			
			If mitigation			or mitigation asse	sement areas		
De	łta = [with-cum	rent]	Time lag (t-factor) =			or mugation asse	SSINCIII dieds		
	-0.70		Risk factor =		RFG	= delta/(t-factor x	risk) =		
			4						

Site/Project Name		Application Numbe	Number Assessment Area Na			or Number	
Progress Energy Florida, Inc./L Transmission Lines/PHP Tra					Wetlands 49	/49A, CD, CT	
FLUCCs code	Further classifica	ition (optional)		Impac	t or Mitigation Site?	Assessment Area Size	
510 - Streams		n River (Wetland C streams/waterway	* .		Existing Condition	2.51 acres (49/49A=0.05, CD=2.05, CT=0.41)	
Basin/Watershed Name/Number	Affected Waterbody (Class	ss)	Special Classificati	on (i.e.C	DFW, AP, other local/state/federal	designation of importance)	
Tampa Bay (03100206) and Hillsborough River (03100205)				Wet	tland CD and CT are OF	- Ws	
Geographic relationship to and hyd	rologic connection with	wetlands, other su	urface water, uplai	nds			
Hydrologically connected to other wand cleared transmission line ROW		outside the transr	mission line ROW.	Surro	ounded by upland and v	vetland forest, pasture,	
Assessment area description							
Streams and waterways vegetated geniculata), sedges (Cyperus sp.) cordata), wax myrtle (Myrica cerife, (Liquidambar styraciflua), red mapl nuisance/exotic species including w), coastal plain willow (S ra), dogfennel (Eupator le (Acer rubrum), bald c	Salix caroliniana), s rium capillifolium), cypress (Taxodium	smartweed (Polyg soft rush (Juncus distichum), and the mrose willow (Lud	onum e effusi aurel d wigia p	punctatum), pickerelwe us), royal fern (Osmund oak (Quercus laurifolia) peruviana), and rattlebo	ed (<i>Pontederia</i> la regalis), sweetgum . Occasional x (Sesbania punicea).	
Significant nearby features		Uniqueness (considering the relative rarity in relation to the regional landscape.)					
Existing trans		Not unique					
Functions			Mitigation for pre	vious p	permit/other historic use		
Widlife habitat, water conveyand	ce, flood attenuation, ac	quifer recharge	N/A				
Anticipated Wildlife Utilization Base that are representative of the asses be found)		•	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Wading birds, raccoon, fish, va	arious amphibians and l	herpetofauna	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).				
Observed Evidence of Wildlife Utiliz	zation (List species dire	ctly observed, or o	other signs such a	s track	ks, droppings, casings, r	nests, etc.):	
anhinga, large	mouth bass, bluegill, m	iosquitofish, pig fro	og, common yellov	vthroa	t, little blue heron, alliga	tor	
Additional relevant factors:							
Assessment conducted by:			Assessment date	e(s):	·		
J. Styer, S. Rizzo, K. Bullock			9/30/09, 10/8&13/2009				

Site/Project	Name			Application Number Assessment Area Name or Number			a Name or Number	
			c./Levy Nuclear Plant -			Wetland	ds 49/49A, CD, CT	
mpact or Mi		Lines/PHF	Transmission Line	Assessment conducted by:		Assessment date	date:	
·	-	mpact - Mit	igation	J. Styer, S. Rizzo, K. B	C. Bullock 9/30/09, 10/8&13/2009			
	Guidance	_	Optimal (10)	Moderate(7) Condition is less than	Mi	nimal (4)	Not Present (0)	
would be su type of wetla	dicator is based on what vould be suitable for the pe of wetland or surface water assessed		Condition is optimal and fully supports wetland/surface water functions	optimal and optimal, but sufficient to provide wetland/surface water wetland/surface water functions optimal but sufficient to wetland/surface water functions				
	i(a) Location scape Supp		Individual parameter scores: cleared transmission line RC willow, and rattlebox; c) Wild surrounding cleared landsca adjacent to other habitats; e) surrounding cleared transmis	port variable is somewhat redu a) Support to wildlife listed in DW; b) Invasive exotic species life access to and from outside pe; d) functions that benefit fis Impacts to wildlife listed in Pa ssion line ROW; f) Hydrologica ream areas on assessment are	Part 1 by or = 8, minima = = 8, slightly h & wildlife or art 1 by outsi	utside habitats = 9 I coverage of wate y decreased due t downstream-dista de land uses = 8, ed areas downstre	o, slightly reduced due to per hyacinth, primrose o limitations imposed by nce or barriers = 8, areas slightly reduced due to am of assessment area =	
	Water Envi		parameter scores: a) water development; b) water level deposition = 8, limited erosic of assessment area; g) hydrological requirements = degradation = 7, some indicasomewhat elevated nutrients	e is reduced somewhat due to levels and flows = 8, typical of indicators = 7; c) soil moisture on noted; e) evidence of fire his ologic stress on vegetation = 9, foraging habitat; i) vegetativation of high nutrients, exotic s e evident due to algal growth a vave, wave energy, currents ar	assessmen = 8, consist story = N/A; , minimal; h ve species to pecies; j) dir nd nuisance	t area, slightly red ent with expected f) vegetation comi) use by animal sp plerant of and asso rect observation of lexotic vegetation	luced due to adjacent; ; d) soil erosion or munity zonation = 8, typica pecies with specific pociated with water quality f water quality = 7,	
1. Ve	Community egetation an	nd/or	parameter scores: a) plant or maintenance typically remov or other invasive plant speci- and recruitment = 7, area wit ROW maintenance; e) densi 8, typical of assessment area alteration of community struc-	riable is slightly reduced due to community species in the canopies shrub/canopy stratum, nones = 8, minimal coverage of within transmission line ROW is ity and quality of coarse woody a, somewhat reduced due to moture by routine maintenance; ition or algal growth in submerger	by, shrub, or desirable water hyacinth maintained; debris, sna naintenance h) topograph	ground stratum = etland species pron, water primrose, d) age & size dist g, den, and cavity g land manager nic features = 8, ty	7, transmission line esent; b) invasive exotics rattlebox; c) regeneration ribution = 7, altered due to r = N/A; f) plant condition = ment practices = 8, due to roical of system, altered	
Score = sum	of above sa	oroel30 /is	If preservation on witin	action		For impact cases	sment areas	
	ds, divide by	•	If preservation as mitig Preservation adjustme			For impact asses delta x acres = -0		
current or w/o pres		with	r reservation adjustme	ant lactor		and CD); -0.80 x (and 49/49A); tota		
0.80		0	Adjusted mitigation de	lta =		otal FL of 0.40	1. 01 0.50 acres	
I_		·	I					
D-1/	_ D. JAL	ro mál	1	If mitigation For mitigation assessment areas Risk factor = RFG = delta/(t-factor x risk) =				
Delta	= [with-curr	rentj	· · · · · · · · · · · · · · · · · · ·					
	-0.80		Risk factor =					

Site/Project Name	Application Numb		er	Assessment Area Name	nt Area Name or Number		
Progress Energy Florida, Inc./Levy N Transmission Lines/PHP Transmi				63, 64, 69, 75, 79, 80	, 32/33, 34, 44, 46, 47/47A, 50/50A, 53, 55, 59, 0, 83, 84, 87, 99, 110A, 111, 115, 119, 121, 124, , AN, AQ, AT1/AT2, AU, AY, BG, CN, CS, DJ, DM, DZ, EG		
FLUCCs code 511	Further classificat	ion (optional)	lm	pact or Mitigation Site? Existing Condition	Assessment Area Size 3.17 acres (11=0.12, 27=0.02, 29=0.04, 32/33=0.07, 34=0.01, 44=0.02, 46=0.02, 47/47A=0.13, 50/50A=0.26, 53=0.02, 55=0.21, 59=0.15, 63=0.07, 64=0.02, 69=0.01, 75=0.06, 79=0.04, 80=0.07, 83=0.01, 84=0.01, 87=0.001, 99=0.02, 110A=0.03, 111=0.03, 115=0.09, 119=0.21, 121=0.02, 123=0.30, 124=0.08, 125=0.02, 131=0.04, H=0.05, AC=0.08, AI=0.02, AN=0.02, AQ=0.11, AT=1/AT=2=0.22, AU=0.02, AY=0.02, BG=0.01, CN=0.03, CS=0.07, DJ=0.04, DM=0.05, DZ=0.17, EG=0.06)		
Basin/Watershed Name/Number Tampa Bay (03100206) and Hillsborough River (03100205)	ted Waterbody (Class	s)	Special Classification	(i.e.OFW, AP, other local/state/fede	al designation of importance)		
Geographic relationship to and hydrologi	ic connection with	wetlands, other s	urface water, uplands	 S			
Hydrologically connected to other wetlan transmission line ROW		·	•		wetland forest, pasture, and cleared		
Assessment area description					1		
Ditches vegetated with primarily nuisance/exotic species such as cattail (<i>Typha latifolia</i>), water primrose (<i>Ludwigia peruviana</i>), torpedo grass (<i>Panicum repens</i>), Brazilian pepper (<i>Schinus terebinthifolius</i>), camphor tree (<i>Cinnamomea camphora</i>), hydrilla (<i>Hydrilla verticillata</i>), bahiagrass (<i>Paspalum notatum</i>), wild taro (<i>Colocasia esculenta</i>), Chinese tallow (<i>Sapium sebiferum</i>), paragrass (<i>Urochioa mutica</i>), alligatorweed (<i>Alternanthera philoxeroides</i>), water lettuce (<i>Eichhornia crassipes</i>), and rattlebox (<i>Sesbania s</i>). Additional native wetland and upland species occur within the ditches, including maidencane (<i>Panicum hemitomori</i>), sedges (<i>Cyperus sp</i>), buttonweed (<i>Cloidia virginiana</i>), pickerelweed (<i>Pontederia cordata</i>), smartweed (<i>Polygonum punctatus</i>), silverling (<i>Baccharis glomeruliflora</i>), bushy broomsedge (<i>Andropogon glomeratus</i>), smutgrass (<i>Sporobolus indicus</i>), tickseed sunflower (<i>Bidens alba</i>), coastal plain willow (<i>Salix caroliniana</i>), water hyssop (<i>Bacopa monnier</i>), red maple (<i>Acer rubrum</i>), swamp fem (<i>Blechnum serulatum</i>), marsh pennywort (<i>Hydrocotyle umbellata</i>), caesarweed (<i>Urena lobata</i>), cinnamon fem (<i>Osmunda cinnamomea</i>), laurel oak (<i>Quercus laurifolia</i>), capeweed (<i>Phyla nodiflora</i>), wax myrtle (<i>Myrica cerifera</i>), Vignia chain fem (<i>Woodwardia viginiana</i>), soft rush (<i>Juncus effusus</i>), dayflower (<i>Commelina difusa</i>), beakrushes (<i>Rhynchospora sp</i>), dogfennel (<i>Eupatorium capillifolium</i>), creeping ludwigia (<i>Ludwigia repens</i>), meadow beauty (<i>Rhexia sp.</i>), yellow-eyed grass (<i>Xyris sp.</i>), leafflower (<i>Phyllanthus sp.</i>), goatweed (<i>Scoparia dulcis</i>), rushes (<i>Juncus spp.</i>), and duckweed (<i>Lemna minor</i>).							
Significant nearby features			Uniqueness (considering the relative rarity in relation to the regional landscape.)				
Existing transmission line ROW,	roadways, houses	, pasture	Not unique				
Functions			Mitigation for previous permit/other historic use				
Widlife habitat, water conveyance, flo	ood attenuation, aq	uifer recharge	N/A				
Anticipated Wildlife Utilization Based on that are representative of the assessment be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Wading birds, raccoon, fish, various	amphibians and h	erpetofauna			h as white ibis (SSC), little blue heron (SSC), andhill crane (Τ), and wood stork (Ε).		
Observed Evidence of Wildlife Utilization	(List species direc	ally observed, or o	other signs such as tr	acks, droppings, casings	nests, etc.):		
green tree frog, leopard frog, great egret	t, garter snake, mo	squitofish, sandh	ill crane, kestrel, sno black racer	wy egret, armadillo, red-s	houldered hawk, marsh hawk, largemouth bass,		
Additional relevant factors:							
l							
Assessment conducted by:			Assessment date(s)				
M. Arrants, J. Styer, S. Rizzo, K. Bullock			9/25/2009 through 10/22/2009				

1			Application Number			Name or Number	
		c./Levy Nuclear Plant - • Transmission Line	-		Wetlands 11, 27, 29, 32/33, 34, 44, 46, 47/47A, 50/50A, 53, 55, 59, 63, 64, 69, 75, 79, 80, 83, 84, 87, 99, 110A, 111, 115, 119, 121, 124, 125, 131, H, AC, Al, AN, AQ, AT1/AT2, AU, AY, BG, CN, CS, DJ, DM, DZ, EG		
Impact or Mitigation			Assessment conducted by:		Assessment date		
	Impact -	Fill	M. Arrants, J. Styer, S. Rizzo, K. Bullock 9/25/09 through 10/22/09				
Scoring Guidance	7	Optimal (10)	Moderate(7)	Mir	nimal (4)	Not Present (0)	
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed		Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions Condition is less than Minimal level of support of wetland/surface water functions		vel of support of /surface water	Condition is insufficient to provide wetland/surface water functions	
.500(6)(a) Location a Landscape Suppo w/o pres or current 4		transmission line ROW, urba listed in Part 1 by outside hal surrounding development; b) outside = 6, decreased due t wildlife downstream-distance 1 by outside land uses = 6, ro connected areas downstream	ort variable is reduced due to n and/or agricultural developm bitats = 4, reduced due to distul Invasive exotic species = 4, so ilmitations imposed by surror or barriers = 4, little benefit, a educed due to surrounding developed in of assessment area = 4, artifacy of downstream areas on as	ent. Individurbance fron ignificant counding deventificial drain velopment a icial drainag	lual parameter soon maintenance mo overage; c) Wildlife eloped areas; d) fun ageways; e) Impa and clearing of nat ge features, some	ores: a) Support to wildlife owing/herbicide, access to and from inctions that benefit fish & acts to wildlife listed in Part ive habitat; f) Hydrologically of which connect to	
.500(6)(b)Water Enviro (n/a for uplands) w/o pres or current 4		within surrounding disturbed of excavated ditches; b) wate = 6, consistent with expected landuses; e) evidence of fire species encroachment; g) hy animal species with specific i) vegetative species tolerant cattails and exotic species; j)	e is reduced due to artifical hyc landscape. Individual parame er level indicators = 4, altered ht; d) soil erosion or deposition history = N/A; f) vegetation condrologic stress on vegetation a hydrological requirements = 5, of and associated with water of direct observation of water que () existing water quality data =	ter scores: hydroperiod 4, erosion mmunity zoi 6, upland due to surre quality degra	a) water levels ar due to to excavat from livestock, ro nation = 3, artificia and transitional sp ounding altered la adation = 3, indica gh nutrients eviden	d flows = 3, artificial nature ed ditches; c) soil moisture adways, adjacent al system, significant upland becies prevalent; h) use by ndscape/altered hydrology; ation of high nutrients, and due to algal growth and	
.500(6)(c)Community st							
1. Vegetation and/ 2. Benthic Commur w/o pres or current	/or	artificial nature of drainage di or ground stratum = 4, maint prevalent; b) invasive exotic c) regeneration and recruitme diminished hydroperiod; d) a maintanence; e) density and reduced due to maintenance	iable is reduced due to significitiches. Individual parameter signance typically removes shrus so or other invasive plant specient = 4, artificial system, recruige & size distribution = 4, typic quality of coarse woody debris and herbicide; g) land managance; h) topographic features = communities = N/A	cores: a) pla b/canopy st es = 6, signi itment impac al of artificia s, snag, den ement pract	ant community speratum, non-desira ficant coverage of cted by surroundiral drainage ditch, in and cavity = N/A ices = 5, due to al	ecies in the canopy, shrub, ble wetland species exotic/nuisance species; ag development and impacted due to c; f) plant condition = 6, iteration of community	
Vegetation and/ Benthic Commur //o pres or current	/or nity with 0	artificial nature of drainage di or ground stratum = 4, maint prevalent; b) invasive exotic c) regeneration and recruitmi diminished hydroperiod; d) a maintanence; e) density and reduced due to maintenance structure by routine maintena	itches. Individual parameter signance typically removes shrus sor other invasive plant specient = 4, artificial system, recruige & size distribution = 4, typic quality of coarse woody debris and herbicide; g) land managance; h) topographic features = communities = N/A	cores: a) pla b/canopy st es = 6, signi timent impac all of artificia s, snag, den ement pract = 4, artificial	ant community speratum, non-desira ficant coverage of cted by surroundiral drainage ditch, in and cavity = N/A ices = 5, due to al	ecies in the canopy, shrub, ble wetland species exotic/nuisance species; exotic/nuisance species	
1. Vegetation and/ 2. Benthic Commur w/o pres or current 4 Score = sum of above scor uplands, divide by 2: current or w/o pres	with 0 es/30 (if	artificial nature of drainage di or ground stratum = 4, maint prevalent; b) invasive exotic c) regeneration and recruitme diminished hydroperiod; d) a maintanence; e) density and reduced due to maintenance structure by routine maintenain submerged aquatic plant of the preservation as mitig preservation adjustments.	itches. Individual parameter signance typically removes shrus sor other invasive plant specient = 4, artificial system, recruige & size distribution = 4, typic quality of coarse woody debris and herbicide; g) land managance; h) topographic features = communities = N/A	cores: a) pla b/canopy st es = 6, signi timent impac all of artificia s, snag, den ement pract = 4, artificial FL = (See impac	ant community speratum, non-desira ficant coverage of cted by surroundin al drainage ditch, i, and cavity = N/A ices = 5, due to al excavated system For impact assess delta x acres = -0, impact table for in	ecies in the canopy, shrub, ble wetland species exotic/nuisance species; exotic/nuisance species; ag development and impacted due to s; f) plant condition = 6, iteration of community n; i) siltation or algal growth sment areas 40 x 0.8 = 0.32 dividual wetland	
1. Vegetation and/ 2. Benthic Commur w/o pres or current 4 Score = sum of above scor uplands, divide by 2: current or w/o pres	with 0 es/30 (if 0) with 0	artificial nature of drainage dor ground stratum = 4, maint prevalent; b) invasive exotic c) regeneration and recruitme diminished hydroperiod; d) a maintanence; e) density and reduced due to maintenance structure by routine maintenain submerged aquatic plant of the preservation as mitig preservation adjustment adjusted mitigation del	itches. Individual parameter signance typically removes shrus sor other invasive plant specient = 4, artificial system, recruige & size distribution = 4, typic quality of coarse woody debris and herbicide; g) land managance; h) topographic features = communities = N/A	cores: a) pla b/canopy st es = 6, signi timent impac all of artificia s, snag, den ement pract = 4, artificial FL = (See impac	ant community speratum, non-desiral ficant coverage of cted by surroundin al drainage ditch, i, and cavity = N/A ices = 5, due to al excavated system For impact assess delta x acres = -0, impact table for inct acreage)	ecies in the canopy, shrub, ble wetland species exotic/nuisance species; exotic/nuisance species	

Site/Project Name			Application Number	Г	Assessment Area Name or Number				
Progress Energy Florida, Inc./Le Transmission Lines/PHP Tran							/B, 37, 62, 65, 71, 72, 74A/B, 78, 86, 97, 8, 128, A, Y, BB, CY, DA		
FLUCCs code 511		Further classificat	tion (optional)			t or Mitigation Site? Existing Condition	Assessment Area Size 1.38 acres (5=0.03, 7=0.17, 8=0.03, 9=0.01, 25=0.03, 37= 0.01, 62=0.04, 65=0.03, 71=0.09, 72=0.04, 74A/B=0.02, 78=0.05, 86=0.05, 97=0.04, 112B=0.08, 128=0.16, A=0.1, Y=0.21, BB=0.03, CY=0.05, DA=0.11)		
Basin/Watershed Name/Number Tampa Bay (03100206) and Hillsborough River (03100205)	Affecte	ed Waterbody (Class	s)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance) None					
Geographic relationship to and hydro Hydrologically connected to other we transmission line ROW	•			•		ounded by upland and w	vetland forest, pasture, and cleared		
alligatorweed (Alternanthera philoxer fireflag (Thalia geniculata), sedges (smartweed (Polygonum punctatus), (Baccharis glomeruliflora), bushy bro (Bacopa monnieri), red maple (Acer cinnamon fern (Osmunda cinnamom	roide: (Cype cabb cooms r rubru nea), ginian	s). Additional nati erus spp.), buttonv page palm (Sabal p sedge (Andropogo um), swamp fern (laurel oak (Quero a), soft rush (Juno	ive wetland and u weed (Diodia virgir palmetto), maiden in glomeratus), tic (Blechnum serrula ius laurifolia), cape cus effusus), beal	pland species occi niana), grassy arro nhair sedge (Eleoc ekseed sunflower (i atum), marsh penn eweed (Phyla nodi krushes (Rhyncho	ur with owhea haris Biden: iywort flora) spora	nin the ditches, including of (Sagittaria graminea sp.), buttonbush (Ceph s alba), coastal plain with (Hydrocotyle umbellate, wax myrtle (Myrica ce, spp.), dogfennel (Eupa	illow (Salix caroliniana), water hyssop a), caesarweed (Urena lobata), rifera), laurel oak (Quercus laurifolia), atorium capillifolium), creeping ludwigia		
Significant nearby features				Uniqueness (considering the relative rarity in relation to the regional landscape.)					
Existing transr	missi	on line ROW		Not unique					
Functions				Mitigation for previous permit/other historic use					
Widlife habitat, water conveyance	e, floo	od attenuation, aq	uifer recharge			N/A			
Anticipated Wildlife Utilization Based that are representative of the assess be found)				Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)					
Wading birds, raccoon, fish, a herpe	etofa	una	iipians and	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).					
Observed Evidence of Wildlife Utiliza	ation ((List species direc	tly observed, or of	ther signs such as	track	s, droppings, casings, n	ests, etc.):		
`	led	opard frog, mosqu	itofish, sandhill cra	ane, snowy egret,	red sl	nouldered hawk, feral h	og		
Additional relevant factors:									
Assessment conducted by:				Assessment date	(s):				
M. Arrants, J. Styer, S. Rizzo, K. Bull		9/25/2009 through 10/22/2009							

Site/Project Name			Application Number		A = = = = = + A	Name of the last	
Progress Energy Flo. Transmission Line			Application Number		Assessment Area Name or Number Wetlands 5, 7-9, 25A/B, 37, 62, 65, 71, 72, 74A/B, 78, 86, 97, 112B, 128, A, Y, BB, CY,		
Impact or Mitigation			Assessment conducted by:		DA Assessment date:		
1 -	mpact - Fil	II	M. Arrants, J. Styer, S. Rizzo	, K. Bullock		 through 10/22/2009)
Scoring Guidance		Optimal (10)	Moderate(7)	Mi	nimal (4)	Not Present ((0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed		Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	vel of support of /surface water inctions	Condition is insuffic provide wetland/su water function	urface	
.500(6)(a) Location an Landscape Support w/o pres or current	nd tra	ansmission line ROW. Indiv prewhat reduced due to loo voerage; c) Wildlife access to eveloped areas; d) functions tificial drainageways; e) Impevelopment and clearing of	ort variable is reduced due to vidual parameter scores: a) S cation within cleared transmiss to and from outside = 6, decre is that benefit fish & wildlife do: pacts to wildlife listed in Part 1 native habitat; f) Hydrologicall nnect to adjacent areas; g) De tream areas.	upport to wi sion line RO ased due to wnstream-di by outside y connected	Idlife listed in Part W; b) Invasive exc limitations impos- stance or barriers land uses = 6, red l areas downstrea	1 by outside habitate office species = 6, mode by surrounding = 5, moderate benefuced due to surround m of assessment are	s = 6, derate fit, iding ea = 6,
.500(6)(b)Water Environn (n/a for uplands) w/o pres or current	with wind with with with with with wiff of the wind with wind with wind with with with with with with with with	thin surrounding disturbed lexcavated ditches; b) wate 6, consistent with expected diduses; e) evidence of fire lecies encroachment; g) hybrimal species with specific levegetative species tolerant attails and exotic species; j)	is reduced due to artifical hydandscape. Individual paramer level indicators = 4, altered hyd soil erosion or deposition history = N/A; f) vegetation codrologic stress on vegetation enydrological requirements = 5, of and associated with water direct observation of water quelity data =	ter scores: nydroperiod = 4, erosion mmunity zor = 6, upland a due to surre quality degra ality = 3, hig	a) water levels and ue to to excavat from livestock, ronation = 3, artificia and transitional spounding altered la adation = 3, indicagh nutrients evider	d flows = 3, artificial ed ditches; c) soil mo adways, adjacent al system, significant becies prevalent; h) undscape/altered hydrition of high nutrients at due to algal growth	nature pisture upland use by rology; s, h and
.500(6)(c)Community structure. 1. Vegetation and/or 2. Benthic Community w/o pres or current v	ard or pro req y dir ma req with	tificial nature of drainage dit ground stratum = 5, mainte evalent; b) invasive exotics generation and recruitment minished hydroperiod; d) aç aintanence; e) density and d duced due to maintenance	able is reduced due to moderatches. Individual parameter sonance typically removes shru or other invasive plant specie = 4, artificial system, recruitm ge & size distribution = 5, typic quality of coarse woody debris and herbicide; g) land managence; h) topographic features = imunities = N/A	cores: a) pla b/canopy sti es = 6, mode ent impacte al of artificia s, snag, den ement practi	ant community speratum, non-desiral erate coverage of d by surrounding at drainage ditch, s, and cavity = N/A ices = 5, due to al	ecies in the canopy, so ble wetland species exotic/nuisance species development and some impact due to ; f) plant condition = teration of communit	cies; c)
Score = sum of above scores/	/30 /if	If presentation as mitigs	ation		For import cooper		
uplands, divide by 20)		If preservation as mitiga	l l		For impact assess		
	with	Preservation adjustmen Adjusted mitigation delt		(See i	delta x acres = -0. impact table for in t acreage)		
0.50	0						
		If mitigation		Fo	or mitigation asses	ssment areas	
Delta = [with-current]		Time lag (t-factor) =					
-0.50		Risk factor =		RFG :	= delta/(t-factor x i	risk) =	

Site/Project Name		Application Number	r		Assessment Area Name or Number		
Progress Energy Florida, Inc./Lo Transmission Lines/PHP Tra	-				Wetla	nd CU	
FLUCCs code	Further classifica	tion (optional)		Impac	t or Mitigation Site?	Assessment Area Size	
511				ı	Existing Condition	0.06 acres	
Basin/Watershed Name/Number Tampa Bay (03100206) and Hillsborough River (03100205)	Affected Waterbody (Clas	s)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance) Adjacent to OFW (tributary of Hillsborough River)				
Geographic relationship to and hydi	ologic connection with	wetlands, other su	urface water, uplar	nds			
Hydrologically connected to other w and cleared transmission line ROW		outside the transr	mission line ROW.	Surr	ounded by upland and v	wetland forest, pasture,	
Assessment area description							
Ditch vegetated with native wetland species including sweetgum (Liquidambar styraciflua), bald cypress (Taxodium distichum), coastal plain willow (Salix caroliniana), dogfennel (Eupatorium capillifolium), and netted chain fern (Woodwardia aereolata).							
Significant nearby features		Uniqueness (considering the relative rarity in relation to the regional landscape.)					
Existing trans		Not unique					
Functions			Mitigation for prev	/ious p	permit/other historic use	,	
Widlife habitat, water conveyand	e, flood attenuation, ac	uifer recharge	N/A				
Anticipated Wildlife Utilization Base that are representative of the asses be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Wading birds, raccoon, white tailed herp	deer, armadillo, variou etofauna	s amphibians and	d Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).				
Observed Evidence of Wildlife Utiliz	ation (List species dire	ctly observed, or c	ther signs such a	s tracł	ks, droppings, casings,	nests, etc.):	
		none obse	enved				
		none obse					
Additional relevant factors:							
Assessment conducted by:			Assessment date	(s):			
J. Styer, K. Bullock			10/13/2009				

Site/Projec	ct Name			Application Number	Assessme	ent Area Name or Number	
Pro	gress Energy		c./Levy Nuclear Plant -			Wetland CU	
Impact or		Lines/PHF	7 Transmission Line	Assessment conducted by:	Assessme		
impact or	•		- dista	•			
	ь	Existing Co	ndition	J. Styer, K. Bullocl	`	10/13/2009	
Scorin	ng Guidance	_	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)	
indicator is would be type of we	The scoring of each dicator is based on what would be suitable for the pe of wetland or surface water assessed		Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	coort of Condition is insufficient to ater provide wetland/surface water functions		
	(6)(a) Location ndscape Supp		transmission line ROW. Indi reduced due to cleared ROW outside = 7, slightly decrease downstream-distance or barr due to clearing of ROW, f) H	vidual parameter scores: a) S v; b) Invasive exotic species = ed due to surrounding cleared riers = 7; e) Impacts to wildlife ydrologically connected areas	upport to wildlife listed 7, moderate coverage areas; d) functions tha listed in Part 1 by outs downstream of assess	ide land uses = 8, minimal impact	
	(b)Water Envi n/a for upland r		within surrounding disturbed of excavated ditches; b) wate = 7, consistent with expected vegetation community zonati transitional species prevalen surrounding altered landscap degradation = 7 exotic specilikely due to presence of nuis	landscape. Individual parame er level indicators = 5, altered t; d) soil erosion or deposition ion = 7, typical of assessment t; h) use by animal species wit pe/altered hydrology; i) vegeta es present; j) direct observatio	eter scores: a) water le hydroperiod due to to e = 8, minimal erosion; e area; g) hydrologic str h specific hydrological tive species tolerant of n of water quality = 6, mission line ROW main	f and associated with water quality moderate nutrient enrichment ntenance; K) existing water quality	
1. \	Cc)Community Vegetation an including the community of the	d/or	artificial nature of drainage d or ground stratum = 4, maint prevalent; b) invasive exotic regeneration and recruitmen distribution = 6, typical of arti woody debris, snag, den, an land management practices	itches. Individual parameter s enance typically removes shrus s or other invasive plant speci t = 4, artificial system, recruitm ificial drainage ditch, impacted	cores: a) plant communib/canopy stratum, nor es = 7, moderate cover ent impacted by ROW due to maintanence; on = 7, reduced due to elopment, reduced due	rage of exotic/nuisance species; of maintenance; d) age & size e) density and quality of coarse maintenance and herbicide; g) to routine maintenance; h)	
Spore = -	um of above so	oros/20 /:r	If propopration as wife	ation	Enriment	t accessment areas	
	um of above so lands, divide by		If preservation as mitig Preservation adjustme		For impac	t assessment areas	
current or w/o pres 0.63	S	with 0	Adjusted mitigation del		FL = delta x acr	res = -0.63 x 0 = 0	
	<u> </u>	<u> </u>	J 				
			If mitigation		For mitigation	on assessment areas	
Del	lta = [with-cun	rent]	Time lag (t-factor) =				
	-0.63		Risk factor =		RFG = delta/(t-l	factor x risk) =	
			4		L		

Site/Project Name		Application Numbe	r		Assessment Area Name or Number		
Progress Energy Florida, Inc./Lev Transmission Lines/PHP Trans	•				Wetlands	BM, HH, II	
FLUCCs code	Further classifica	tion (optional)		Impac	t or Mitigation Site?	Assessment Area Size	
520		, Lake Hixon, and unnamed lake adjacent to Fairy Lake			Existing Condition	4.66 acres (BM=2.21, HH=1.66, II=0.79)	
Basin/Watershed Name/Number Af	fected Waterbody (Clas	ss)	Special Classificati	on (i.e.C	DFW, AP, other local/state/federal	designation of importance)	
Tampa Bay (03100206)					None		
Geographic relationship to and hydrol	ogic connection with	wetlands, other su	ırface water, uplar	nds			
Lake Estes (Wetland BM), Hixon Lake wetlands	e (Wetland HH), and	unnamed lake adj	acent to Fairy Lak	e (We	tland II) - connect to adj	acent forested	
Assessment area description							
Urban lakes surrounded by roadways nuisance/exotic species, such as catta (Ludiwigia peruviana), cypress (Taxococcidentalis), elderberry (Sambucus de Cambucus de	ail (<i>Typha latifolia</i>), w dium ascendens), liv	rild taro (<i>Colocasia</i> e oak (<i>Quercus vi</i>	a esculenta), torpe rginiana), wax my	edo gra rtle (M	ass (<i>Panicum repens</i>), _I	primrose willow	
Significant nearby features		Uniqueness (collandscape.)	nsider	ing the relative rarity in I	relation to the regional		
Existing transmission line	ROW, roadways, ho	ouses	Not unique				
Functions			Mitigation for prev	vious p	permit/other historic use		
Water storage, wildl	ife habitat, recreation		N/A				
Anticipated Wildlife Utilization Based	on Literature Review				y Listed Species (List s		
that are representative of the assessn be found)	nent area and reason	ably expected to	classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Wading birds, raccoon, osprey, red-sh various amphibian	nouldered hawk, sunf s and herpetofauna	îsh, mosquitofish,	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), and tricolored heron (SSC).				
Observed Evidence of Wildlife Utilizat	ion (List species dire	ctly observed, or o	ther signs such a	s track	s, droppings, casings, r	ests, etc.):	
		Mosquitofish, a	ople snails				
Additional relevant factors:							
		•					
Assessment conducted by:			Assessment date	(s):			
J. Styer, K. Bullock	10/6/2009						

Site/Project Name			Application Number		Assessment Area Name or Number		
Progress Energy Flori					Wetlands BM, HH, II		
Transmission Lines	/PHP Trans	mission Line	A		Assessment date	· · ·	
Impact or Mitigation			Assessment conducted by:				
Existin	g Condition		J. Styer, K. Bullock 10/6/2009			10/6/2009	
Scoring Guidance	F	Optimal (10)	Moderate(7)	Mi	nimal (4)	Not Present (0)	
The scoring of each			Condition is less than		evel of support of l/surface water provide wetland/surfa		
indicator is based on what would be suitable for the		tion is optimal and fully	optimal, but sufficient to	L			
type of wetland or surface	Supp	supports wetland/surface maintain most wetland/surface water provide water functions wetland/surface functions water					
water assessed			waterfunctions				
	<u> </u>						
	within		oort variable is somewhat red /. Individual parameter score			•	
.500(6)(a) Location and			isturbance from surrounding				
Landscape Support			nd primrose willow; c) Wildlife				
			inding cleared landscape an				
w/o pres or			stance or barriers = 7, areas : 7, somewhat reduced due t				
current w			as downstream of assessme				
6	Deper	ndency of downstream	areas on assessment area =	a = 6, moderate benefit to adjacent areas.			
			e is reduced due to artifical hounding cleared transmission				
.500(6)(b)Water Environme			e of excavated ponds, typical				
(n/a for uplands)			sture = 8, consistent with exp				
			ory = N/A; f) vegetation com				
			ation = 7, minimal; h) use by ack of hydrologic connection				
w/o pres or			degradation = 7, some indic				
current w	ith observ	vation of water quality =	= 7, elevated nutrients evider	nt due to alga	al growth and nuis	ance/exotic vegetation; K)	
8	existin	ng water quality data =	N/A; I) water depth wave, w	ave energy, o	currents and light	penetration = N/A.	
	. The co	ommunity structure vari	iable is reduced due to prese	ence of exotic	c/nuisance specie	s and excavated, artificial	
.500(6)(c)Community struc			eservoirs. Individual parame				
			, maintenance typically remo				
 Vegetation and/or 			s or other invasive plant spe ion and recruitment = 7, artif				
2. Benthic Community		. , •	hydroperiod; d) age & size		•		
w/o pres or			se woody debris, snag, den,				
			reduced due to maintenanc				
	comm		ne maintenance; h) topograp quatic plant communities = N		= 6, typical of exc	avated system; i) siltation	
,	, algai g	growth in submerged at	qualic plant communities – i				
Score = sum of above scores/3	0 (if	If preservation as mitig	ation,		For impact asses	sment areas	
uplands, divide by 20)	[Preservation adjustme	nt factor =				
current pr w/o pres w	_{ith} }			FL =	delta x acres = -0	.70 x 0 = 0	
	, 	Adjusted mitigation del	ta =	<u> </u>			
	[lf mitigation		F	or mitigation asse	essment areas	
Delta = [with-current]		Time lag (t-factor) =		<u> </u>			
-0.70	[Risk factor =		RFG	= delta/(t-factor x	risk) =	
				L			

Site/Project Name	,	Application Numbe	it.	ľ	Assessment Area Name	or Number
Progress Energy Florida, Inc./Levy N Transmission Lines/PHP Transmi			Wetlands 66-68, 73, 82, 90, 101-104, 113, 119, G, L PP, RR, SS, TT, YY, ZZ, AE-AH, AO, AP, AV, AW, DP, DT-DV, DX, EB, EC, EF		, ZZ, AE-AH, AO, AP, AV, AW, BE, BW, BX, DL,	
FLUCCs code 534	Further classificat	tion (optional) water Ponds, Res			t or Mitigation Site?	Assessment Area Size 11.22 acres (66=0.09, 67=0.12, 68=0.43, 73=0.35, 82=0.08, 90=0.16, 101=0.12, 102=0.11, 103=0.15, 104=0.18, 113=0.24, 119=0.02, G=0.25, L=0.03, M=0.71, P=0.20, R=0.90, T=0.75, MM=0.30, PP=0.25, RR=0.76, SS=0.24, TT=0.27, YY=0.26, ZZ=0.74, AE=0.07, AF=0.05, AG=0.01, AH=0.74, AO=0.19, AP=0.03, AV=0.24, AW=0.27, BE=0.25, BW=0.05, BX=0.30, DL=0.17, DP=0.21, DT=0.21, DU=0.04, DV=0.12, DX=0.03, EB=0.10, EC=0.32, EF=0.11)
Basin/Watershed Name/Number Affect Tampa Bay (03100206) and Hillsborough River (03100205)	ted Waterbody (Class	is)	Special Classification	n (i.e.O	DFW, AP, other local/state/feder	ral designation of importance) None
Geographic relationship to and hydrological Stormwater ponds/man-made reservoirs, residential areas.			•		other wetlands/surface	e waters. Surrounded by roadways, pasture,
nuisance/exotic species such as cattail (philoxeroides), as well as native species	Typha latifolia), torp such as arrowhead p.), rushes (Juncus	pedo grass (<i>Panio</i> d (<i>Sagittaria lancil</i>	cum repens), primi ifolia), pickerelweed	rose w d (<i>Pon</i> i	illow (Ludiwigia peruvi tederia cordata), wax	erbicided. Vegetative community dominated by ana), alligator weed (Alternanthera myrtle (Myrica cerifera), coastal plain willow hemitomon), smartweed (Polygonum sp.), and
Significant nearby features Uniqueness (considering the relative rarity in relation to the regional landscape.)					relation to the regional landscape.)	
Existing transmission line ROW, roadw	ays, houses, golf c	ourses, pasture			Not	unique
Functions			Mitigation for previous permit/other historic use			
Water storage, w	ildlife habitat		N/A			
Anticipated Wildlife Utilization Based on I that are representative of the assessmen be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)			
Wading birds, raccoon, various a	mphibians and hen	petofauna	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), and tricolored heron (SSC).			
Observed Evidence of Wildlife Utilization	(List species direc	tly observed, or of	ther signs such as	tracks.	, droppings, casings, r	iests, etc.):
red shouldered hawk, red tailed hawk					eopard frog, sunfish, lit phoebe, mosquitofish	tle blue heron, livestock (horses, goats), snowy
Additional relevant factors:						
Assessment conducted by:			Assessment date	(s):		
M. Arrants, J. Styer, S. Rizzo, K. Bullock			9/25/09 through 1	0/22/0	19	

Site/Project Name			Application Number	Assessment Area Name or Number			
		c./Levy Nuclear Plant - Transmission Line		FLUCFCS 534 - Wetlands 66-68, 73, 82, 90 101-104, 113, 119, G, L, M, P, R, T, MM, PP, RR, SS, TT, YY, ZZ, AE-AH, AO, AP, AV, AW, BE, BW, BX, DL, DP, DT-DV, DX, EB, EC, EF			
Impact or Mitigation			Assessment conducted by:		Assessment date):	
	Impact -	Fill	M. Arrants, J. Styer, S. Rizzo,	K. Bullock	9/25/09	through 10/22/09	
Scoring Guidance]	Optimal (10)	Moderate(7)	Mir	nimal (4)	Not Present	(0)
The scoring of each indicator is based on wha would be suitable for the type of wetland or surface water assessed		Condition is optimal and fully supports wetland/surface water functions	Condition is less than		surface water	Condition is insuff provide wetland/s water functio	surface
.500(6)(a) Location a Landscape Suppo u/o pres or current		surrounding urban and/or ag Part 1 by outside habitats = 4 development; b) Invasive exc and from outside = 6, decrea connection; d) functions that other habitats; e) Impacts to development and clearing of	port variable is reduced due to lo ricultural development. Individu 4, reduced due to disturbance fro pitc species = 4, significant cove issed due to limitations imposed benefit fish & wildlife downstrea wildlife listed in Part 1 by outsid native habitat; f) Hydrologically ection; g) Dependency of downs	ual parameter om mainte erage of tor by surroun am-distance le land use connected	ter scores: a) Sup nance mowing/he pedo grass and c ding developed a e or barriers = 1, a s = 6, reduced du areas downstrea	pport to wildlife liste arbicide, surrounding cattail; c) Wildlife accreas and lack of hydareas typically isolate to surrounding am of assessment a	g cess to drologic ted fror rea = 1
.500(6)(b)Water Enviro (n/a for uplands)		ponds/reservoirs within surro 3, artificial nature of excavate soil moisture = 6, consistent	e is reduced due to artifical hydr ounding disturbed landscape. In ed ponds, typically no outflow; b with expected; d) soil erosion or	ndividual pa o) water lev	rameter scores: el indicators = 4,	a) water levels and upland excavated p	flows = onds; o
w/o pres or current 4	with 0	zone; g) hydrologic stress on species with specific hydrolo tolerant of and associated wi species; j) direct observation	history = N/A; f) vegetation com n vegetation = 6, deep water zon gical requirements = 5, due to la th water quality degradation = 3 of water quality = 3, high nutrie quality data = N/A; I) water degradation	nmunity zon nes preclud ack of hydr a, indication ents eviden	le emergent vege ologic connection of high nutrients t due to algal grov	al system, limited litt tation; h) use by an ; i) vegetative speci , cattails and exotic wth and nuisance/e	toral imal es cotic
current	0 tructure /or	zone; g) hydrologic stress on species with specific hydrolo tolerant of and associated wi species; j) direct observation vegetation; K) existing water N/A. The community structure var artificial nature of stormwater canopy, shrub, or ground strespecies prevalent; b) invasive cattail, primrose willow; c) redevelopment and diminished e) density and quality of coar maintenance and herbicide;	n vegetation = 6, deep water zon gical requirements = 5, due to lat the water quality degradation = 3 of water quality = 3, high nutrie quality data = N/A; I) water deprinable is reduced due to significat ponds/reservoirs. Individual patum = 4, maintenance typically exectics or other invasive plan generation and recruitment = 4, I hydroperiod; d) age & size distrese woody debris, snag, den, ang) land management practices at features = 4, artificial excavate	nmunity zones preclud ack of hydr ack of hydr ants evident oth wave, we ant coverage arameter so removes so t species = artificial sy ribution = 2 d cavity = = 5, due to	le emergent vege ologic connection of high nutrients to due to algal growave energy, currie e of exotic/nuisancores: a) plant coshrub/canopy strafe, significant cowstem, recruitmen, typical of artifici N/A; f) plant condalteration of comme	al system, limited litt tation; h) use by an i; i) vegetative speci , cattails and exotic with and nuisance/es ents and light penet once species and exo mmunity species in tum, non-desirable verage of torpedo gr t impacted by surro al stormwater pond itton = 6, reduced d munity structure by	coral imal es cotic ration = cavated the wetlanc ass, unding system ue to routine
.500(6)(c)Community st 1. Vegetation and/ 2. Benthic Community st	0 tructure /or nity with 0	zone, g) hydrologic stress on species with specific hydrolo tolerant of and associated wi species; j) direct observation vegetation; K) existing water N/A. The community structure var artificial nature of stormwater canopy, shrub, or ground strespecies prevalent; b) invasive cattail, primrose willow; c) redevelopment and diminished e) density and quality of coarmaintenance and herbicide; maintenance; h) topographic	n vegetation = 6, deep water zon gical requirements = 5, due to lat the water quality degradation = 3 of water quality = 3, high nutrie quality data = N/A; I) water deprivable is reduced due to significat pronds/reservoirs. Individual pratum = 4, maintenance typically executics or other invasive plan generation and recruitment = 4, thydroperiod; d) age & size distresse woody debris, snag, den, ang) land management practices = 1 features = 4, artificial excavater N/A	nmunity zones precludack of hydr sale in the coverage arameter sale in the coverage are sale in the covera	le emergent vege ologic connection of high nutrients to due to algal growave energy, currie e of exotic/nuisancores: a) plant coshrub/canopy strafe, significant cowstem, recruitmen, typical of artifici N/A; f) plant condalteration of comme	al system, limited littation; h) use by an; i) vegetative speci, cattails and exotic with and nuisance/events and light penet once species and exommunity species in tum, non-desirable verage of torpedo gr t impacted by surro all stormwater pond ition = 6, reduced d munity structure by growth in submergers. See 1.43 x 0.74 = 0.32	coral imal es cotic ration = cavated the wetlanc ass, unding system ue to routine
2. Benthic Community st 1. Vegetation and/ 2. Benthic Community st v/o pres or current 5 Score = sum of above score uplands, divide by 20 current or w/o pres	tructure /or nity with 0 es/30 (if 0) with	zone; g) hydrologic stress on species with specific hydrolo tolerant of and associated wi species; j) direct observation vegetation; K) existing water N/A. The community structure var artificial nature of stormwater canopy, shrub, or ground straspecies prevalent; b) invasiv cattail, primrose willow; c) redevelopment and diminished e) density and quality of coar maintenance and herbicide; maintenance; h) topographic aquatic plant communities =	n vegetation = 6, deep water zon gical requirements = 5, due to lat the water quality degradation = 3 of water quality = 3, high nutrie quality data = N/A; I) water deprivable is reduced due to significat pronds/reservoirs. Individual pratum = 4, maintenance typically executics or other invasive plan generation and recruitment = 4, thydroperiod; d) age & size distresse woody debris, snag, den, ang) land management practices = 1 features = 4, artificial excavater N/A	nmunity zones precludack of hydradication on the series of	le emergent vege ologic connection of high nutrients to due to algal growwave energy, curnie e of exotic/nuisancores: a) plant co-hirub/canopy strate 6, significant cowstem, recruitmen 1, typical of artifici N/A; f) plant conductor alteration of commodities of commodities of the commodities of commodities	al system, limited littation; h) use by an; i) vegetative speci, cattails and exotic with and nuisance/events and light penet once species and exommunity species in tum, non-desirable verage of torpedo gr timpacted by surro all stormwater pond ition = 6, reduced dimunity structure by growth in submergrowth in submerg	coral imal es cotic ration = cavated the wetlanc ass, unding system ue to routine
2. Benthic Community st 1. Vegetation and/ 2. Benthic Community st v/o pres or current 5 Score = sum of above score uplands, divide by 20 current or w/o pres	tructure /or nity with 0 es/30 (if 0) with 0	zone; g) hydrologic stress on species with specific hydrolotolerant of and associated wispecies; j) direct observation vegetation; K) existing water N/A. The community structure var artificial nature of stormwater canopy, shrub, or ground strespecies prevalent; b) invasiv cattail, primrose willow; c) redevelopment and diminished e) density and quality of coar maintenance and herbicide; maintenance; h) topographic aquatic plant communities =	n vegetation = 6, deep water zon gical requirements = 5, due to lat the water quality degradation = 3 of water quality = 3, high nutrie quality data = N/A; I) water deprivable is reduced due to significat pronds/reservoirs. Individual pratum = 4, maintenance typically executics or other invasive plan generation and recruitment = 4, thydroperiod; d) age & size distresse woody debris, snag, den, ang) land management practices = 1 features = 4, artificial excavater N/A	nmunity zones precludack of hydradication on the second of	le emergent vege ologic connection of high nutrients to due to algal grow vave energy, curre e of exotic/nuisan cores: a) plant co shrub/canopy strafe, significant covistem, recruitmen la, typical of artificial values of communication of commun	al system, limited littation; h) use by an; i) vegetative speci, cattails and exotic with and nuisance/events and light penet once species and exommunity species in tum, non-desirable verage of torpedo gr timpacted by surro all stormwater pond ition = 6, reduced dimunity structure by growth in submergrowth in submerg	coral imal es cotic ration = cavated the wetlanc ass, unding system ue to routine

Site/Project Name		Application Numbe	r		Assessment Area Name	or Number	
Progress Energy Florida, Inc./L Transmission Lines/PHP Tr						I, AK, BK, BR, CR, DH, , DS	
FLUCCs code 534				Impact or Mitigation Site?			
Basin/Watershed Name/Number Tampa Bay (03100206) and Hillsborough River (03100205)	Affected Waterbody (Clas	ss)	Special Classification (i.e.OFW, AP, other local/state/federal designation of imp			designation of importance)	
Geographic relationship to and hyd	rologic connection with	wetlands other su	rface water unlan	ds			
Stormwater ponds/man-made reser by roadways, pasture, residential a	voirs, typically Isolated,	,	. ,		other wetlands/surface	waters. Surrounded	
Stormwater ponds/reservoirs surroi comprised of mixture of nuisance/e (Panicum repens), primrose willow dogfennel (Eupatorium capillifolium fern (Osmunda cinnamomea), butt virginica), arrowhead (Sagittaria lai dwarf umbrellagrass (Fuirena scirp (Ilex cassine), water hyssop (Bacol (Andropogon virginicus).	xotic and native species (Ludiwigia peruviana), (), spatterdock (Nuphar onweed (Diodia virginian ncifolia), soft rush (Juncoidea), silverling (Bacch	s such as cattail (7 melaleuca (Melale luteum), water lot na), alligator weed cus effusus), ticksi naris glomeruliflora	Typha latifolia), was euca quinquefolia) us (Nelumbo lutea d (Alternanthera ph eed sunflower (Bid h), wax myttle (Myr itomon), smartwee	ter lettu , Brazili), fragr hiloxero lens alb rica cen ed (Pol	ice (Pistia stratioides), ian pepper (Schinus te ant water lily (Nyphaeaides), Virginia chain fe ia), swamp fern (Blechifera), sedges (Cyperuygonum sp.), and broo	torpedo grass rebinthifolius), a odorata), cinnamon ern (Woodwardia inum serrulatum), is spp.), dahoon holly imsedge bluestem	
Significant nearby features			Uniqueness (considering the relative rarity in relation to the regional landscape.)				
Existing transmission line ROW, roadways, houses			Not unique				
Functions			Mitigation for previous permit/other historic use				
Water stora	ge, wildlife habitat				N/A		
Anticipated Wildlife Utilization Base that are representative of the asses be found)				T, SSC)	Listed Species (List s), type of use, and inter		
Wading birds, raccoon, vario	ous amphibians and her	petofauna			by wading birds such a nowy egret (SSC), and		
Observed Evidence of Wildlife Utiliz	ration (List species direc	ctly observed, or o	ther signs such as	tracks,	droppings, casings, n	ests, etc.):	
mosquitofish, san	dhill crane, largemouth	bass, sunfish, trice	olored heron, snov	vy egre	t, little blue heron, box	turtle	
Additional relevant factors:							
Assessment conducted by:			Assessment date	(s):			
М. Arrants, J. Styer, S. Rizzo, K. Bu	illock		9/25/09 through 1	0/22/09)		

	ect Name			Application Number		Assessment Area Name or Number		
			c./Levy Nuclear Plant - Transmission Line			FLUCFCS 534 - Wetlands 86, I, T, AD, AJ AK, BK, BR, CR, DK, DH, DS		
	Mitigation	Littes/FITE	Transmission Line	Assessment conducted by:		Assessment date		
	_	Impact -	Fill	M. Arrants, J. Styer, S. Rizzo	, K. Bullock		through 10/22/09	
Scori	ng Guidance	_	Optimal (10)	Moderate(7)	Mi	nimal (4)	Not Present (0)	
The scoring of each ndicator is based on what would be suitable for the type of wetland or surface water assessed Condition is optimal and fully supports wetland/surface water functions		Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	wetland	evel of support of /surface water unctions	Condition is insufficient to provide wetland/surface water functions			
	0(6)(a) Location andscape Supp or		surrounding urban and/or ag Part 1 by outside habitats = exotic species = 7, some cov to and from outside = 6, som of hydrologic connection; d) isolated from other habitats; to surrounding development	port variable is reduced due to ricultural development. Individ 7, somewhat reduced due to diverage of torpedo grass and calewhat decreased due to limitat functions that benefit fish & will ell limitation of native habitat, lly no hydrologic connection; g stream areas.	dual parame listurbance f attail, Brazili ations impos Idlife downsl Part 1 by ou f) Hydrologi	eter scores: a) Sul- from surrounding of an pepper and me ed by surrounding tream-distance or tside land uses = ically connected a	oport to wildlife listed in development; b) Invasive elaleuca; c) Wildlife access i developed areas and lact barriers = 3, areas typicall 6, somewhat reduced due reas downstream of	
)(b)Water Envi (n/a for upland		ponds/reservoirs within surro flows = 4, artificial nature of oponds; c) soil moisture = 7, c evidence of fire history = N/A hydrologic stress on vegetati by animal species with speci connection reduces utilizatio some indication of high nutri- nutrients evident due to alga	e is reduced due to artifical hyd bunding cleared, impacted area excavated ponds, typically no consistent with expected; d) so k; f) vegetation community zon ion = 6, areas of deeper water fific hydrological requirements = n; i) vegetative species tolerar ents, cattails and exotic specie I growth and nuisance/exotic v urrents and light penetration =	as. Individuoutflow; b) woil erosion or nation = 5, and reduce extended as for a for	al parameter scor water level indicate deposition = 7, lin difficial system, recent of expected en gnoted, although I sociated with wate observation of wate	es: a) water levels and ors = 4, upland excavated inited erosion noted; e) duced littoral zone; g) nergent vegetation; h) use ack of hydrologic r quality degradation = 5, er quality = 5, elevated	
1.	(c)Community Vegetation an Benthic Comm	ıd/or	nature of stormwater ponds// shrub, or ground stratum = 5 prevalent; b) invasive exotic primrose willow; c) regenera development and diminished e) density and quality of coal maintenance and herbicide;	riable is reduced due to preser reservoirs. Individual paramet i, maintenance typically removes or other invasive plant specition and recruitment = 4, artifical hydroperiod; d) age & size dirse woody debris, snag, den, age) land management practices of features = 4, artificial excavatorial.	ter scores: a yes shrub/cal ies = 7, mod cial system, istribution = 4 and cavity = s = 5, due to	 plant community nopy stratum, nor erate coverage of recruitment impace 4, typical of artificing N/A; f) plant conduction of community 	species in the canopy, -desirable wetland specie torpedo grass, cattail, ted by surrounding al stormwater pond syster ition = 6, reduced due to munity structure by routine	
	sum of above scoolands, divide by		If preservation as mitig Preservation adjustme Adjusted mitigation del	nt factor =	FL = (Weti (Weti	For impact asses delta x acres = -0 land DK); -0.53 x (land CR); total of FL of 0.08	.53 x 0.08 = 0.04 0.07 = 0.04	
			If mitigation					
Dei	elta = [with-curi	renti	Time lag (t-factor) =		F	or mitigation asse	ssment areas	

Site/Project Name		Application Number	er Assessment Area Name or Numb			r Number	
	Progress Energy Florida, Inc./Levy Nuclear Plant - Transmission Lines/PHP Transmission Line					, BO, CX, UU/VV	
FLUCCs code 534/533	Further classifica Stormwater Po	tion (optional) onds, Reservoirs < <100 acres (533)		Impact or Mitigation Site? Assessment Area \$ 2.79 acres (24= BF=0.15, BO=0 CX=0.48, UU/V>=0.42			
Basin/Watershed Name/Number Affect Tampa Bay (03100206) and Hillsborough River (03100205)	led Waterbody (Class) Special Classification (i.			0 n (i.e.0	OFW, AP, other local/state/lederal designation of importance) None		
Geographic relationship to and hydrolog	ic connection with	wetlands, other su	rface water, uplan	nds			
Stormwater ponds/man-made reservoirs, typically Isolated, occasionally connected through ditches to other wetlands/surface waters. Surrounded by roadways, pasture, residential areas.							
Assessment area description							
Stormwater ponds/reservoirs surrounded by roadways, houses, and/or pastures. Vegetative community comprised of mixture of primarily native species, such as maidencane (<i>Panicum hemitomon</i>), foxtail grass (<i>Setaria</i> sp.), climbing hempvine (<i>Mikania scandens</i>), dogfennel (<i>Eupatorium capillifolium</i>), lizard's tail (<i>Saururus cernuus</i>), meadow beauty (<i>Rhexia</i> sp.), soft rush (<i>Juncus effusus</i>), meadow beauty (<i>Rhexia</i> sp.), coinwort (<i>Hydrocotyle umbellata</i>), yellow-eyed grass (<i>Xyris</i> sp.), goldenrod (<i>Solidago</i> sp.), broomsedge bluestem (Andropogon virginicus), bighead rush (<i>Juncus megacephalus</i>), dwarf umbrellagrass (<i>Fuirena scirpoidea</i>), sedges (<i>Cyperus</i> sp.), and coastal plain willow (<i>Salix caroliniana</i>), as well as nuisance/exotic and native species such as torpedo grass (<i>Panicum repens</i>), primrose willow (<i>Ludiwigia peruviana</i>), alligatorweed (<i>Alternanthera philoxeroides</i>), and rattlebox (<i>Sesbania punicea</i>).							
Significant nearby features			Uniqueness (co landscape.)	nsideri	ing the relative rarity in r	elation to the regional	
Existing transmission line ROW, roadways, houses			Not unique				
Functions			Mitigation for pre	vious p	permit/other historic use		
Water storage, v	vildlife habitat		N/A				
Anticipated Wildlife Utilization Based on that are representative of the assessme be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Wading birds, raccoon, various a	amphibians and her	petofauna			e by wading birds such a snowy egret (SSC), and		
Observed Evidence of Wildlife Utilization	n (List species direc	ctly observed, or o	ther signs such as	tracks	s, droppings, casings, ne	ests, etc.):	
cattle egret, snowy egre	t, white ibis located	to west of transmi	ission line ROW n	ear W	etland 24; leopard frog,	mallard,	
Additional relevant factors:							
Assessment conducted by:			Assessment date	e(s):			
M. Arrants, J. Styer, S. Rizzo, K. Bullock	(9/25/09 through 10/22/09				

Site/Project Name		Application Number		Assessment Area	a Name or Number	
Progress Energy Florida, Ir				FLUCFCS 534/533 - Wetlands 24, BF, BO, CX, UU/VV		
Transmission Lines/PHI	P Transmission Line					
Impact or Mitigation		Assessment conducted by: Assessm			essment date:	
Existing Co	ondition	M. Arrants, J. Styer, S. Rizzo	, K. Bullock	9/25/09	through 10/22/09	
Scoring Guidance	Optimal (10)	Moderate(7)	Mi	nimal (4)	Not Present	(0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most Minimal let wetland.		evel of support of d/surface water functions Not Preser Condition is insurprovide wetland water functions		icient to surface
.500(6)(a) Location and Landscape Support w/o pres or current with 7 0	within transmission line ROV habitats = 8, slightly reduced minimal coverage of torpedo decreased due to limitations functions that benefit fish & v Impacts to wildlife listed in Patransmission line ROW; f) Hy	port variable is somewhat redu V. Individual parameter scores I due to disturbance from surro grass and primrose willow; c) imposed by surrounding clear wildlife downstream-distance or art 1 by outside land uses = 7, ydrologically connected areas of pendency of downstream area	s: a) Suppor uunding deve Wildlife acc ed landscap r barriers = ' somewhat i downstream	nt to wildlife listed in to wildlife listed in the learning and from one and lack of hydron, areas adjacent reduced due to sure of assessment and sure of assessment and elopement.	in Part 1 by outside sive exotic species utside = 7, slightly rologic connection; to other habitats; e) rrounding cleared rea = 6, typically lim	= 8, d) ited
.500(6)(b)Water Environment (n/a for uplands) v/o pres or current with	ponds/reservoirs within surro and flows = 6, artificial nature excavated ponds; c) soil moi noted; e) evidence of fire hist zone; g) hydrologic stress on requirements = 7, foraging not tolerant of and associated wi species; j) direct observation	e is reduced due to artifical hyd bunding cleared transmission li- e of excavated ponds, typically isture = 8, consistent with expe- tory = N/A; f) vegetation comm in vegetation = 7, minimal; h) us- oted, although lack of hydrolog ith water quality degradation = it of water quality = 7, elevated K) existing water quality data =	ne ROW. In no outflow; ected; d) soil unity zonati se by animal gic connection, some industrients every	ndividual parameter b) water level ind erosion or depos on = 5, artificial sy species with specien reduces utilizat lication of high nutident due to algal	er scores: a) water icators = 6, upland ition = 8, limited ercystem, reduced littocific hydrological ion; i) vegetative sptrients, cattails and growth and	levels esion ral ecies exotic
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community v/o pres or current with	nature of stormwater ponds/ishrub, or ground stratum = 7 prevalent; b) invasive exotic primrose willow; c) regeneral development and diminished system; e) density and qualit assessment area, somewhat	riable is reduced due to present reservoirs. Individual parametri, maintenance typically removes or other invasive plant special tion and recruitment = 7, artifical typical t	er scores: a es shrub/cai es = 7, mod ial system, i stribution = 6 g, den, and) plant community nopy stratum, non erate coverage of recruitment impac 5, typical of artifici	species in the cand desirable wetland torpedo grass, catt ted by surrounding al stormwater pond	opy, specie:
7 0		ne maintenance; h) topographi quatic plant communities = N/A	ic features =	•	es = 6, due to altera	tion of
7 0 Score = sum of above scores/30 (if uplands, divide by 20)	algal growth in submerged a	ne maintenance; h) topographi quatic plant communities = N/A	ic features =	•	es = 6, due to altera evated system; i) sil	tion of
7 0 Score = sum of above scores/30 (if uplands, divide by 20) current	algal growth in submerged a	ne maintenance; h) topographi quatic plant communities = N/A lation, nt factor =	ic features =	e 6, typical of exca	es = 6, due to altera vated system; i) sill	tion of
7 0 Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres with	algal growth in submerged and algal growth in submerged and algorithms as mitigation as mitigation delegation	ne maintenance; h) topographi quatic plant communities = N/A lation, nt factor =	ic features =	For impact assess delta x acres = -0.	es = 6, due to altera evated system; i) sill esment areas	tion of
7 0 Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres with	algal growth in submerged a	ne maintenance; h) topographi quatic plant communities = N/A lation, nt factor =	ic features =	For impact assess	es = 6, due to altera evated system; i) sill esment areas	tion of

Site/Project Name		Application Numbe	er .		Assessment Area Name o	or Number
Progress Energy Florida, Inc./Lo Transmission Lines/PHP Tra					Wetlands 70	, 71, 89, CZ
FLUCCs code	Further classifica	tion (optional)		Impac	et or Mitigation Site?	Assessment Area Size
618 - Willow Shrub Marsh					Existing Condition	1.98 acres (70=0.06, 71=0.78, 89=0.39, CZ=0.75)
Basin/Watershed Name/Number	Affected Waterbody (Clas	ss)	Special Classificati	on (i.e.	DFW, AP, other local/state/federal	designation of importance)
Tampa Bay (03100206) and Hillsborough River (03100205)		None				
Geographic relationship to and hydro	ologic connection with	wetlands, other si	urface water, upla	nds		
Hydrologically connected to other wetlands/surface waters outside the transmission line ROW. Surrounded by upland and wetland forest, pasture, and cleared transmission line ROW						
Assessment area description						
Shrub marsh dominated by coastal maple (<i>Acer rubrum</i>), pond cypress (<i>Salvinia minima</i>), duckweed (<i>Lemi</i> (<i>Solidago</i> sp.), blackberry (<i>Rubus</i> scandens).	(Taxodium ascendens na minor), sedges (Cyp	s), maidencane (F perus spp., Carex	Panicum hemitomo spp.), brushy bro	on), pr omsed	imrose willow (Ludwigia dge (<i>Andropogon glome</i>	spp.), water spangles ratus), goldenrod
Significant nearby features			Uniqueness (co landscape.)	nsider	ing the relative rarity in I	relation to the regional
Existing transmission line ROW			Not unique			
Functions			Mitigation for pre	vious	permit/other historic use	
Widlife habitat, water	storage, aquifer recha	rge	N/A			
Anticipated Wildlife Utilization Base that are representative of the asses be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)			
Wading birds, raccoon, vario	ous amphibians and her	rpetofauna	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).			
Observed Evidence of Wildlife Utiliz	ation (List species dire	ctly observed, or o	other signs such a	s track	s, droppings, casings, r	nests, etc.):
	re	d winged blackbir	d, mockingbird			
Additional relevant factors:						
Assessment conducted by:			Assessment date	e(s):	· · · · · · · · · · · · · · · · · · ·	
J. Styer, S. Rizzo, K. Bullock			10/7/09 & 10/13/09			

Site/Project Name		Application Number],	Assessment Area	Name or Number	
Progress Energy Florida, In				FLUCFCS 618 - Wetlands 70, 71, 89, CZ Assessment date:		
Transmission Lines/PH Impact or Mitigation	P Transmission Line	Assessment conducted by:				
Impact	- Fill	J. Styer, S. Rizzo, K. B		10/7/09 & 10/13/09		
			·			
Scoring Guidance The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Optimal (10) Condition is optimal and fully supports wetland/surface water functions	Moderate(7) Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	.		Not Present (0) Condition is insufficient to provide wetland/surface water functions	
.500(6)(a) Location and Landscape Support //o pres or current with	line, residential, and agricultu outside habitats = 6, reduced c) Wildlife access to and fron and lack of hydrologic conne isolated from other habitats; surrounding habitat loss resu	port variable is reduced somewural areas. Individual paramet didue to surrounding developm noutside = 6, decreased due to ection; d) functions that benefit e) Impacts to wildlife listed in fullting from residential development hydrologic connection; g) Depareas.	ter scores: a) nent; b) Invas to limitations fish & wildlife Part 1 by outs ment; f) Hydro	Support to wildlive exotic species imposed by surrous downstream-disside land uses = 6 blogically connections.	fe listed in Part 1 by s = 8, minimal coverage; bunding residential areas stance or barriers = 3, area 6, reduced due to ted areas downstream of	
.500(6)(b)Water Environment (n/a for uplands) //o pres or current with 7	residential and agricultural la in water level due to develop expected; c) soil moisture = 8 evidence of fire history = N/A encroachment; g) hydrologic hydrological requirements = associated with water quality	e is slightly reduced due to impanduses. Individual parameter sed nature of the surrounding a 8, consistent with expected; d) A; f) vegetation community zon stress on vegetation = 7, not a 7, some wading bird foraging of degradation = 8, community oxisting water quality data = N/4	scores: a) water areas; b) water o soil erosion ation = 6, son apparent; h) opportunities; consists of ty	vater levels and fler level indicators or deposition = 4, mewhat altered - use by animal sport; i) vegetative spepical species; j) d	ows = 8, slight alterations = 8, consistent with , erosion from grazing; e) upland species ecies with specific ecies tolerant of and irect observation of water	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community //o pres or current with 7	upland species. Individual p. = 7, dominated by desirable moderate coverage; c) reger size distribution = 7, typical of) plant condition = 7; g) land	riable is slightly reduced due to arameter scores: a) plant com native wetland species; b) inv neration and recruitment = 7, s of system; e) density and qualif management practices = 7, typica nmunities = N/A	munity species asive exotics comewhat imputy of coarse value to alteration	es in the canopy, or other invasive pacted by diminis woody debris, sna on of community:	shrub, or ground stratum e plant species = 7, hed hydroperiod; d) age & eg, den, and cavity = N/A; structure by clearing of	
Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres with 0.67 0	If preservation as mitig Preservation adjustme Adjusted mitigation del	nt factor =	FL = d (Wetla (Wetla	For impact assess lelta x acres = -0. and 71); -0.67 x 0 and 89); total of 0.13	67 x 0.15 = 0.10 .05 = 0.03	
Delta = [with-current]	If mitigation Time lag (t-factor) =		Fo	r mitigation asse	ssment areas	
-0.67	Risk factor =		RFG =	delta/(t-factor x	risk) =	

Site/Project Name		Application Numbe	ır		Assessment Area Name or Number		
Progress Energy Florida, Inc./L Transmission Lines/PHP Tra	•				Wetlands B, K, A/B		
FLUCCs code	Further classifica	tion (optional)		Impac	et or Mitigation Site?	Assessment Area Size	
621 - Cypress					Existing Condition	3.07 acres (B=2.99, K=0.04, A/B = 18.29)	
Basin/Watershed Name/Number	Affected Waterbody (Clas	Waterbody (Class) Special Classification (i.e.OFW, AP, other local/state/federal designation of in				designation of importance)	
Tampa Bay (03100206)		None					
Geographic relationship to and hydr	rologic connection with	wetlands, other se	ırface water, uplar	nds			
Hydrologically connected to other w roadways, and cleared transmission		outside the transi	nission line ROW.	Surre	ounded by upland and w	vetland forest,	
Assessment area description							
Forested cypress wetlands vegetate laurifolia), red maple (Acer rubrum) halimifolia), and occasional Brazilia swamp fern (Blechnum serrulatum) (Urochloa mutica).	ı, slash pine (<i>Pinus ellio</i> n pepper (<i>Schinus tere</i> l	ottii). Shrub speci binthifolius). Grou	es include wax my undcover species i flag (<i>Thalia genicu</i>	rtle (<i>l</i> l include <i>ilata</i>),	Myrica cerifera), grounds e cinnamon fern (Osmur yellow-eyed grass (Xyri	tel tree (<i>Baccharis</i> anda cinnamomea), s sp.), and paragrass	
Significant nearby features			Uniqueness (collandscape.)	nsideri	ing the relative rarity in r	elation to the regional	
Existing transmission line ROW, roadways, substation			Not unique				
Functions			Mitigation for prev	vious p	permit/other historic use		
Widlife habitat, water	storage, aquifer rechar	ge	N/A				
Anticipated Wildlife Utilization Based					y Listed Species (List sp		
that are representative of the assess be found)	sment area and reason	ably expected to	classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Wading birds, raccoon, vario	us amphibians and her	petofauna	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).				
Observed Evidence of Wildlife Utiliz	ation (List species direc	ctly observed, or o	ther signs such as	s track	s, droppings, casings, n	ests, etc.):	
mosquitofish, leopard frog, armadillo, alligator							
Additional relevant factors:							
Assessment conducted by:			Assessment date	(s):			
J. Styer, K. Bullock			9/21-23/09				

Site/Project Name	**	Application Number	1	Assessment Area Name or Number		
Progress Energy Florida, Ir	_			FLUCFCS 621 - Wetlands B, K, A/B		
Transmission Lines/PHI	P Transmission Line					
Impact or Mitigation		Assessment conducted by:	ľ	Assessment date:		
Impact -	- Fill	J. Styer, K. Bullock	J. Styer, K. Bullock 9/			
Scoring Guidance	Optimal (10)	Moderate(7)	Min	imal (4)	Not Present	t (0)
The scoring of each indicator is based on what	Condition is optimal and	Condition is less than	Minimalla	int of automort of	Condition is insuf	ee
would be suitable for the	fully supports	optimal, but sufficient to maintain most		rel of support of surface water	provide wetland	
type of wetland or surface	wetland/surface water functions	wetland/surface		nctions	water functi	
water assessed	tunctions	waterfunctions				
.500(6)(a) Location and Landscape Support w/o pres or current with 8 0	line. Individual parameter so to disturbance from cattle; b) = 8, slightly decreased due to connection; d) functions that habitats; e) Impacts to wildlif loss; f) Hydrologically connections	port variable is reduced somewores: a) Support to wildlife list Invasive exotic species = 9, mo limitations imposed by surroubenefit fish & wildlife downstre listed in Part 1 by outside larcted areas downstream of assert	ted in Part 1 I ninimal cover unding agricu eam-distance nd uses = 8, s essment area	by outside habita age; c) Wildlife a ultural areas and le or barriers = 0, a slightly reduced da = 0, no hydrolog	ats = 8, slightly reduccess to and from lack of hydrologic area isolated from the to surrounding gic connection; g)	uced due outside other
The water environment score is slightly reduced due to impacts from historical landclearing and drought conditions in the surrounding areas and drought conditions; b) water level indicators = 8, consistent with expected; c) soil moisture = 8, consistent with expected; d) soil erosion or deposition = 4, erosion from cattle; e) evidence of fire history = N/A; f) vegetation community zonation = 6, somewhat altered - upland species encroachment; g) hydrologic stress on vegetation = 7, not apparent; h) use by animal species with specific hydrological requirement = 7, ephermal habitat; i) vegetative species tolerant of and associated with water quality degradation = 8, community consists of typical species; j) direct observation of water quality = 8, none noted; K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A.						
The community structure variable is slightly reduced due to encroachment of upland species. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 9, dominated by desirable native wetland species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 7, somewhat impacted by diminished hydroperiod; d) age & size distribution = 8, typical of system; experiments and uplants; density and quality of coarse woody debris, snag, den, and cavity = N/A; f) plant condition = 8, slightly reduced due to encroachment of upland species. Individual parameter scores: a) plant community services = 9, minimal coverage; c) regeneration and recruitment = 7, somewhat impacted by diminished hydroperiod; d) age & size distribution = 8, typical of system; experiments and uplants; density and quality of coarse woody debris, snag, den, and cavity = N/A; f) plant condition = 8, slightly reduced due to encroachment of upland species. Individual parameter scores: a) plant community structure = 9, dominated by desirable native wetland species; b) invasive exotics or other invasive plant species = 9, minimal coverage; c) regeneration and recruitment = 7, somewhat impacted by diminished hydroperiod; d) age & size distribution = 8, typical of system; experiments = 7, due to alteration of community structure by clearing of adjacent adjacent adjacent plant communities = N/A						
Score = sum of above scores/30 (if	If preservation as mitig	ation		or impact accord	smont areas	1
uplands, divide by 20)				or impact assess lelta x acres = -0.		
current	Preservation adjustmen	nt factor =	(Wetla	ind A/B); -0.83 x ·	<0.005 = <0.005	
or w/o pres with			,	ind K); -0.83 x 0.1		
	Adjusted mitigation del	ta =		ind B); total of 0. L of 0.14	. ir acres and	
0.83			total !			1
	If mitigation		Fo	r mitigation asse	ssment areas	
Delta = [with-current]	Time lag (t-factor) =		For mitigation assessment areas			
-0.83	Risk factor =	RFG = delta/(t-factor x risk)			risk) =	

Site/Project Name		Application Number	Assessmen	Assessment Area Name or Number FLUCFCS 621 - Wetlands B, K, A/B		
Progress Energy Florida, In Transmission Lines/PH			FLUCF			
mpact or Mitigation	Transmission Line	Assessment conducted by:	Assessmen	t date:		
Impact - C	learing	J. Styer, K. Bullock	k	9/21-23/09		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)		
The scoring of each ndicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support wetland/surface water functions	rt of Condition is insufficient		
.500(6)(a) Location and Landscape Support	landscape support variable the marsh/wetland scrub communabitats = 5, reduced due to associated with disturbance; functions that benefit fish & vin Part 1 by outside land use	s = 4, reduced due to habitat led ed due to clearing impacts; g)	ested parcels and conversiones: a) Support to wildli exotic species = 6, poten outside = 4, reduced du or barriers = 5, limited ber oss; f) Hydrologically cor	sion to a freshwater ife listed in Part 1 by outside tial encroachment of exotics e to clearing impacts; d) nefit; e) Impacts to wildlife lister		
.500(6)(b)Water Environment (n/a for uplands) //o pres or current with	compaction. Individual para- use of heavy machinery, ero clearing impacts; c) soil mois erosion from clearing impact to removal of canopy stratun animal species with specific tolerant of and associated wi	meter scores: a) water levels sion/sedimentation, and soil consture = 4, altered from soil corrs; e) evidence of fire history = n; g) hydrologic stress on vege hydrological requirements = 6, ith water quality degradation = of water quality = N/A; K) exis	and flows = 4, altered du ompaction; b) water level paction; d) soil erosion of N/A; f) vegetation commetation = 6, some stress f , decreased use due to c 6, may have potential er	or deposition = 4, temporary unity zonation = 4, altered due rom soil compaction; h) use by		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community //o pres or current with 9 4	functional value compared to becomes established throug canopy, shrub, or ground str = 6, potential encroachment disturbed due to clearing; he distribution = 4, impacted fro reduced due to clearing impa- practices = 4, due to alteration	vert the system to a freshwater the existing forested system. In natural succession. Individuatum = 4, canopy stratum remof exotics associated with distribaceous and shrub stratum sim clearing; e) density and quatacts; f) plant condition = 4, red on of community structure by cor algal growth in submerged	Functional value will incual parameter scores: a) oved; b) invasive exotics urbance; c) regeneration pecies will eventually regulity of coarse woody debuced due to clearing impolearing; h) topographic	crease as vegetative community plant community species in the sor other invasive plant species and recruitment = 4, severely generate; d) age & size ris, snag, den, and cavity = 4, acts; g) land management features = 4, atypical for		
Score = sum of above scores/30 (if uplands, divide by 20) current with 0.83 0.43	If preservation as mitig Preservation adjustme Adjusted mitigation de	nt factor =		ssessment areas = -0.40 x 0.25 = 0.10		
	If mitigation					
	7		For mitigation	assessment areas		
Delta = [with-current]	Time lag (t-factor) =		For mitigation RFG = delta/(t-fac			

Site/Project Name		Application Numbe	г		Assessment Area Name of	or Number
Progress Energy Florida, Inc./Levy N Transmission Lines/PHP Transm					Wetlands E, XX,	AQ, AR, AS, DE
FLUCCs code	Further classifica	tion (optional)		Impac	t or Mitigation Site?	Assessment Area Size
630 - Mixed Hardwood/Conifer Wetland		, ,		'	Existing Condition	1.07 acres (E=0.23, XX=0.01, AQ=0.18, AR=0.001, AS=0.13, DE=0.52)
Basin/Watershed Name/Number Affect	ed Waterbody (Clas	35)	Special Classificati	on (i.e.(OFW, AP, other local/state/federal	designation of importance)
Tampa Bay (03100206) and Hillsborough River (03100205)					None	designation or importance)
Geographic relationship to and hydrologi	c connection with	wetlands, other si	urface water, uplai	nds		
Hydrologically connected to other wetlan roadways, golf course, and cleared trans	ds/surface waters	outside the transi			ounded by upland and w	etland forest,
Assessment area description						
Forested wetlands vegetated with mixtur red maple (<i>Acer rubrum</i>), blackgum (<i>Ny</i> : myrtle (<i>Myrica cerifera</i>), buttonbush (<i>Ce</i> _l swamp fern (<i>Blechnum serrulatum</i>), mai	ssa sylvatica), pop phalanthus occide	o ash (<i>Fraxinus ca</i> <i>ntalis</i>), and Brazil	<i>iroliniana</i>), slash p ian pepper (<i>Schin</i>	oine (F us tere	Pinus elliottii). Shrub sp ebinthifolius). Groundco	ecies include wax over species include
Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)					
Existing transmission line ROW, roadways, golf course			Not unique			
Functions			Mitigation for previous permit/other historic use			
Widlife habitat, water stora	age, aquifer recha	rge	N/A			
Anticipated Wildlife Utilization Based on that are representative of the assessmer be found)		•		T, SS	by Listed Species (List s C), type of use, and inte	•
Wading birds, raccoon, various a	mphibians and he	rpetofauna	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).			
Observed Evidence of Wildlife Utilization	(List species dire	ctly observed, or o	ther signs such a	s track	ks, droppings, casings, r	ests, etc.):
	red shoulde	ered hawk, leopard	d frog, armadillo, b	oobcat	:	
Additional relevant factors:						
Assessment conducted by:			Accessment data	/(c).		
J. Styer, K. Bullock			Assessment date(s): 9/21&29/09; 10/1&15/09			

Site/Project Name Progress Energy Florida, In Transmission Lines/PHF		Application Number		rea Name or Number 30 - Wetlands E, XX, AQ, AR, AS, DE
Impact or Mitigation		Assessment conducted by:	Assessment d	ate:
Impact -	Fill	J. Styer, K. Bulloci	9/2	&29/09; 10/1&15/09
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	
.500(6)(a) Location and Landscape Support w/o pres or current with 7	line and golf course. Individu slightly reduced due to surrou pepper; c) Wildlife access to areas and lack of hydrologic moderate barriers due to surr reduced due to surrounding h	port variable is reduced somewhal parameter scores: a) Suppunding development; b) Invasionand from outside = 7, decreas connection; d) functions that brounding development; e) Imparbitat loss; f) Hydrologically dependency of downstream are	ort to wildlife listed in Part ve exotic species = 7, some ed due to limitations impos enefit fish & wildlife downst acts to wildlife listed in Part connected areas downstreal	1 by outside habitats = 8, e coverage by Brazilian ed by surrounding agricultural ream-distance or barriers = 7, 1 by outside land uses = 7, m of assessment area = 8,
.500(6)(b)Water Environment (n/a for uplands) W/o pres or current with	Individual parameter scores: development; b) water level in d) soil erosion or deposition = vegetation community zonation vegetation = 7, some edge efformed requirements = 7, wading bird degradation = 8, community of	e is slightly reduced due to imp a) water levels and flows = 7, ndicators = 8, consistent with = 5, erosion from digging, surro on = 7, somewhat altered - upl ffect, reduced hydroperiod; h) d foraging habitat; i) vegetative consists of typical species; j) d N/A; l) water depth wave, wav	alterations in water level d expected; c) soil moisture sounding development; e) evand species encroachment use by animal species with expecies tolerant of and as irect observation of water of	ue to surrounding = 8, consistent with expected; ridence of fire history = N/A; f) t; g) hydrologic stress on specific hydrological sociated with water quality quality = 8, none noted; K)
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 8 0	upland species. Individual pa 9, dominated by desirable na coverage of Brazilian pepper transmission line maintenand woody debris, snag, den, and management practices = 7, d	able is slightly reduced due to arameter scores: a) plant committee wetland species; b) invas; c) regeneration and recruitme e; d) age & size distribution = d cavity = N/A; f) plant conditioue to alteration of community ical for assessment area; i) silt	nunity species in the canop ive exotics or other invasivent = 6, impacted by diminis 8, typical of system; e) den n = 8, slightly reduced due structure by clearing of adj	by, shrub, or ground stratum = e plant species = 7, moderate shed hydroperiod, sity and quality of coarse to altered hydroperiod; g) land acent native uplands; h)
Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres with 0.73	If preservation as mitigation adjustment Adjusted mitigation delt	nt factor =	For impact ass FL = delta x acres = (Wetland E); -0.73 x (Wetland AQ); total total FL of 0.11	0.03 = 0.02
	If mitigation		For mitigation as	ssessment areas
Delta = [with-current]	Time lag (t-factor) =		RFG = delta/(t-facto	
-0.73	Risk factor =		NFG - deita/(t-lacto	i A liok) –

te/Project Name Progress Energy Florida, Inc./Levy Nuclear Plant - Transmission Lines/PHP Transmission Line		Application Number		Area Name or Number 30 - Wetlands E, XX, AQ, AR, AS, DE		
Impact or Mitigation		Assessment conducted by:	Assessment	Assessment date:		
Impact - C	learing	J. Styer, K. Bulloch	9/2	1&29/09; 10/1&15/09		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)		
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support wetland/surface water functions	l l		
.500(6)(a) Location and Landscape Support v/o pres or current with 7 5	landscape support variable to marsh/wetland scrub communabitats = 5, reduced due to associated with disturbance; functions that benefit fish & vin Part 1 by outside land use	ociated with clearing the transn- hrough loss of contiguous fore unity. Individual parameter so clearing impacts; b) Invasive of c) Wildlife access to and from wildlife downstream-distance of its = 4, reduced due to habitat the ed due to clearing impacts; g) istream areas.	sted parcels and conversiones: a) Support to wildlift exotic species = 6, potentiouside = 4, reduced due or barriers = 5, limited beneoss; f) Hydrologically confirmed beneous benedicted by the firmed by the firmed by the firmed benedicted by the firmed by th	on to a freshwater e listed in Part 1 by outside al encroachment of exotics to clearing impacts; d) efit; e) Impacts to wildlife listed ected areas downstream of		
.500(6)(b)Water Environment (n/a for uplands)	freshwater marsh/wetland so sedimentation, and soil comp clearing impacts related to u indicators = 4, altered from co	porarily impact the water envir crub habitat. Canopy clearing in paction. Individual parameter se of heavy machinery, erosio clearing impacts; c) soil moistur osion from clearing impacts; e	will impact the water envir scores: a) water levels ar n/sedimentation, and soil re = 4, altered from soil co) evidence of fire history =	onment score due to erosion, id flows = 4, altered due to compaction; b) water level impaction; d) soil erosion or		
w/o pres or current with 7 4	clearing; i) vegetative specie encroachment of nuisance/e	inimal species with specific hydes es tolerant of and associated we exotic species; j) direct observa wave energy, currents and ligh	Irological requirements = 6 ith water quality degradati tion of water quality = N/A	6, decreased use due to on = 6, may have potential		
	clearing; i) vegetative specie encroachment of nuisance/e = N/A; i) water depth wave, Clearing the canopy will confunctional value compared to becomes established throug canopy, shrub, or ground stress, potential encroachment disturbed due to clearing; he distribution = 4, impacted froreduced due to clearing imparactices = 4, due to alteration	nimal species with specific hydes tolerant of and associated wexotic species; j) direct observa	rological requirements = 6 ith water quality degradatition of water quality = N/A nt penetration = N/A. r marsh/wetland scrub cor Functional value will incr al parameter scores: a) ploved; b) invasive exotics urbance; c) regeneration a pecies will eventually regulity of coarse woody debriuced due to clearing impalearing; h) topographic for	s, decreased use due to on = 6, may have potential ; K) existing water quality data munity with significant loss clease as vegetative community and community species in the or other invasive plant species and recruitment = 4, severely enerate; d) age & size s, snag, den, and cavity = 4, cts; g) land management eatures = 4, atypical for		
7 4 .500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with	clearing; i) vegetative specie encroachment of nuisance/e = N/A; I) water depth wave, Clearing the canopy will confunctional value compared to becomes established throug canopy, shrub, or ground str = 6, potential encroachment disturbed due to clearing; he distribution = 4, impacted fror reduced due to clearing imparactices = 4, due to alteratic assessment area; i) siltation	nimal species with specific hydes tolerant of and associated wexotic species; j) direct observative wave energy, currents and light over the system to a freshwate to the existing forested system. In natural succession. Individuatum = 4, canopy stratum rem of exotics associated with disterbaceous and shrub stratum som clearing; e) density and quators; f) plant condition = 4, red on of community structure by cor algal growth in submerged spation, ent factor =	Irological requirements = 6 ith water quality degradatition of water quality = N/A nt penetration = N/A. Ir marsh/wetland scrub con Functional value will incr al parameter scores: a) ploved; b) invasive exotics urbance; c) regeneration apecies will eventually regelity of coarse woody debruced due to clearing impalearing; h) topographic feaquatic plant communities	s, decreased use due to on = 6, may have potential ; K) existing water quality data munity with significant loss clease as vegetative community and community species in the or other invasive plant species and recruitment = 4, severely enerate; d) age & size s, snag, den, and cavity = 4, cts; g) land management eatures = 4, atypical for		
current with 7 4 .500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community Wo pres or current with 8 4 Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres with	clearing; i) vegetative specie encroachment of nuisance/e = N/A; I) water depth wave, Clearing the canopy will confunctional value compared to becomes established throug canopy, shrub, or ground str = 6, potential encroachment disturbed due to clearing; he distribution = 4, impacted fror reduced due to clearing imparatices = 4, due to alteratic assessment area; i) siltation	nimal species with specific hydes tolerant of and associated wexotic species; j) direct observative wave energy, currents and light over the system to a freshwate to the existing forested system. In natural succession. Individuatum = 4, canopy stratum rem of exotics associated with disterbaceous and shrub stratum som clearing; e) density and quators; f) plant condition = 4, red on of community structure by cor algal growth in submerged spation, ent factor =	Irological requirements = 6 ith water quality degradatition of water quality = N/A nt penetration = N/A. Ir marsh/wetland scrub con Functional value will incr al parameter scores: a) ploved; b) invasive exotics urbance; c) regeneration apecies will eventually regulatity of coarse woody debriuced due to clearing impalearing; h) topographic faquatic plant communities For impact as FL = delta x acres (Wetland E)	s, decreased use due to on = 6, may have potential ; K) existing water quality dat mmunity with significant loss clease as vegetative community ant community species in the or other invasive plant species and recruitment = 4, severely enerate; d) age & size s, snag, den, and cavity = 4, cts; g) land management eatures = 4, atypical for s = N/A.		

Site/Project Name		Application Numbe	r		Assessment Area Name o	or Number
Progress Energy Florida, Inc./Levy N Transmission Lines/PHP Transmi						etland A/B (Kathleen n property)
FLUCCs code	Further classifica	ition (optional)		Impac	t or Mitigation Site?	Assessment Area Size
630 - Mixed Forested Wetland					Impact	52.06 acres
Basin/Watershed Name/Number Affect	ted Waterbody (Clas	ss)	Special Classification	on (i.e.C	DFW, AP, other local/state/federal	I designation of importance)
Port Lonesome Ditches/03100205					None	
Geographic relationship to and hydrologic	c connection with	wetlands, other su	urface water, uplar	nds		
Wetland areas surround the Kathleen Su connecting to Green Swamp and Withlac				shwate	er marshes and mixed f	orested wetlands,
Assessment area description						
Forested mixed hardwood/conifer wetland laurel oak (Quercus laurifolia), slash pine shrub layer comprised of coastal plain wil (Schinus terebinthifolius), buttonbush (Colorunda regalis), sawgrass (Cladium ji pennywort (Hydrocotyle umbellata).	e (Pinus elliottii), ro illow (Salix carolini ephalanthus occid	ed maple (<i>Acer ru</i> iana), wax myrtle dentalis); groundco	<i>ibrum</i>), American (<i>Myrica cerifera</i>), over consists of Vi	elm (<i>L</i> silverli irginia	Ulmus americana), wate ing (Baccharis glomeruli chain fern (Woodwardia	er oak (Q <i>uercus nigra</i>); <i>iflora</i>), Brazilian pepper a <i>virginica</i>), royal fern
Significant nearby features			Uniqueness (collandscape.)	nsideri	ing the relative rarity in i	relation to the regional
Kathleen Substation and transi	mission line ROW	/, US 98			Not unique	
Functions			Mitigation for prev	vious r	permit/other historic use	;
Widlife habitat, water stora	age, aquifer recha	rge			N/A	
Anticipated Wildlife Utilization Based on that are representative of the assessmen be found)		•		T, SSC	by Listed Species (List s C), type of use, and inte	
Wading birds, raccoon, white tailed deer, herpetofa		s amphibians and	heron (SSC), sno	owy eg	ading birds such as whit pret (SSC), tricolored her c), wood stork (E).	
Observed Evidence of Wildlife Utilization	(List species direct	ctly observed, or o	other signs such as	s track	s, droppings, casings, r	nests, etc.):
	Black racer,	green tree frog, le	eopard frog, black	vulture	9	
Additional relevant factors:						
Assessment conducted by:			Assessment date	e(s):		
B. Meinecke, J. Styer			9/17/2009			

Site/Project Name Progress Energy Florida, Inc Transmission Lines/PHP	Application Number		Assessment Area Name or Number FLUCFCS 630 - Wetland A/B (Kathleen Substation Property)		
Impact or Mitigation		Assessment conducted by:		Assessment date	
Impact -	Fill	B. Meinecke, J. Styl	B. Meinecke, J. Styer 10/12/2009		
		_			
Scoring Guidance	Optimal (10)	Moderate(7)	Mir	nimal (4)	Not Present (0)
The scoring of each indicator is based on what	Condition is optimal and	Condition is less than optimal, but sufficient to	Minimal le	vel of support of	Condition is insufficient
would be suitable for the	fully supports wetland/surface water	maintain most		/surface water	provide wetland/surfac
type of wetland or surface water assessed	functions	wetland/surface waterfunctions	fu	inctions	water functions
water assessed		wateriunctions			
.500(6)(a) Location and Landscape Support w/o pres or current with	line right-of-way. Individual preduced due to adjacent US Wildlife access to and from obenefit fish & wildlife downstrwith Green Swamp; e) Impacsurrounding habitat loss; f) Hwetland system connecting to	port variable is slightly reduced parameter scores: a) Support 98; b) Invasive exotic species utside = 8, slightly decreased team-distance or barriers = 8, ats to wildlife listed in Part 1 by ydrologically connected areas of Green Swamp via tributaries a provides benefits to downstr	to wildlife lis = 8, Brazilia due to limita area connec outside land downstrean of Gator Cre	ted in Part 1 by or n pepper present, tions imposed by sted to large wetla d uses = 8, slightly n of assessment a	utside habitats = 8, slightl but not dominant; c) US 98; d) functions that nd complex associated y reduced due to area = 8, contiguous
	on accessment area o, area				
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current with	associated with the existing s alterations in water level due with expected; c) soil moistur evidence of fire history = N/A encroachment; g) hydrologic hydrological requirements = 9 quality degradation = 8, comi	e is slightly reduced due to impossibilitation. Individual paramet to ditching, US 98, and existing = 8, consistent with expecte; f) vegetation community zons stress on vegetation = 8, not a 9, wading bird habitat; i) veget munity consists of typical specify data = N/A; I) water depth of the substantial stress of the substantial stress of typical specify data = N/A; I) water depth of the substantial stress of typical specify data = N/A; I) water depth of the substantial stress of typical specific data.	er scores: a ng substation d; d) soil erc ation = 8, sli- apparent; h) ative species ies; j) direct	a) water levels and n; b) water level in osion or deposition ghtly altered in an use by animal sp s tolerant of and a observation of wa	d flows = 8, slight idicators = 9, consistent in = 8, minimal erosion; e) eas due to upland specie ecies with specific associated with water ater quality = 8, none
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 9 0	reduced due to limited preset community species in the car b) invasive exotics or other in somewhat impacted by existi of system; e) density and qua plant condition = 9; g) land m	ructure is dominated by an ass nce of exotic species Brazilian nopy, shrub, or ground stratum nvasive plant species = 8, limit ng transmission line right-of-w ality of coarse woody debris, s nanagement practices = 7, due pical for assessment area; i) s	pepper. Indicate the pepper. Indicate the pepper in the pe	dividual paramete nated by desirable e; c) regeneration station; d) age & s nd cavity = 9, typic US 98 and transi	r scores: a) plant e native wetland species; and recruitment = 9, size distribution = 9, typic cal of assessment area; f) mission line right-of-way;
Score = sum of above scores/30 (if	If preservation as mitigate	ation,		For impact assess	sment areas
uplands, divide by 20)	Preservation adjustmer	nt factor =			
current br w/o pres with 0.83 0	Adjusted mitigation del	ta =	FL = 0	delta x acres = -0.	83 x 0.05 = 0.05
	ı				
	If mitigation		F.	or mitigation asse	ssment areas
Delta = [with-current]	Time lag (t-factor) =			aningation asse	oomen areas
-0.83	Risk factor =		RFG	= delta/(t-factor x	risk) =

Site/Project Name		Application Numbe	r	F	Assessment Area Name o	or Number
Progress Energy Florida, Inc./Levy Transmission Lines/PHP Transr					Wetlands DD, LL, AZ	Z, BA, BI, BT, BU, DN
FLUCCs code	Further classification	ition (optional)		Impact	or Mitigation Site?	Assessment Area Size
631 - Wetland Scrub					Existing Condition	1.49 acres (DD=0.09, LL=0.42, AZ=0.15, BA=0.41, BI=0.31, BT=0.02, BU=0.04, DN=0.05)
Basin/Watershed Name/Number Affe	ected Waterbody (Clas		Special Classification	on (i.e.Of	FW, AP, other local/state/federal	designation of importance)
Tampa Bay (03100206) and Hillsborough River (03100205)					None	
Geographic relationship to and hydrolog	gic connection with	wetlands, other s	urface water, uplar	nds		
Primarily isolated systems within existin	ng cleared transmis:	sion line ROW; so	ome connections to	o adjace	ent wetlands/surface w	raters outside the ROW.
Assessment area description						
Disturbed wetland scrub dominated by terebinthifolius), cattail (Typha latifolia) bulbifera), lantana (Lantana camara), s additional native species including elde capillifolium), red maple (Acer rubrum) laurifolia), buttonbush (Cephalanthus o broomsedge bluestem (Andropogon glo), Chinese tallow (Sa skunk vine (Paederi erberry (Sambucus c), maiden fern (Thel) occidentalis), caesar	apium sebiferum) ia foetida), chinab canadensis), coas lypteris sp.), rushe irweed (Urena loba	, Florida ground ch erry (<i>Melia adezan</i> stal plain willow (Sa es (<i>Juncus</i> spp.), s ata), blackberry (<i>R</i>	herry (F rach), a alix card sedges	Physalis alkekengi), air and wild taro (Colocasia oliniana), dogfennel (E (Cyperus spp.), laurel	potato (<i>Dioscoria</i> a esculenta), with supatorium oak (Quercus
Significant nearby features			Uniqueness (cor landscape.)	nsiderir	ng the relative rarity in	relation to the regional
Existing transmission line ROW	V, roadways, resider	ntial areas			Not unique	
Functions			Mitigation for prev	vious p	ermit/other historic use	;
Widlife habitat, water sto	orage, aquifer recha	ırge			N/A	
Anticipated Wildlife Utilization Based or that are representative of the assessment be found)				T, SSC	y Listed Species (List s b), type of use, and inte	
Wading birds, raccoon, various	amphibians and her	rpetofauna		SSC), s	e by wading birds such snowy egret (SSC), tric wood stork (E).	
Observed Evidence of Wildlife Utilization	on (List species dire-	ctly observed, or o	other signs such as	s tracks	s, droppings, casings, ı	nests, etc.):
		raccoon, mocking	gbird, catbird			
Additional relevant factors:						
Additional elevant factors.						
Assessment conducted by:			Assessment date	e(s):		
J. Styer, K. Bullock		•	9/23-24/09, 10/05	5/09, 10	0/07/09, 10/20/09	

Progress Energy Florida In		Application Number		ea Name or Number
Transmission Lines/PHF	nc./Levy Nuclear Plant - P Transmission Line		i	- Wetlands DD, LL, AZ, BA, BI, BT, BU, DN
Impact or Mitigation		Assessment conducted by:	Assessment dat	
Impact -	- Fill	J. Styer, K. Bullock	9/23-24/09, 10	0/05/09, 10/07/09, 10/20/09
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Condition is insufficient to provide wetland/surface water functions	
.500(6)(a) Location and Landscape Support w/o pres or current with 6 0	areas and cleared transmissi habitats = 6, reduced due to Wildlife access to and from o functions that benefit fish & w Impacts to wildlife listed in Pa connected areas downstream	port variable is reduced due to on line. Individual parameter substraction of the control of the	scores: a) Support to wildlife nvasive exotic species = 3, s imitations imposed by surrou r barriers = 2, areas isolated reduced due to surrounding hydrologic connection; g) Dep	listed in Part 1 by outside ignificant coverage; c) nding residential areas; d) from other habitats; e) habitat loss; f) Hydrologically
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current with	a) water levels and flows = 4, of assessment area; c) soil madjacent landuses, debris dis species encroachment; g) hy requirements = 3, poor wildlif degradation = 4, community of the second s	e is reduced due to impacts fro altered due to debris disposa- noisture = 6, drier than expecte sposal; e) evidence of fire histo drologic stress on vegetation = te habitat; i) vegetative species consists of nuisance/exotic spe N/A; I) water depth wave, wav	I, clearing; b) water level indi ed; d) soil erosion or deposition ory = N/A; f) vegetation comm = 6; h) use by animal species is tolerant of and associated vecies; j) direct observation of	cators = 6, less than typical on = 3, erosion from nunity zonation = 4, upland with specific hydrological with water quality water quality = N/A; K)
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 4 0	scores: a) plant community s species; b) invasive exotics recruitment = 6, somewhat in reduced due to ROW maintel condition = 4, dominance by practices = 4, debris disposal	iable is reduced due to domina pecies in the canopy, shrub, or other invasive plant species npacted by diminished hydrope nance; e) density and quality cexotic species reduces extent within wetlands, clearing of a assessment area; i) siltation o	r ground stratum = 3, domina = 3, extensive coverage; c) eriod; d) age & size distribution of coarse woody debris, snag and health of native species djacent native uplands; h) to	ated by nuisance/exotic regeneration and on = 6, typical of system, , den, and cavity = 4; f) plan ; g) land management pographic features = 6,
Score = sum of above scores/30 (if	If preservation as mitigate	ation,	For impact asse	ssment areas
uplands, divide by 20) current or w/o pres 0.47 0	Preservation adjustmer Adjusted mitigation del		FL = delta x acres = - (see impact table for i impact acreage)	
	If williand the			
				· · · · · · · · · · · · · · · · · · ·
Delta = [with-current]	If mitigation Time lag (t-factor) =		For mitigation ass	essment areas

Site/Project Name		Application Numbe	er .		Assessment Area Name o	or Number
Progress Energy Florida, Inc./L Transmission Lines/PHP Tr						58, 91, 95A, 100, AM, BV, XX
FLUCCs code 631 - Wetland Scrub	Further classifica	ation (optional)			t or Mitigation Site?	Assessment Area Size 8.41 acres (42=3.02, 54=0.47, 57=0.17, 58=0.76, 91=0.46, 95A=0.71, 100=0.37, AM=1.38, BC=0.47, BH=0.30, BV=0.17, XX=0.13)
Basin/Watershed Name/Number Tampa Bay (03100206) and	Affected Waterbody (Clas	ss)	Special Classificati	on (i.e.C	DFW, AP, other local/state/federal	designation of importance)
Hillsborough River (03100205)					None	
Geographic relationship to and hyd	rologic connection with	wetlands, other su	ırface water, uplar	nds		
Primarily isolated systems within ex	disting cleared transmiss	sion line ROW; so	me connections to	adjac	ent wetlands/surface wa	aters outside the ROW.
Scrub wetlands vegetated with a m (Schinus terebinthifolius), cattail (T (Paspalum boscianum), primrose v native shrub and tree species inclumaple (Acer rubrum), sweetbay (M cerifera), and silverling (Baccharis fern (Thelypteris sp.), rushes (Juno (Polypogon monspeliensis), caesa dogfennel (Eupatorium capillifolium nodiflora), tickseed sunflower (Bide (Osmunda cinnamomea), bushy bid (Rhexia sp.).	ypha latifolia), Chinese villow (Ludwigia spp.), to ding elderberry (Sambu lagnolia virginiana), lau glomeruliflora), and natus spp.), sedges (Cyperweed (Urena lobata), to maidencane (Paniculens alba), pickerelweed	tallow (Sapium se bermudagrass (Cy cus canadensis), urel oak (Quercus ivive groundcover serus spp.), bristleg blackberry (Rubus m hemitomon), so I (Pontedena cord.)	biferum), campho vnodon dactylon), coastal plain willo laurifolia), buttont peccies such as m rass (Setaria sp.) sp.), smartweed oft rush (Juncus eff ata), Virginia chaii	r (Cinr and w w (Sall oush (C narsh p , dayflo (Polyg fusus) n fern	namomea camphora), b ild taro (Colocasia escul ix caroliniana), water oa Cephalanthus occidentai bennywort (Hydrocotyle bower (Commelina difusa onum sp.), peppervine i, rattlebox (Sesbania sp (Woodwardia virginica),	ull crowngrass lenta), with additional lik (Quercus nigra), red lis), wax myrtle (Myrica umbellata), maiden), rabbits foot grass (Ampelopsis arborea), lo.), capeweed (Phyla cinnamon fem
Significant nearby features			Uniqueness (co landscape.)	nsider	ing the relative rarity in I	relation to the regional
Existing transmission line F	₹OW, roadways, resider	ntial areas			Not unique	
Functions			Mitigation for pre	vious	permit/other historic use	
Widlife habitat, wate	r storage, aquifer recha	ırge			N/A	
Anticipated Wildlife Utilization Base that are representative of the assesbe found)				T, SS	by Listed Species (List s C), type of use, and inte	
Wading birds, raccoon, vari	ous amphibians and he	rpetofauna		SSC),	e by wading birds such snowy egret (SSC), tric wood stork (E).	
Observed Evidence of Wildlife Utili:	zation (List species dire	ctly observed, or o	other signs such a	s track	s, droppings, casings, n	ests, etc.):
ibis	s, white tailed deer, Cub	ean tree frog, leopa	ard frog, armadillo	, red sl	houldered hawk	
Additional relevant factors:				• • • • • • • • • • • • • • • • • • • •		
Assessment conducted by:			Assessment date	e(s):		•
J. Styer, S. Rizzo, K. Bullock			9/29/09 through		09	

Site/Project Name		Application Number	[A	Assessment Area	Name or Number
	i, Inc./Levy Nuclear Plant - PHP Transmission Line				- Wetlands 42, 54, 57, 58, D, AM, BC, BH, BV, XX
Impact or Mitigation		Assessment conducted by:		Assessment date	:
Impa	ct - Fill	J. Styer, S. Rizzo, K. Bullock		9/29/09	through 10/21/09
Scoring Guidance	Optimal (10)	Moderate(7)	Min	imal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions Minimal level of wetland/surface function		rel of support of surface water	Condition is insufficient to provide wetland/surface water functions
.500(6)(a) Location and Landscape Support w/o pres or current wit 0	cleared transmission line. In reduced due to surrounding of and from outside = 6, decrea benefit fish & wildlife downstr listed in Part 1 by outside lan	poort variable is reduced due to dividual parameter scores: a) development; b) Invasive exoti sed due to limitations imposed ream-distance or barriers = 5, d uses = 6, reduced due to su area = 4, limited hydrologic corenefit to downstream areas.	Support to wi ic species = 6, d by surroundi limited connector or the connector of the conn	Idlife listed in Par , moderate cover ing residential are ction to other hab oitat loss; f) Hydro	rt 1 by outside habitats = 6 rage; c) Wildlife access to eas; d) functions that bitats; e) Impacts to wildlife blogically connected areas
.500(6)(b)Water Environmer (n/a for uplands) w/o pres or current wit	scores: a) water levels and f assessment area; c) soil moi adjacent landuses; e) eviden encroachment; g) hydrologic requirements = 5, poor wildlif degradation = 6, some speci	e is reduced due to impacts fro lows = 6, altered due to clearin sture = 7, typical of assessme ce of fire history = N/A; f) vege stress on vegetation = 6; h) us fe habitat; i) vegetative species indicative of high nutrients, er quality data = N/A; I) water	ng, ditching; b nt area; d) soi etation commu se by animal s s tolerant of ar eg. cattail, pri	water level indial erosion or depo unity zonation = 6 species with specied with spe	cators = 7, typical of sition = 6, erosion from 6, moderate upland species office hydrological the water quality direct observation of water
.500(6)(c)Community structu 1. Vegetation and/or 2. Benthic Community w/o pres or current 6 0	scores: a) plant community s nuisance/exotic species; b) i and recruitment = 6, somewh system, reduced due to ROV 6; f) plant condition = 6, exter maintenance; g) land manag	iable is reduced due to prevale pecies in the canopy, shrub, o nvasive exotics or other invasuat impacted by ROW mainten V maintenance; e) density and the alth of native species ement practices = 6, clearing assessment area; i) siltation of	or ground strat live plant spec lance, ditching I quality of coa s impacted sor of adjacent na	tum = 6, limited d dies = 6, moderate g; d) age & size d arse woody debris mewhat by exotic tive uplands; h) t	iversity due to coverage by e coverage; c) regeneration listribution = 6, typical of s, snag, den, and cavity = c nuisance species, ROW topographic features = 6,
Score = sum of above scores/30 uplands, divide by 20) current br w/o pres 0.60 0	Preservation adjustment	nt factor =	FL = d	For impact assessed that a cres = -0. Inpact table for including acreage)	60 x 2.04 = 1.22
	If mitigation		Fo	r mitigation asse	ssment areas
Delta = [with-current]	Time lag (t-factor) = Risk factor =		RFG =	delta/(t-factor x	risk) =
-0.00	Max idotor -				

Site/Project Name	'	Application Number	я	Assessment Area Name	or Number
Progress Energy Florida, Inc./Le Transmission Lines/PHP Tra					s, BZ, CA, CCa, CW, DB, DO, EEa
FLUCCs code	Further classificat	tion (optional)	:	Impact or Mitigation Site?	Assessment Area Size 18.21 acres (BD=2.76, BO=1.28, BS=2.72,
631 - Wetland Scrub				Existing Condition	BC=1.28, BS=2.72, BZ=3.25, CA=1.50, CCa=0.98, CW=0.05, DB=3.21, DI=0.32, DC=0.71, EEa=1.43)
Basin/Watershed Name/Number	Affected Waterbody (Clas	is)	Special Classification	On (i.e.OFW, AP, other local/state/federa	al designation of importance)
Tampa Bay (03100206) and Hillsborough River (03100205)			(s adjacent to OFW (tributary o	
Geographic relationship to and hydro	ologic connection with	wetlands, other su	uface water, uplan	nds	
Primarily isolated systems within exi	isting cleared transmiss	sion line ROW; so	me connections to	adjacent wetlands/surface w	vaters outside the ROW.
Assessment area description					
Scrub wetlands dominated by desira willow (Salix caroliniana), water oak laurel oak (Quercus laurifolia), butto cypress (Taxodium distichum), swedas marsh pennywort (Hydrocotyle u (Rhynchospora spp.), fireflag (Thalid (Diodia virginianum), false daisy (Ecapillifolium), maidencane (Panicum (Phyla nodiflora), tickseed sunflowe (Woodwardia aereolata), cinnamon (Bacopa monnieri), marsh fleabane glomeratus), and meadowbeauty (Rerebinthifolius), camphor (Cinnamon	a (Quercus nigra), red nonbush (Cephalanthus of cetgum (Liquidambar styrumbellata), maiden fern (a geniculata), dayflowe (clipta prostata), smartwin hemitomon), goldenror (Bidens alba), fanpeter (En (Osmunda cinnam (Pluchea rosea), bush (Rhexia sp.). Some nuis	maple (Acer rubrui occidentalis), wax yraciflua), and silv in (Thelypteris sp.) er (Commelina difi, veed (Polygonum od (Solidago sp.), als (Sida rhombific nomea), royal ferm iny broomsedge (Ai sance/exotic speci	m), sweetbay (Ma k myrtle (Myrica ce verling (Baccharis s. , rushes (Juncus s. usa), caesarweed (sp.), peppervine (soft rush (Juncus olia), Virginia chair n (Osmunda regalis ndropogon virginic ies present, includi jia peruviana), ano	gnolia virginiana), dahoon h nifera), American elm (Ulmus glomeruliflora), and native gr spp.), sedges (Cyperus spp.) (Urena lobata), blackberry (R Ampelopsis arborea), dogfen effusus), rattlebox (Sesbania n fern (Woodwardia virginica) s), wild rice (Zizania aquatia) s), wild rice (Zizania aquatia) siy, broomsedge bluestem (ing Brazilian pepper (Schinus	iolly (Ilex cassine), is americana), bald oundcover species such (), beakrushes (Rubus sp.), buttonweed anel (Eupatorium a sp.), capeweed (), netted chain fern a), water hyssop (Andropogon s
Significant nearby features			landscape.)	isidening the relative rainy	relation to the regiona.
Existing transmission line	∍ ROW, roadways, sub:	station		Not unique	
Functions			Mitigation for prev	vious permit/other historic use	9
Widlife habitat, water	storage, aquifer rechar	:ge		N/A	
Anticipated Wildlife Utilization Based that are representative of the assess be found)				ation by Listed Species (List s T, SSC), type of use, and inte)	
Wading birds, raccoon, variou	us amphibians and her	petofauna	little blue heron (S	nal use by wading birds such SSC), snowy egret (SSC), tric , and wood stork (E).	
Observed Evidence of Wildlife Utiliza	ation (List species direc	atly observed, or o	ther signs such as	tracks, droppings, casings, r	nests, etc.):
mu	usk turtle, soft shelled tu	urtle, cardinal, catl	bird, great egret, g	lossy ibis, white ibis	
Additional relevant factors:					
Additional relevant factors:					
·					
Assessment conducted by:			Assessment date	(s):	
M. Arrants, J. Styer, S. Rizzo, K. Bul	llock		9/30/09 through 1	0/21/09	

Prog	t Name press Energy	Florida, In	nc./Levy Nuclear Plant -	Application Number		L	a Name or Number Wetlands BD, BO,	
		Lines/PHF	P Transmission Line				CW, DB, DI, DO, EI	Ea
Impact or M	litigation			Assessment conducted by:		Assessment date:		
		Impact -	· Fill	J. Styer, S. Rizzo, K. Bullock 9/30/09 through 10/21/09				
Scoring	Guidance		Optimal (10)	Moderate(7)	М	inimal (4)	Not Present	(0)
The scoring of each ndicator is based on what would be suitable for the ype of wetland or surface water assessed Condition is optimal and fully supports wetland/surface water functions			Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	wetland	evel of support of d/surface water unctions	Condition is insuff provide wetland/ water function	surface	
	3)(a) Location dscape Supp		line ROW; surrounding area page 3. Support to wildlife listed in within ROW; b) Invasive exot decreased due to limitations if functions that benefit fish & wwildlife listed in Part 1 by outs	ort variable is slightly reduced predominantly natural upland a Part 1 by outside habitats = 8, ic species = 8, minimal covera mposed by surrounding agricuidlife downstream-distance or ide land uses = 8, slightly reduced in a sessessment area = 7; g) D tream areas.	and wetland , slightly rec ge; c) Wildl ultural areas barriers = uced due to	l communities. Ind luced due to cleari ife access to and f and lack of hydro 7, minimal distance s surrounding habit	dividual parameter s ng of forested habit from outside = 8, slip plogic connection; d) ploarries; e) Impact tat loss; f) Hydrologi	scores: tat ghtly) s to ically
	b)Water Envir /a for uplands		parameter scores: a) water le	is only slightly reduced due to evels and flows = 8, slight after nesistent with expected; c) soil	rations in w moisture =	ater level due to cl 8, consistent with	eared surrounding a expected; d) soil ere	
//o pres or current 8		with 0	species with specific hydrolog associated with water quality	oachment; g) hydrologic stress gical requirements = 8, wading degradation = 8, community c iisting water quality data = N/A	s on vegeta bird foragin onsists of ty	tion = 7, not appar ng; i) vegetative sp ypical species; j) di	rent; h) use by anim becies tolerant of an irect observation of	al id water
.500(6)(c) 1. Vo. 2. Ber)Community : 'egetation and nthic Commu	0 structure	species with specific hydrologassociated with water quality quality = 8, none noted; K) expenetration = N/A. The vegetative community is variable slightly reduced due community species in the car invasive exotics or other invasomewhat impacted by dimin quality of coarse woody debrig) land management practice	oachment; g) hydrologic stress gical requirements = 8, wading degradation = 8, community c	s on vegeta i bird foragii onsists of ty in blage of na c species. I i = 8, domin il coverage; ze distribut i; f) plant co	tion = 7, not apparing; i) vegetative spypical species; j) diepth wave, wave eative wetland speciative wetland speciated by desirable act or egeneration aron = 8, typical of sondition = 8, slightly enance; h) topogra	ent; h) use by anim ecies tolerant of an irect observation of energy, currents and es. Community structure rescores: a) plant native wetland special recruitment = 7, system; e) density a y reduced due to draphic features = 8, t	al id water d light ucture cies; b ind ought;
.500(6)(c) 1. Ve 2. Bei	egetation and	o structure d/or unity with	species with specific hydrologassociated with water quality quality = 8, none noted; K) expenetration = N/A. The vegetative community is variable slightly reduced due community species in the car invasive exotics or other invasomewhat impacted by dimin quality of coarse woody debrig) land management practice for assessment area; i) siltation	pachment; g) hydrologic stressical requirements = 8, wading degradation = 8, community consisting water quality data = N/A degradation = N	s on vegeta i bird foragii onsists of ty in blage of na c species. I i = 8, domin il coverage; ze distribut i; f) plant co	tion = 7, not apparing; i) vegetative spypical species; j) diepth wave, wave eative wetland speciative wetland speciated by desirable act or egeneration aron = 8, typical of sondition = 8, slightly enance; h) topogra	ent; h) use by anim ecies tolerant of an irect observation of energy, currents and es. Community struer scores: a) plant native wetland spend recruitment = 7, system; e) density a y reduced due to draphic features = 8, te	al id water d light ucture cies; b ind ought;
8 .500(6)(c) 1. Vo 2. Ber //o pres or current 8 Score = sun	egetation and	ostructure d/or unity with ores/30 (if	species with specific hydrologassociated with water quality quality = 8, none noted; K) expenetration = N/A. The vegetative community is variable slightly reduced due community species in the car invasive exotics or other invasomewhat impacted by dimin quality of coarse woody debrig) land management practice for assessment area; i) siltation	coachment; g) hydrologic stressical requirements = 8, wading degradation = 8, community control isting water quality data = N/A dominated by a diverse assent to presence of nuisance/exotic nopy, shrub, or ground stratum sive plant species = 7, minima ished hydroperiod; d) age & sis, snag, den, and cavity = N/A s = 8, slightly reduced due to lon or algal growth in submergentation, at factor =	s on vegeta bird foraginonsists of ty nblage of na c species. I i = 8, domin I coverage; ze distribut c; f) plant co ROW maint ed aquatic p	tion = 7, not apparing; i) vegetative spypical species; j) diepth wave, wave entire wetland special individual parametrated by desirable c) regeneration aron = 8, slightly enance; h) topographant communities	ent; h) use by anim ecies tolerant of an irect observation of energy, currents and es. Community structure scores: a) plant native wetland spend recruitment = 7, system; e) density a y reduced due to draphic features = 8, ten N/A	al id water d light ucture cies; b ind ought;
.500(6)(c) 1. Vo 2. Ber v/o pres or current 8 Score = sun uplar current or w/o pres	egetation and inthic Community of above see	ostructure d/or unity with o ores/30 (if 20) with	species with specific hydrolog associated with water quality quality = 8, none noted; K) expenetration = N/A. The vegetative community is variable slightly reduced due community species in the car invasive exotics or other invasomewhat impacted by dimin quality of coarse woody debrig) land management practice for assessment area; i) siltatic Preservation as mitigal Preservation adjustmen Adjusted mitigation delt	coachment; g) hydrologic stressical requirements = 8, wading degradation = 8, community control isting water quality data = N/A dominated by a diverse assent to presence of nuisance/exotic nopy, shrub, or ground stratum sive plant species = 7, minima ished hydroperiod; d) age & sis, snag, den, and cavity = N/A s = 8, slightly reduced due to lon or algal growth in submergentation, at factor =	s on vegeta bird foraginonsists of ty nblage of na c species. I i = 8, domin I coverage; ze distribut c; f) plant co ROW maint ed aquatic p	tion = 7, not apparing; i) vegetative spypical species; j) diepth wave, wave eative wetland speciated by desirable ic) regeneration aron = 8, typical of sondition = 8, slightly enance; h) topograplant communities: For impact assessed elta x acres = -0, impact table for incommunities of the second seco	ent; h) use by anim ecies tolerant of an irect observation of energy, currents and es. Community structure scores: a) plant native wetland spend recruitment = 7, system; e) density a y reduced due to draphic features = 8, ten N/A	al id water d light ucture cies; b ind ought;
.500(6)(c) 1. Vo 2. Ber //o pres or current 8 Score = sun uplar current or w/o pres 0.80	egetation and inthic Community of above see	ostructure d/or unity with oores/30 (if 20) with	species with specific hydrologassociated with water quality quality = 8, none noted; K) expenetration = N/A. The vegetative community is variable slightly reduced due community species in the car invasive exotics or other invasomewhat impacted by dimin quality of coarse woody debrig) land management practice for assessment area; i) siltatic lif preservation as mittigated.	coachment; g) hydrologic stressical requirements = 8, wading degradation = 8, community control isting water quality data = N/A dominated by a diverse assent to presence of nuisance/exotic nopy, shrub, or ground stratum sive plant species = 7, minima ished hydroperiod; d) age & sis, snag, den, and cavity = N/A s = 8, slightly reduced due to lon or algal growth in submergentation, at factor =	s on vegeta bird foragin onsists of ty c species. a 8, domin of coverage; cye distributi cyf plant co ROW maint ed aquatic p FL = (see impa	tion = 7, not apparing; i) vegetative spypical species; j) diepth wave, wave eative wetland speciated by desirable ic) regeneration aron = 8, typical of sondition = 8, slightly enance; h) topograplant communities: For impact assessed elta x acres = -0, impact table for incommunities of the second seco	ent; h) use by anim ecies tolerant of an irect observation of energy, currents and es. Community structure er scores: a) plant native wetland speen direcruitment = 7, system; e) density a y reduced due to draphic features = 8, ten N/A sment areas .80 x 5.96 = 4.77 dividual wetland	al id water d light ucture cies; b ind ought;

Site/Project Name		Application Numbe	ef		Assessment Area Name o	r Number
Progress Energy Florida, Inc./Levy N Transmission Lines/PHP Transmi					96, 130, A, B, O, Q, l	56, 60, 61, 65, 74, 81, 85, 86, 92, 94, 95, U, V, Z, AA, AL, AX, BBa, BQ, CQ, DR, DW, EA, GG, JJ, KK
FLUCCs code 641 - Freshwater Marsh	Further classifical	tion (optional)			t or Mitigation Site?	Assessment Area Size 11.91 acres (35=0.45, 37=0.09, 39=0.03, 56=0.10, 60=0.44, 61=0.20, 65=0.30, 74C=0.02, 81=0.01, 85=0.01, 86=0.09, 92=1.26, 94=0.08, 95=0.10, 96=0.08, 130=0.01, A=0.77, B=2.58, O=0.85, Q=0.10, U=0.36, V=0.60, Z=0.17, AA=0.33, AL=0.89, AX=0.16, BBa=0.25, BQ=0.11, CQ=0.11, DR=0.23, DW=0.49, EA=0.03, GG=0.02, JJ=0.08, KK=0.51)
Basin/Watershed Name/Number Affect Tampa Bay (03100206) and Hillsborough River (03100205)	ted Waterbody (Clas	s)	Special Classificatio	n (i.e.C	FW, AP, other local/state/federal o	
Geographic relationship to and hydrologi	c connection with	wetlands, other su	urface water, upland	is .		
Some freshwater marshes within the RO and wetland forest, roadways, residentia	W are hydrological	lly connected to o	ther wetlands/surfa	ce wa		ission line ROW. Surrounded by upland
Assessment area description						
(Quercus laurifolia) and red maple (Acer (Baccharis glomeruliiflora). Common gir hemiltomon), dogfennel (Eupatorium cap virginicus), flattop goldenrod (Euthamia buttonweed (Diodia virginiana), marsh p pickererweed (Pontederia cordata), hain, umbrosum), spatterdock (Nuphar luteum dwarf umbrella grass (Fuirena scirpoides repens), cattail (Typha latifolia), paragra (Cinnamomea camphora), alligator weed	Freshwater marsh wetlands vegetated with a mixture of nuisance/exotic and native herbaceous species and a sparse canopy comprised of a mixture of laurel oak (Quercus laurifolia) and red maple (Acer rubrum). Dominant shrub species include wax myrtle (Myrica cerifera), coastal plain willow (Salix caroliniana), and silverling (Baccharis glomenuliflora). Common groundcover species include Virginia chain fern (Woodwardia virginica), smartweed (Polygonum sp.), maidencane (Panicum hemitomon), dogfennel (Eupatorium capillifolium), soft rush (Juncus effusus), bushy broomsedge (Andropogon glomeratus), broomsedge bluestem (Andropogon virginicus), flattop goldenrod (Euthamia mnor), dayflower (Commelina difusa), water hyssop (Bacopa monnieri), blackberry (Rubus sp.), sedges (Cyperus spp.), buttonweed (Diodia virginiana), marsh pennywort (Hydrocotyle umbellata), sand cordgrass (Spartina bakeri), blue maidencane (Amphicarpum muhlenbergianum), pickerelweed (Pontederia cordata), harry indigo (Indigofera hirsuta), tickseed sunflower (Bidens alba), nutsedge (Scleria sp.), baby's tears (Micranthemum umbrosum), spatterdock (Nuphar Iuteum), creeping ludwigia (Ludwigia repens), morning-glory (Ipomea sp.), caesarweed (Urena lobata), spikerush (Eleocharis sp.), dwarf umbrella grass (Fuirena scirpoides), and beak rushes (Rhynchospora sp.). Significant coverage by nuisance/exotic species, including torpedo grass (Panicum repens), cattail (Typha latifolia), paragrass (Urochloa mutica), Chinese tallow (Sapium sebiferum), Brazilian pepper (Schinus terebinthifolius), camphor (Cinnamomea camphora), alligator weed (Alternanthera philoxeroides), doveweed (Murdannia nudiflora), water lettuce (Pistia stratioides), air potato (Dioscorea bublifera), rattlebox (Sesbania sp.), bahia grass (Paspalum notatum), and primrose willow (Ludwigia peruviana).					
Significant nearby features			Uniqueness (cor	sider	ing the relative rarity in r	relation to the regional landscape.)
Existing transmission line RO	W, roadways, sub	station			Not uniq	lue
Functions			Mitigation for prev	ious	permit/other historic use	
Widlife habitat, water stor	age, aquifer rechai	rge			N/A	
Anticipated Wildlife Utilization Based on that are representative of the assessmen be found)					y Listed Species (List spintensity of use of the a	pecies, their legal classification (E, T, ssessment area)
Wading birds, raccoon, various a	mphibians and her	petofauna				as white ibis (SSC), little blue heron SC), sandhill crane (T), and wood stork
Observed Evidence of Wildlife Utilization	(List species direc	ctly observed, or o	other signs such as	track	s, droppings, casings, ne	ests, etc.):
armadillo, t	oullfrog, white ibis,	sandhill crane, mo	osquitofish, snowy (egret,	little blue heron, black r	acer, catbird
Additional relevant factors:						
Assessment conducted by:			Assessment date	(s):		-
M. Arrants, J. Styer, S. Rizzo, K. Bullock			9/21/09 through 1	0/22/	09	

Site/Project Name		Application Number		Assessment Area	a Name or Number
Progress Energy Florida, Inc./Levy Nuclear Plant - Transmission Lines/PHP Transmission Line				74, 81, 85, 86, 9 Q, U, V, Z, AA,	- 35, 37, 39, 56, 60, 61, 65, 12, 94, 95, 96, 130, A, B, O, AL, AX, BBa, BQ, CQ, DR, EA, GG, JJ, KK
Impact or Mitigation		Assessment conducted by:		Assessment date):
Impact -	Fill	M. Arrants, J. Styer, S. Rizzo, I	K. Bullock	9/21/09	through 10/22/09
Scoring Guidance	Optimal (10)	Moderate(7)	Mit	nimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	maintain most wetland/s		vel of support of /surface water inctions	Condition is insufficient to provide wetland/surface water functions
.500(6)(a) Location and Landscape Support w/o pres or current with 0	cleared transmission line. Inc reduced due to surrounding of and from outside = 6, decreas benefit fish & wildlife downstr listed in Part 1 by outside land	port variable is reduced due to lo dividual parameter scores: a) Si development; b) Invasive exotic: sed due to limitations imposed beam-distance or barriers = 5, lim d uses = 6, reduced due to surrourea = 4, limited hydrologic connenefit to downstream areas.	upport to w species = 6 by surround nited conne ounding ha	vildlife listed in Pai 5, moderate cover ding residential are ection to other hab bitat loss; f) Hydro	rt 1 by outside habitats = 6 rage; c) Wildlife access to eas; d) functions that bitats; e) Impacts to wildlife ologically connected areas
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current with 5	residential landuses, and roal clearing, ditching; b) water levassessment area; d) soil eros f) vegetation community zona 6; h) use by animal species watolerant of and associated wit	e is reduced due to impacts from dways. Individual parameter so vel indicators = 6, typical of asse sion or deposition = 5, erosion fra tition = 6, moderate upland speci with specific hydrological require th water quality degradation = 6, ervation of water quality = N/A; k and light penetration = N/A.	ores: a) wassment ar om adjacesies encroar ments = 5, some spe	ater levels and flo ea; c) soil moistur int landuses; e) ev chment; g) hydrole poor wildlife habilicies indicative of l	ws = 5, altered due to re = 6, typical of ridence of fire history = N/A ogic stress on vegetation = tat; i) vegetative species high nutrients, eg. cattail,
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community //o pres or current with 5	parameter scores: a) plant conuisance/exotic species; b) in regeneration and recruitment grazing and maintenance of plant condition = 6, reduced cof community structure by cle	able is reduced due to significar ommunity species in the canopy, nvasive exotics or other invasive = 6, impacted by mowing, grazi ROW; e) density and quality of c due to grazing, ROW maintenan earing of adjacent native uplands th in submerged aquatic plant co	, shrub, or get plant speting; d) age coarse woo ice; g) land s; h) topogi	ground stratum = cies = 5, significal & size distributior dy debris, snag, comanagement pra raphic features = 6	5, dominated by nt coverage; c) n = 5, altered due to den, and cavity = N/A; f) actices = 6, due to alteration
Score = sum of above scores/30 (if	If preservation as mitiga	ation,		For impact assess	sment areas
uplands, divide by 20) current or w/o pres 0.53 0	Preservation adjustmer Adjusted mitigation delt	nt factor =	FL = ((see i	delta x acres = -0. mpact table for inc	.53 x 2.45 = 1.30
0.00					
	If mitigation		F	or mitigation asse	essment areas
Delta = [with-current]	Time lag (t-factor) =				
-0.53	Risk factor =		RFG	= delta/(t-factor x	risk) =
		· ·			

Site/Project Name		Application Number	г		Assessment Area Name o	r Number	
Progress Energy Florida, Inc./Levy Transmission Lines/PHP Transr						33, 71, 76, 109, 132, C, D, UU/VV, N, BP, CJ, CP, DH, ED	
FLUCCs code 641 - Freshwater Marsh	Further classificat	tion (optional)	(optional) In		t or Mitigation Site?	Assessment Area Size 8.04 acres (14=0.14, 26=0.04, 32/33=1.48, 71=0.82, 76=0.12, 109=0.53, 132=0.45, C=0.26, D=0.51, UU/VV=0.40, AB=1.16, BL=0.38, BN=0.55, BP=0.06, CJ=0.02, CP=0.72, DH=0.23, ED=0.17)	
Basin/Watershed Name/Number Affe Tampa Bay (03100206) and Hillsborough River (03100205)	ected Waterbody (Clas	s)	Special Classification	on (i.e.Ol	PFW, AP, other local/state/federal o	tesignation of importance)	
Geographic relationship to and hydrolog	gic connection with v	wetlands, other su	rface water, uplan	ds			
Some freshwater marshes within the Roupland and wetland forest, roadways, re						ssion line ROW. Surrounded by	
Assessment area description Freshwater marsh wetlands dominated by herbaceous species and a sparse canopy comprised of a mixture of slash pine (Pinus elliottii), bald cypress (Taxodium distichum), American elm (Ulmus americana), laurel oak (Quercus laurifolia), and red maple (Acer rubrum). Dominant shrub species include dahoon holly (Ilex cassine), wax myrtle (Myrica cerifera), elderberry (Sambucus canadensis), coastal plain willow (Salix caroliniana), and silverling (Baccharis glomeruliflora). Common groundcover species include Virginia chain fem (Woodwardia virginica), fireflag (Thalia geniculata), smartweed (Polygonum sp.), maidencane (Panicum hemiltomon), dogfennel (Eupatorium capililfolium), soft rush (Juncus effusus), bushy broomsedge (Andropogon glomeratus), flattop goldenrod (Euthamia minor), redroot (Lachnanthes caroliniana), water spangles (Salvinia minima), milkweed (Asclepias sp.), coinwort (Centella asiatica), dayflower (Commelina difusa), goldenrod (Solidago sp.), swamp fem (Blechnum serrulatum), water hyssop (Bacopa monnieri), blackberry (Rubus sp.), sedges (Cyperus spp.), buttonweed (Diodia virginiana), capeweed (Phyla nodiflora), muscadine (Vitis rotundifolia), marsh pennywort (Hydrocotyle umbellata) mosquitofem (Azolla caroliniana), leafflower (Phyllanthus sp.), duckweed (Lemna minor), sand cordgrass (Spartina bakeri), sawgrass (Cladium jamaicense), cinnamon fem (Osmunda cinnamomea), caesarweed (Urena lobata), and fragrant water lily (Nymphaea odorata). Significant coverage by nuisance/exotic species, including torpedo grass (Panicum repens), cattail (Typha latifolia), alligator weed (Alternanthera philoxeroides), doveweed (Murdannia nudiflora), water lettuce (Pistia stratioides), air potato (Dioscorea bulbifera), melaleuca (Melaleuca quinquenervia), rattlebox (Sesbania sp.), bermuda grass (Cynodon dacty/on), bahia grass (Paspalum notatum), and primrose willow (Ludwigia peruviana).							
Significant nearby features			Uniqueness (considering the relative rarity in relation to the regional landscape.)				
Existing transmission line Re	OW, roadways, sub	station	Not unique				
Functions			Mitigation for previous permit/other historic use				
Widlife habitat, water sto	orage, aquifer rechar	rge	N/A				
Anticipated Wildlife Utilization Based or that are representative of the assessme be found)		•			by Listed Species (List sp nd intensity of use of the	pecies, their legal classification (E, e assessment area)	
Wading birds, raccoon, various	amphibians and her	petofauna	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).				
Observed Evidence of Wildlife Utilizatio	n (List species direc	ctly observed, or o	ther signs such as	tracks	s, droppings, casings, ne	ests, etc.):	
armadillo, leopa	ard frog, black racer	·, red shouldered h	nawk, marsh rabbit	t, moor	rhen, mallard, kestrel, bl	ack vulture .	
Additional relevant factors:							
Assessment conducted by:			Assessment date	e(s):		•	
M. Arrants, J. Styer, S. Rizzo, K. Bulloc	k		9/23/09 through		09		

Site/Project Name		Application Number			Name or Number
	Inc./Levy Nuclear Plant - HP Transmission Line	,		76, 109, 132, C,	Wetlands 14, 26, 32/33, 7 [,] D, UU/VV, AB, BL, BN, BF I, CP, DH, ED
Impact or Mitigation		Assessment conducted by:		Assessment date	
Impa	et - Fill	M. Arrants, J. Styer, S. Rizzo,	K. Bullock	9/23/09	through 10/22/09
Scoring Guidance	Optimal (10)	Moderate(7)	Mi	nimal (4)	Not Present (0)
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	ondition is less than limal, but sufficient to maintain most wetland/surface Minimal level of support of wetland/surface water functions		Condition is insufficient to provide wetland/surface water functions
.500(6)(a) Location and Landscape Support alo pres or current with	cleared transmission line. In reduced due to surrounding and from outside = 6, decrea benefit fish & wildlife downstr listed in Part 1 by outside lan	port variable is reduced due to I dividual parameter scores: a) \$ development; b) Invasive exotic used due to limitations imposed ream-distance or barriers = 5, lind uses = 6, reduced due to sur area = 4, limited hydrologic conenefit to downstream areas.	Support to vo species = to by surround mited conner rounding ha	vildlife listed in Pai 6, moderate cover ding residential are ection to other hab abitat loss; f) Hydro	rt 1 by outside habitats = rage; c) Wildlife access to eas; d) functions that bitats; e) Impacts to wildlif ologically connected area
.500(6)(b)Water Environment (n/a for uplands) v/o pres or current with	residential landuses, and roa clearing, ditching; b) water le assessment area; d) soil ero; f) vegetation community zon; 6; h) use by animal species w tolerant of and associated with primrose willow; i) direct obs;	e is reduced due to impacts from idways. Individual parameter survel indicators = 7, typical of assistence of deposition = 6, erosion that it is a factor of the factor of	cores: a) wasessment and adjace cies encroa ements = 5, some spe	rater levels and flo rea; c) soil moistur int landuses; e) ev ichment; g) hydroli i poor wildlife habi iccies indicative of	ws = 6, altered due to re = 7, typical of ridence of fire history = N/r ogic stress on vegetation tat; i) vegetative species high nutrients, eg. cattail,
.500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community v/o pres or current with 6	scores: a) plant community s nuisance/exotic species; b) and recruitment = 6, somewh system, reduced due to ROV 6; f) plant condition = 6, exte maintenance; g) land manag	riable is reduced due to prevale pecies in the canopy, shrub, or invasive exotics or other invasive at maintenance; e) density and on the analyment of the maintenance; e) density and on the analyment of the maintenance; e) clearing of assessment area; i) siltation or	ground stra ve plant speance, ditchir quality of co impacted so f adjacent r	atum = 6, limited d ecies = 6, moderat ng; d) age & size d parse woody debri omewhat by exotio native uplands; h) f	liversity due to coverage be coverage; c) regeneration distribution = 6, typical of s, snag, den, and cavity = c nuisance species, ROW topographic features = 6,
Score = sum of above scores/30	(if If preservation as mitig	ation		For impact assess	sment areas
uplands, divide by 20) current or w/o pres with	Preservation adjustme	nt factor =	(see	delta x acres = -0. impact table for inc t acreage)	.60 x 2.01 = 1.20
0.60 0					
	If mitigation	· · · · · · · · · · · · · · · · · · ·	F	or mitigation asse	essment areas
Delta = [with-current]	Time lag (t-factor) =				
-0.60	Risk factor =		RFG	= delta/(t-factor x	risk) =

Site/Project Name		Application Numbe	er .		Assessment Area Name	or Number
Progress Energy Florida, Inc./Levy I Transmission Lines/PHP Transm					45, 106, 107, 129, J, N	12, 13, 15-17, 19, 28, 36, 38, 40, 41, 43, I, W, NN, OO, WW, AM, BJ, CE, CH, CI, /CL, CM, CO, DG, EH
FLUCCs code 641 - Freshwater Marsh	Further classifica	ition (optional)	im		or Mitigation Site?	Assessment Area Size 43 acres (1=0.15, 2=2.63, 3=0.52, 4=0.71, 6=3.81, 10=1.22, 12=0.79, 13=1.34, 15=1.31, 16=0.31, 17=0.19, 19=0.05, 28=0.08, 36=1.38, 38=0.68, 40=1.42, 41=1.04, 43=1.55, 45=1.02, 106=0.15, 107=1.24, 129=2.88, J=0.98, N=1.77, W=0.71, NN=0.50, OO=2.27, WW=0.43, AM=0.56, BJ=0.76, CE=1.71, CH=0.78, CI=1.03, CK/CL=2.01, CM=1.97, CO=0.50, DG=0.60, EH=1.95)
Basin/Watershed Name/Number Tampa Bay (03100206) and Hillsborough River (03100205)	ted Waterbody (Clas	ss)	•		FW, AP, other local/state/federal	designation of (importance) ibutary of Hillsborough River)
Geographic relationship to and hydrolog	ic connection with	wetlands, other s	surface water, upland	İs		
Some freshwater marshes within the R0 upland and wetland forest, roadways, re						mission line ROW. Surrounded by
dahoon holly (llex cassine), gallberry (llisilverling (Baccharis glomerulifora), Grelliottii), smartweed (Polygonum sp.), li maidencane (Panicum hemitomon), do beauty (Rhexia sp.), flattop goldenrod (woolgrass (Scirpus cyprinus), redroot (liscirpoides), water spangles (Salvinia msp.), coinwort (Centella asiatica), dayfic spatterdock (Nuphar Iuleum), swamp feduicis), climbing hempvine (Mikania scablackberry (Rubus sp.), sedges (Cypen (Hydrocotyle umbellata), pickeretweed alata). Moderate coverage by nuisance bermuda grass (Cynodon dactylon), me (Myriophyllum aquaticum), and Chinese	pine (Pinus elliottii e (Acer rubrum), m), m youndcover species zard's tail (Saurum, fennel (Eupatoriu) Euthamia minor), 1 .achnanthes caroninima), balsam ap wer (Commelina d em (Blechnum sem undens), cordush us spp.), buttonwe (Pontederia cordat letexotic species, in lalaleuca (Melaleuce	i), bald cypress (Tiand sweetgum (Living Witte (Myrica cerife is include Virginia cus cerumus), rushe is cerumus), rushe m capilificilium), si flattened pipewort iniana), fanwort (Cibirusa), greenbrier rulatum), water hy comparation of the c	"axodium distichum," axodium distichum, aya, elderberry (Sam chain fem (Woodwan es (Juncus spp.), be fit nsh (Juncus effu; (Eriocaulon compres Cabomba carolinian harantia), milkweed ('(Smilax sp.), golder ssop (Bacopa monn, arrowhead (Sagittar ana), capeweed (Phy lead (Sagittaria gram rass (Panicum repen rattlebox (Sesbania	Am Am Ambuda aks sus sus sus (Asc	lerican elm (Ulmus ams Shrub species include zus canadensis), coast virginica), fireflag (Tha- edges (Rhynchospora), b bushy broomsedge (m), b ristlegrass (Setari utgrass (Leersia sp.), clepias sp.), false pimp (Solidago sp.), St. Jot peppervine (Ampelopancifolia), blue maiden andiflora), muscadine (a), mosquitofem (Azolli- cattail (Typha Istifolia), primrose willow (Ludi	ericana), red bay (Persea palustris), buttonbush (Cephalanthus occidentalis), al plain willow (Salix caroliniana), and lia geniculata), yellow-eyed grass (Xyris spp.), spikerush (Eleocharis sp.), Andropogon glomeratus), meadow a sp.), Walter's sedge (Carex walterii), twarf umbreila grass (Fuirena emel (Undernia sp.), nutsedge (Scleria nn's wort (Hypericum fasciculatum), sisi arborea), goatweed (Scoparia cane (Amphicarpum muhlenbergianum), Vitis rotundifolia), marsh pennywort a caroliniana), and musky mint (Hyptis, wild taro (Colocasia esculenta), wigia peruviana), parrot's feather
Significant nearby features Existing transmission line RC)W, roadways, sub	ostation	Uniqueness (consi	ider	ing the relative rarity in Not unio	relation to the regional landscape.) que
Functions	-		Mitigation for previo	usı	permit/other historic us	e
Widlife habitat, water stor	age, aquifer recha	arge			N/A	
Anticipated Wildlife Utilization Based or that are representative of the assessme be found)			Anticipated Utilization SSC), type of use, a	on b and	y Listed Species (List a intensity of use of the a	species, their legal classification (E, T, assessment area)
Wading birds, raccoon, various a	amphibians and he	erpetofauna				n as white ibis (SSC), little blue heron SSC), sandhill crane (T), and wood stork
Observed Evidence of Wildlife Utilization	n (List species dire	ectly observed, or	other signs such as	trac	ks, droppings, casings,	nests, etc.):
little blue heron, cuban tree frog, white			wk, leopard frog, racc crane, turkey, commo			squitofish, green tree frog, Florida cooter
Additional relevant factors:	-					
Assessment conducted by:			Assessment date(s):		
M. Arrants, J. Styer, S. Rizzo, K. Bulloc	k		9/22/09 through 10/		09	

Progress Energy Florida, Inc./Levy Nuclear Plant - Transmission Lines/PHP Transmission Line Impact or Mitigation Assessment conducted by: Impact - Fill Assessment conducted by: M. Arrants, J. Styer, S. Rizzo, K. Bullock Scoring Guidance The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed Optimal (10) Moderate(7) Condition is less than optimal, but sufficient to maintain most wetland/surface water functions Wetland/surface waterfunctions Location and landscape support variable is slightly reduced due to location or	support of ce water Condition is insufficient to provide wetland/surface
Scoring Guidance The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed M. Arrants, J. Styer, S. Rizzo, K. Bullock	9/22/09 through 10/19/09 (4) Not Present (0) support of ce water Condition is insufficient to provide wetland/surface
Scoring Guidance The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed Condition is optimal and fully supports wetland/surface water functions Condition is less than optimal, but sufficient to maintain most wetland/surface water functions waterfunctions Location and landscape support variable is slightly reduced due to location or	(4) Not Present (0) support of ce water Condition is insufficient to provide wetland/surface
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed Condition is optimal and fully supports wetland/surface water functions Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions Wetland/surface waterfunctions Location and landscape support variable is slightly reduced due to location or	support of ce water provide wetland/surface
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed Condition is optimal and fully supports wetland/surface water functions Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions Winimal level of wetland/surface waterfunctions Location and landscape support variable is slightly reduced due to location or	support of ce water provide wetland/surface
Location and landscape support variable is slightly reduced due to location or	
ROW. Individual parameter scores: a) Support to wildlife listed in Part 1 by of due to adjacent development, cleared ROW; b) Invasive exotic species = 6, report to and from outside = 7, decreased due to limitations imposed by clearing, robenefit fish & wildlife downstream-distance or barriers = 7; e) Impacts to wildlife downstream of assessment area = 7, typically connect to adjacent forested with a downstream areas on assessment area = 6, moderate benefit to downstream	outside habitats = 7, slightly reduced noderate coverage; c) Wildlife access adways, development; d) functions tha ife listed in Part 1 by outside land uses ; f) Hydrologically connected areas /etlands; g) Dependency of
The water environment score is reflective of relatively undisturbed hydrology, landclearing, and adjacent residential and agricultural landuses. Individual purplement (n/a for uplands) [level indicators = 7, consistent with expected; c) soil moisture = 7, consistent deposition = 8, minimal erosion; e) evidence of fire history = N/A; f) vegetation upland species encroachment; g) hydrologic stress on vegetation = 8, not ap specific hydrological requirements = 7, wading bird foraging habitat; i) vegetation with water quality degradation = 7, community consists of typical native species; j) direct observation of water quality = 8, none noted to the control of t	arameter scores: a) water levels and areas, ditching, development; b) water twith expected; d) soil erosion or n community zonation = 7, some parent; h) use by animal species with tive species tolerant of and associated ies, moderate coverage of
These freshwater marshes support a diverse community of native wetland ve species are present, slightly reducing the community structure variable. Indiv community species in the canopy, shrub, or ground stratum = 7, dominated bu nivasive plant species present, ROW maintenance reduces extent of cano invasive plant species = 6, moderate coverage; c) regeneration and recruitment maintenance; d) age & size distribution = 8, typical of system; e) density and den, and cavity = 7; f) plant condition = 8; g) land management practices = 7, or algal growth in submerged aquatic plant communities = N/A	vidual parameter scores: a) plant by desirable native wetland species, py species; b) invasive exotics or othe ent = 7, somewhat impacted by ROW quality of coarse woody debris, snag, due to alteration of community
uplands, divide by 20) Preservation adjustment factor = FL = delta:	x acres = -0.70 x 9.12 = 6.38 at table for individual wetland eage)
Tracks at a second	
If mitigation For mit	tigation assessment areas
	ra/(t-factor x risk) =

Site/Project Name		Application Numbe	r		Assessment Area Name	or Number
Progress Energy Florida, Inc./Levy N Transmission Lines/PHP Transmi		5				i 643 - Wetland A/B station Property)
FLUCCs code	Further classifica	tion (optional)		Impac	et or Mitigation Site?	Assessment Area Size
641/643 - Freshwater Marshes/Wet Prairie					Existing Condition	23.08 acres (FLUCFCS 641); 3.09 (FLUCFCS 643)
Basin/Watershed Name/Number Affect	ted Waterbody (Clas	ss)	Special Classificati	on (i.e.	OFW, AP, other local/state/federa	l designation of importance)
Port Lonesome Ditches/03100205					None	
Geographic relationship to and hydrologi	c connection with	wetlands, other su	urface water, uplai	nds		
Wetland areas surround the Kathleen Su connecting to Green Swamp and Withlac	•		_	shwat	er marshes and mixed	forested wetlands,
Assessment area description						
Freshwater marsh and wet prairie comm Shrub layer comprised of coastal plain w pepper (Schinus terebinthifolius), buttonl bluestem (Andropogon virginicus), maide grass (Xyris elliottii), coinwort (Centalla a	illow (Salix carolin bush (Cephalanthi encane (Panicum	iana), wax myrtle us occidentalis); g hemitomon), sma	(Myrica cerifera), roundcover consis rtweed (Polygonu drocotyle umbellat	silver sts of: m pun ta).	ling (Baccharis glomeru sawgrass (Cladium jam nctatum), cattail (Typha	liflora), Brazilian aicense), broomsedge latifolia), yellow-eyed
Significant nearby features			Uniqueness (co landscape.)	nsider	ing the relative rarity in	relation to the regional
Kathleen Substation and trans	mission line ROW	, US 98			Not unique	
Functions			Mitigation for pre	vious	permit/other historic use)
Widlife habitat, water stora	age, aquifer rechai	rge			N/A	: :
Anticipated Wildlife Utilization Based on I that are representative of the assessmen be found)		•		T, SS	by Listed Species (List s C), type of use, and inte	
Wading birds, raccoon, white tailed deer, herpetofa	•	s amphibians and	heron (SSC), sno	wy eg	ading birds such as whi gret (SSC), tricolored he (), wood stork (E).	
Observed Evidence of Wildlife Utilization	(List species direct	ctly observed, or o	ther signs such a	s track	s, droppings, casings, i	nests, etc.):
	Black racer,	green tree frog, le	eopard frog, black	vulture	e	
Additional relevant factors:						
			FA	, , -		
Assessment conducted by: B. Meinecke, J. Styer			Assessment date 9/17/2009	:(S):		
D. WEITECKE, J. Styel			311112009			

Site/Project Name Progress Energy Florida, Ir	nc /Lew Nuclear Plant -	Application Number		ea Name or Number 643 - Wetland A/B (Kathleen		
Transmission Lines/PHI			Sub	station Property)		
Impact or Mitigation		Assessment conducted by:	Assessment dat	Assessment date:		
Impact	- Fill	B. Meinecke, J. Sty	er	10/12/2009		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)		
The scoring of each		Condition is less than				
indicator is based on what	Condition is optimal and fully	1	Minimal level of support of			
would be suitable for the type of wetland or surface	supports wetland/surface water functions	maintain most wetland/surface	wetland/surface water functions	provide wetland/surface water functions		
water assessed	Water fallotions	waterfunctions	Tarrottorio	Water falletions		
.500(6)(a) Location and Landscape Support	line right-of-way. Individual preduced due to adjacent US Wildlife access to and from control benefit fish & wildlife downstructure. Green Swamp; e) Impacts to	port variable is slightly reduced parameter scores: a) Support 98; b) Invasive exotic species outside = 8, slightly decreased ream-distance or barriers = 8, o wildlife listed in Part 1 by outside in the state of t	to wildlife listed in Part 1 by = 8, Brazilian pepper preser due to limitations imposed barea connected to large wet side land uses = 8, slightly re	outside habitats = 8, slightly it, but not dominant; c) y US 98; d) functions that land complex associated with educed due to surrounding		
current with		connected areas downstream		-		
8 0	area = 8, area provides bene	via tributaries of Gator Creek efits to downstream areas.	g) Dependency of downstre	eam areas on assessment		
v/o pres or current with	erosion; e) evidence of fire h upland species encroachmer specific hydrological requirer water quality degradation = 7	c) soil moisture = 8, consistent istory = N/A; f) vegetation commt; g) hydrologic stress on vegments = 7, wading bird habitat 7, community consists of typics = 8, no indications of impacts and light penetration = N/A.	nmunity zonation = 7, slightly etation = 8, not apparent; h) ; i) vegetative species tolera al species, some upland end	altered in areas due to use by animal species with nt of and associated with roachment; j) direct		
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community v/o pres or current with 7 0	parameter scores: a) plant or native wetland species, but r other invasive plant species existing transmission line rigil and quality of coarse woody right-of-way maintenance; f)	riable is slightly reduced due to community species in the canonusance (cattail) and exotic (E = 6, moderate coverage; c) re ht-of-way and substation, d) a debris, snag, den, and cavity plant condition = 7; g) land my; h) topographic features = 7, mmunities = N/A	py, shrub, or ground stratum strazilian pepper) species pre generation and recruitment : age & size distribution = 7, ty = 7, somewhat reduced com anagement practices = 6, du	= 7, dominated by desirable sent; b) invasive exotics or = 7, somewhat impacted by pical of system; e) density pared to expected due to e to adjacent US 98 and		
Score = sum of above scores/30 (iii	If preservation as mitig	ation	For impact asse	ssment areas		
uplands, divide by 20)	Preservation adjustme		FL = delta x acres = -	0.73 x 2.35 = 1.72		
current			(FLUCFCS 641); -0.7 (FLUCFCS 643); tota			
or w/o pres with 0.73 0	Adjusted mitigation del	ta =	and total FL of 1.80	1012.47 dures		
	J					
	If mitigation					
	7		For mitigation ass	essment areas		
Delta = [with-current]	Time lag (t-factor) =		For mitigation ass	essment areas		

Site/Project Name		Application Numbe	r	Assessment Area Name	or Number	
Progress Energy Florida, Inc./L Transmission Lines/PHP Tra					B, 21A/21B, 22A/22B, B, 126, F, X, FF, CF	
FLUCCs code 641 - Freshwater Marsh	Further classifica	tion (optional)	in	npact or Mitigation Site? Existing Condition	Assessment Area Size 11.77 acres (18=0.61, 20A/20B=0.47, 21A/21B=0.82, 22A/22B=0.39, 23A/23B=0.49, 30A/30B=2.23, 126=2.47, F=1.32, X=0.82, FF=1.53, CF=0.62)	
Basin/Watershed Name/Number Tampa Bay (03100206) and Hillsborough River (03100205)	Affected Waterbody (Class	ss)	Special Classification	(i.e.OFW, AP, other local/state/federa	al designation of importance)	
Geographic relationship to and hyd	rologic connection with	wetlands, other su	urface water, upland	s		
Some freshwater marshes within th Surrounded by upland and wetland						
Assessment area description						
Freshwater marsh wetlands vegeta and a sparse canopy comprised of cabbage palm (Sabal palmetto), re styraciflua). Shrub species include coastal plain willow (Salix caroliniar virginica), fireflag (Thalia geniculati rush (Juncus marginatus), southen dogfennel (Eupatonium capillifolium flattop goldenrod (Euthamia minor) peppervine (Ampelopsis arborea), (Spartina sp.), arrowhead (Sagittar (Ipomea sp.), blackberry (Rubus si virginiana), capeweed (Phyla nodif (Hydrocotyle umbellata), muhly gramosquitofem (Azolla caroliniana), (Panicum repens), rattlebox (Sesbi (Urochloa mutica), doveweed (Mur	a mixture of slash pine of bay (Persea palustris buttonbush (Cephalant ha), and silverling (Bacca), yellow-eyed grass (An beaksedge (Rhynchos), soft rush (Juncus effu, flattened pipewort (Eric goatweed (Scoparia dul ia lancifolia), blue maidip.), rushes (Juncus spplora), muscadine (Vitis is sis (Muhlenbergia capill) and musky mint (Hyptis ania sp.), primrose willow	(Pinus elliottii), ba), laurel oak (Que- thus occidentalis) sharis glomeruliflo. (yris elliottii), sma spora microcarpa) susus), bushy broo ocaulon compress (cis), climbing hen encane (Amphica. .), sedges (Cyper- rotundifolia), Virgi aris), pickerelwee alata). Moderate w (Ludwigia perur	ald cypress (Taxodiu rcus laurifolia), red r , wax myrtle (Myrica ra). Groundcover s , trweed (Polygonum), spikerush (Eleoche msedge (Andropog sum), bristlegrass (S npvine (Mikania sca rpum muhlenbergiar us spp.), sawgrass mia creeper (Parther de (Pontederia corda coverage by nuisan viana), parrot's feath	m distichum), live oak (Quemaple (Acer rubrum), and s cerifera), elderberry (Sam pecies include Virginia chai sp.), lizard's tail (Saururus aris sp.), maidencane (Pan on glomeratus), meadow b Setaria sp.), water hyssop (podens), loosestrife (Lythrur num), maiden fem (Thelyph (Cladium jamaicense), butt nocissus quinquefolia), mai ta), grassy arrowhead (Sag ce/exotic species, including	ercus virginiana), sweetgum (Liquidambar bucus canadensis), in fem (Woodwardia cernuus), grassleaf icum hemitomon), eauty (Rhexia sp.), Bacopa monnieri), m sp.), cordrush eris sp.), moming glory onweed (Diodia rish pennywort gittaria graminea), g torpedo grass	
Significant nearby features			Uniqueness (cons landscape.)	idering the relative rarity in	relation to the regional	
Existing transmission lin	e ROW, roadways, sub	station		Not unique		
Functions			Mitigation for previo	ous permit/other historic use	e	
Widlife habitat, wate	r storage, aquifer recha	rge		N/A		
Anticipated Wildlife Utilization Base that are representative of the asses be found)		` ·	1	on by Listed Species (List s SSC), type of use, and inte		
Wading birds, raccoon, vari	Wading birds, raccoon, various amphibians and herpetofauna Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).					
Observed Evidence of Wildlife Utiliz	zation (List species direc	ctly observed, or o	ther signs such as t	racks, droppings, casings,	nests, etc.):	
turkey, white tailed deer, feral ho	g, cuban brown anole, a	armadillo, kestrel, racer		uitofish, leopard frog, wood	stork, white ibis, black	
Additional relevant factors:				·		
Assessment conducted by:			Assessment date(s	s):		
M. Arrants, J. Styer, S. Rizzo, K. B	ullock		9/23/09 through 10	/21/09		

	Inc./Levy Nuclear Plant - HP Transmission Line	Application Number		FLUCFCS 641	a Name or Number - Wetlands 18, 20-23, 30, 5, F, X, FF, CF	
mpact or Mitigation	THE TRANSPORTED	Assessment conducted by:		Assessment date:		
	ct - Fill	M. Arrants, J. Styer, S. Rizzo,			through 10/21/09	
Scoring Guidance	Optimal (10)	Moderate(7)	Mir	nimal (4)	Not Present (0)	
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed Condition is optimal supports wetland/s water function		Condition is less than	Minimal lev	vel of support of surface water nctions	Condition is insufficient to provide wetland/surface water functions	
.500(6)(a) Location and Landscape Support //o pres or current with	ROW. Individual parameters preferred habitat; b) Invasive slightly decreased due to limit downstream-distance or barridue to clearing; f) Hydrologic	port variable is slightly reduced of scores: a) Support to wildlife list exotic species = 8, minimal containing it is species = 8, minimal containing it is species = 8; e) Impacts to wildlife list ally connected areas downstreasment area = 7, significant benefits	sted in Part verage; c) V d roadways; sted in Part am of asses	1 by outside habit vildlife access to a d) functions that 1 by outside land sment area = 8; g	ats = 9, wetlands provide and from outside = 8, benefit fish & wildlife uses = 8, slightly reduced	
.500(6)(b)Water Environment (n/a for uplands)	land clearing. Individual para clearing of surrounding areas consistent with expected; d) vegetation community zonati	e is reflective of relatively undist ameter scores: a) water levels a s; b) water level indicators = 8, soil erosion or deposition = 8, m on = 8; g) hydrologic stress on	and flows = consistent v ninimal eros	8, slight alteration vith expected; c) s ion; e) evidence o	ns in water level due to soil moisture = 8, of fire history = N/A; f)	
v/o pres or current with 8 0	and associated with water qu	uirements = 9, high quality wad uality degradation = 8, communi t; K) existing water quality data	ing bird fora	iging habitat; i) ve of typical species;	egetative species tolerant; j) direct observation of	
current with 8 0 .500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community	and associated with water question water quality = 8, none noted light penetration = N/A. These freshwater marshes so structure variable is slightly replant community species in the species; b) invasive exotics recruitment = 8, somewhat in density and quality of coarse practices = 7, due to alteration	uirements = 9, high quality wad uality degradation = 8, communi	native wetla tic/nuisance atum = 8, di = 7, modera d) age & si cavity = 8; f) earing of adj	nging habitat; i) veof typical species; ater depth wave, ventre depth	egetative species tolerant in the community and parameter scores: a) rable native wetland egeneration and so, typical of system; e) the second species and species are species	
current with 8 0 .500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community //o pres or current with 8 0	and associated with water quester quality = 8, none noted light penetration = N/A. These freshwater marshes so structure variable is slightly replant community species in the species; b) invasive exotics recruitment = 8, somewhat in density and quality of coarse practices = 7, due to alteratice features = 8, typical for asset	uirements = 9, high quality wad uality degradation = 8, communit; K) existing water quality data upport a diverse community of reduced due to presence of exothe canopy, shrub, or ground stroor other invasive plant species inpacted by ROW maintenance; woody debris, snag, den, and on of community structure by clessment area; i) siltation or algal	ing bird foratty consists = N/A; I) was native wetlatic/nuisance atum = 8, di = 7, moderad) age & si cavity = 8; f) saring of adj growth in si	nging habitat; i) veof typical species; ater depth wave, ventre depth	hough the community all parameter scores: a) rable native wetland egeneration and 8, typical of system; e) 6, g) land management nds; h) topographic c plant communities = N/A	
current with 8 0 .500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community w/o pres or current with 8 0 Score = sum of above scores/30 uplands, divide by 20) current or w/o pres with	and associated with water quester quality = 8, none noted light penetration = N/A. These freshwater marshes so structure variable is slightly replant community species in the species; b) invasive exotics recruitment = 8, somewhat in density and quality of coarse practices = 7, due to alteratice features = 8, typical for assets (if	uirements = 9, high quality wad uality degradation = 8, communit; K) existing water quality data upport a diverse community of reduced due to presence of exothe canopy, shrub, or ground stroor other invasive plant species inpacted by ROW maintenance; woody debris, snag, den, and con of community structure by clessment area; i) siltation or algaluation,	ing bird foratty consists = N/A; I) was native wetlatic/nuisance atum = 8, di = 7, moderad) age & si cavity = 8; fj earing of adj growth in si	nging habitat; i) ve of typical species; ater depth wave, ve and vegetation, alt species. Individu ominated by desir ate coverage; c) re ze distribution = 8 plant condition = acent native upla ubmerged aquation	hough the community ual parameter scores: a) table native wetland egeneration and 8, typical of system; e) 8, g) land management nds; h) topographic c plant communities = N/A sment areas 80 x 2.32 = 1.86	
current with 8 0 .500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community //o pres or current with 8 0 Score = sum of above scores/30 uplands, divide by 20) current	and associated with water quester quality = 8, none noted light penetration = N/A. These freshwater marshes so structure variable is slightly replant community species in the species; b) invasive exotics recruitment = 8, somewhat in density and quality of coarse practices = 7, due to alteration features = 8, typical for assets (if	uirements = 9, high quality wad uality degradation = 8, communit; K) existing water quality data upport a diverse community of reduced due to presence of exothe canopy, shrub, or ground stroor other invasive plant species inpacted by ROW maintenance; woody debris, snag, den, and con of community structure by clessment area; i) siltation or algalation,	ing bird foratty consists = N/A; I) was native wetlatic/nuisance atum = 8, di = 7, moderad) age & si cavity = 8; fj earing of adj growth in si	aging habitat; i) veof typical species; ater depth wave, we have a species. Individual properties of the coverage; c) rece distribution = 80 plant condition	hough the community ual parameter scores: a) table native wetland egeneration and 8, typical of system; e) 8, g) land management nds; h) topographic c plant communities = N/A sment areas 80 x 2.32 = 1.86	
current with 8 0 .500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community w/o pres or current with 8 0 Score = sum of above scores/30 uplands, divide by 20) current or w/o pres with	and associated with water quester quality = 8, none noted light penetration = N/A. These freshwater marshes so structure variable is slightly replant community species in the species; b) invasive exotics recruitment = 8, somewhat in density and quality of coarse practices = 7, due to alteration features = 8, typical for assets (if	uirements = 9, high quality wad uality degradation = 8, communit; K) existing water quality data upport a diverse community of reduced due to presence of exothe canopy, shrub, or ground stroor other invasive plant species inpacted by ROW maintenance; woody debris, snag, den, and con of community structure by clessment area; i) siltation or algalation,	ing bird foratty consists of a N/A; I) was a native wetlattic/nuisance atum = 8, de = 7, moderard) age & si cavity = 8; f) earing of adj growth in si	aging habitat; i) veof typical species; ater depth wave, we had vegetation, alt species. Individual properties of the coverage; c) rege distribution = 80 plant condition = acent native upla ubmerged aquation. For impact assessed elta x acres = -0, mpact table for in-	hough the community ual parameter scores: a) and parameter scores: a) rable native wetland ageneration and a, typical of system; e) as; g) land management nds; h) topographic c plant communities = N/A sment areas 80 x 2.32 = 1.86 dividual wetland	
8 0 .500(6)(c)Community structur 1. Vegetation and/or 2. Benthic Community v/o pres or current with 8 0 Score = sum of above scores/30 uplands, divide by 20) current or w/o pres with	and associated with water quester quality = 8, none noted light penetration = N/A. These freshwater marshes so structure variable is slightly replant community species in the species; b) invasive exotics recruitment = 8, somewhat in density and quality of coarse practices = 7, due to alteration features = 8, typical for asset (if preservation as mitting preservation adjustment Adjusted mitigation deligible.	uirements = 9, high quality wad uality degradation = 8, communit; K) existing water quality data upport a diverse community of reduced due to presence of exothe canopy, shrub, or ground stroor other invasive plant species inpacted by ROW maintenance; woody debris, snag, den, and con of community structure by clessment area; i) siltation or algalation,	ing bird foratty consists of a N/A; I) was a native wetlattic/nuisance atum = 8, di = 7, moderatd) age & si parring of adj growth in si	aging habitat; i) veof typical species, atter depth wave, water destribution = 80 plant condition = acent native upla aubmerged aquation. For impact assessed telta x acres = -0, mpact table for intereage)	hough the community ual parameter scores: a) and parameter scores: a) rable native wetland egeneration and a, typical of system; e) 8; g) land management nds; h) topographic c plant communities = N/A sment areas 80 x 2.32 = 1.86 dividual wetland	

Site/Project Name		Application Numbe	Г	Assessment Area Name of	r Number	
Progress Energy Florida, Inc./L Transmission Lines/PHP Tr				Wetlands 127, DDa,	EE, QQ, CD, CV, DC	
FLUCCs code	Further classifica	ition (optional)		Impact or Mitigation Site?	Assessment Area Size	
641 - Freshwater Marsh		,	Existing Condition 6.2 acres (1 DDa=0.08, QQ=0.60, 0 CV=2.00, 0			
Basin/Watershed Name/Number	Affected Waterbody (Clas	:e)	Special Classification (i.e.OFW, AP, other local/state/federal designation			
Tampa Bay (03100206) and Hillsborough River (03100205)	Anected Waterbody (Glas		Wetland CV is adjacent to OFW (tributary of Hillsborough R			
Geographic relationship to and hyd	rologic connection with	wetlands, other su	rface water, uplan	ds		
Hydrologically connected to other w forest, roadways, and cleared trans		outside the transn	nission line ROW t	hrough ditching. Surrounded	by upland and wetland	
Assessment area description						
canopy comprised of a mixture of s water oak (Quercus nigra), and sw (Myrica cerifera), gallberry (Ilex gla virginica), royal fem (Osmunda reg yellow-eyed grass (Xyris elliottii), s (Solidago sp.), grassleaf rush (Jun cinnamon fem (Osmunda cinnamo apillifolium), coinwort (Centella as (Axonopus furcatus), Minimal covwillow (Ludwigia peruviana), and w	reetgum (<i>Liquidambar</i> si sabra), and silverling (<i>Bai</i> salis), fireflag (<i>Thalia ge</i> simartweed (<i>Polygonum</i> sicus marginatus), redroc smea), spikerush (<i>Eleoc</i> siatica), soft rush (<i>Junc</i> erage by nuisance/exotic	tyraciflua). Shrub ccharis glomerulifl iniculata), alligator sp.), lizard's tail (so t (Lachnanthes ca tharis baldwinii), rr us effusus), broon c species, includin	species include bi ora). Groundcove weed (Alternanthe Saururus cernuus) aroliniana), southe naidencane (Panic nsedge bluestem (uttonbush (Cephalanthus occi er species include Virginia cha era philoxeroides), dayflower in, , swamp fern (Blechnum sem ern beaksedge (Rhynchospor, um hemitomon), dogfennel (E Andropogon virginicus), and	identalis), wax myrtle in fem (Woodwardia (Commelina difusa), ulatum), goldenrod a microcarpa), Eupatorium big carpetgrass	
Significant nearby features			Uniqueness (considering the relative rarity in relation to the regional landscape.)			
Existing transmiss	sion line ROW, roadways	s	Not unique			
Functions			Mitigation for pre-	vious permit/other historic use		
Widlife habitat, wate	r storage, aquifer rechar	rge	N/A			
Anticipated Wildlife Utilization Base that are representative of the asses be found)			,	ation by Listed Species (List s T, SSC), type of use, and inte)		
Wading birds, raccoon, vari	ous amphibians and her	rpetofauna	Potential occasional use by wading birds such as white ibis (SSC), little blue heron (SSC), snowy egret (SSC), tricolored heron (SSC), sandhill crane (T), and wood stork (E).			
Observed Evidence of Wildlife Utiliz	zation (List species direc	ctly observed, or o	ther signs such as	tracks, droppings, casings, ne	ests, etc.):	
snowy egret, sandh	ill crane, anhinga, larger	mouth bass, mosq	uitofish, pig frog, c	ommon yellowthroat, little blue	e heron,	
Additional relevant factors:						
Assessment conducted by:			Assessment date	e(s):	· · · · · · · · · · · · · · · · · · ·	
M. Arrants, J. Styer, S. Rizzo, K. Bi	ullock		9/25/09 through	10/22/09		

Transmission Lines/PH	nc./Levy Nuclear Plant -	Application Number		FLUCFCS 641	Name or Number - Wetlands 127, DDa,	
Impact or Mitigation	r transmission Line	Assessment conducted by:		QQ, CD, CV, DC Assessment date:		
Impact	- Fill	M. Arrants, J. Styer, S. Rizzo,	through 10/22/09			
0					T	
Scoring Guidance The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Optimal (10) Condition is optimal and fully supports wetland/surface water functions	Moderate(7) Minimal (4) Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions Minimal level of support of wetland/surface water functions			Not Present (0) Condition is insufficie provide wetland/surf water functions	
.500(6)(a) Location and Landscape Support w/o pres or current with 8	ROW. Individual parameter's preferred habitat; b) Invasive slightly decreased due to limi downstream-distance or barridue to clearing; f) Hydrologica	port variable is slightly reduced of scores: a) Support to wildlife lis exotic species = 8, minimal contations imposed by clearing anciers = 8; e) Impacts to wildlife listly connected areas downstreasment area = 7, signficant beneficant	sted in Part verage; c) V d roadways sted in Part am of asses	1 by outside habit Mildlife access to a ; d) functions that 1 by outside land ssment area = 8; g	tats = 9, wetlands provi and from outside = 8, benefit fish & wildlife uses = 8, slightly redu	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current with	levels and flows = 8, slight alt 9, consistent with expected; erosion; e) evidence of fire hi 8, not apparent; h) use by ani foraging habitat; i) vegetative consists of typical species; j)	e is reflective of relatively undistreations in water level due to cl c) soil moisture = 9, consistent of story = N/A; f) vegetation comminal species with specific hydrospecies tolerant of and associal direct observation of water quality, currents and light penetra	learing of s with expect nunity zona plogical requated with water lity = 8, nor	urrounding areas; ted; d) soil erosior tion = 9; g) hydrol uirements = 9, hig ater quality degrad ne noted; K) existin	b) water level indicaton or deposition = 8, min ogic stress on vegetation h quality wading bird dation = 8, community	
- I '					J q	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community	variable is slightly reduced du community species in the car invasive exotics or other inva- somewhat impacted by ROW coarse woody debris, snag, d alteration of community struct	upport a diverse community of rue to presence of exotic/nuisand nopy, shrub, or ground stratum is sive plant species = 9, minimal remaintenance; d) age & size disten, and cavity = 8; f) plant conclure by clearing of adjacent nation algal growth in submerged accepts.	ce species. = 9, domina coverage; stribution = dition = 9; g ive uplands	Ind vegetation. The Individual parameted by desirable recovered in the Individual parameter and the Individual parameter in the Individual parameter in the Individual parameter in the Individual parameter in Individual par	ne community structure eter scores: a) plant native wetland species ad recruitment = 8, m; e) density and quali nt practices = 7, due to eatures = 8, typical for	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 9 0	variable is slightly reduced du community species in the car invasive exotics or other inva- somewhat impacted by ROW coarse woody debris, snag, d alteration of community struct assessment area; i) siltation of	ue to presence of exotic/nuisand nopy, shrub, or ground stratum sive plant species = 9, minimal maintenance; d) age & size disten, and cavity = 8; f) plant conductor by clearing of adjacent nation algal growth in submerged accepts.	ce species. = 9, domina coverage; stribution = dition = 9; g ive uplands quatic plant	and vegetation. The Individual parameted by desirable recommended in the Individual parameter in Individua	ne community structure eter scores: a) plant native wetland species id recruitment = 8, m; e) density and quali int practices = 7, due to eatures = 8, typical for /A	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with	variable is slightly reduced du community species in the car invasive exotics or other inva- somewhat impacted by ROW coarse woody debris, snag, d alteration of community struct assessment area; i) siltation of	ue to presence of exotic/nuisance to presence of exotic/nuisance popy, shrub, or ground stratum sive plant species = 9, minimal / maintenance; d) age & size disten, and cavity = 8; f) plant conclure by clearing of adjacent nation algal growth in submerged action, at factor =	ce species. = 9, domina coverage; stribution = 9; g ive uplands quatic plant	Ind vegetation. The Individual parameted by desirable recovered in the Individual parameter and the Individual parameter in the Individual parameter in the Individual parameter in the Individual parameter in Individual par	ne community structure eter scores: a) plant native wetland species and recruitment = 8, m; e) density and quali ant practices = 7, due to eatures = 8, typical for A	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 9 0 Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres with	variable is slightly reduced ducommunity species in the car invasive exotics or other invasomewhat impacted by ROW coarse woody debris, snag, dalteration of community struct assessment area; i) siltation of the preservation as mitigated.	ue to presence of exotic/nuisance to presence of exotic/nuisance popy, shrub, or ground stratum sive plant species = 9, minimal / maintenance; d) age & size disten, and cavity = 8; f) plant conclure by clearing of adjacent nation algal growth in submerged action, at factor =	ce species. = 9, domina coverage; stribution = stribution = 9; g ive uplands quatic plant FL = 6 (see i impac	Indivegetation. The Individual paramated by desirable recommended by desirable recommended in the Individual paramated by desirable for impact assessed delta x acres = -0. Individual paramated in the Individual paramated in the Individual paramated in the Individual paramated in the Individual paramated in Individual	ne community structure eter scores: a) plant native wetland species and recruitment = 8, mr; e) density and quali nit practices = 7, due to eatures = 8, typical for I/A	
1. Vegetation and/or 2. Benthic Community Wo pres or current with 9 0 Score = sum of above scores/30 (if uplands, divide by 20) current or w/o pres with	variable is slightly reduced ducommunity species in the car invasive exotics or other invasomewhat impacted by ROW coarse woody debris, snag, dilteration of community struct assessment area; i) siltation of the preservation as mitigated Preservation adjustment Adjusted mitigation delta	ue to presence of exotic/nuisance to presence of exotic/nuisance popy, shrub, or ground stratum sive plant species = 9, minimal / maintenance; d) age & size disten, and cavity = 8; f) plant conclure by clearing of adjacent nation algal growth in submerged action, at factor =	ce species. = 9, domina coverage; stribution = stribution = 9; g ive uplands quatic plant FL = 6 (see i impac	and vegetation. The Individual paramated by desirable recomment of the Individual paramated by desirable recomment of the Individual Paramater of the Individual Paramater of the Individual Paramater of the Individual Paramater of Individual Paramater of the Individual Paramater of Individual P	ne community structure eter scores: a) plant native wetland species and recruitment = 8, mr; e) density and quali nit practices = 7, due to eatures = 8, typical for I/A	

Site/Project Name		Application Number	-	Ass	sessment Area Name o	r Number
Progress Energy Florida, Inc./Lev Transmission Lines/PHP Tran				W		14, 120, 123, CG, DQ, DY
FLUCCs code 643 - Wet Prairie	Further classificat	tion (optional)	·	, ,	Mitigation Site?	Assessment Area Size 2.24 acres (66=0.44, 77=0.01, 108=0.25, 114=0.21, 120=0.14, 123=0.71, CG=0.23, DQ=0.02, DW=0.12, DY=0.11)
Basin/Watershed Name/Number A	ffected Waterbody (Class	s)	Special Classification	on (i.e.OFW,	AP, other local/state/federal d	esignation of importance)
Tampa Bay (03100206) and Hillsborough River (03100205)					None	
	11		<u> </u>			
Geographic relationship to and hydro Hydrologically connected to other we roadways, and cleared transmission l	tlands/surface waters		•		led by upland and we	etland forest,
Assessment area description						
Disturbed wet prairie wetlands vegeta Common species include the nuisand dactylon), bahiagrass (Paspalum noi well as native species leafflower (Physp.), piedmont primrose willow (Ludw broomsedge bluestem (Andropogon (Andropogon glomeratus), lesser cre capeweed (Phyla nodiflora), sedges dayflower (Commelina difusa), button	ce/exotics primrose wil tatum), alligator weed yllanthus sp.), dogfenr vigia arcuata), yellow- virginicus), dwarf umb teping rush (Juncus re (Cyperus sp.), soft rus	low (Ludwigia per (Alternanthera ph nel (Eupatorium ca eyed grass (Xyris prellagrass (Fuiren pens), silverling (sh (Juncus effusus	ruviana), dovewee iloxeroides), and c apillifolium), goatw sp.), false daisy (E aa scirpoides), mill Baccharis glomeru	ed (<i>Murda</i> occasiona veed (<i>Sco</i> Eclipta pro kweed (<i>A</i> uliflora), o	annia nudiflora), bermal Chinese tallow (Sa oparia dulcis), witchgostata), (Rhynchospostata), (Rhynchospostelepias sp.), bushy coastal plain willow (nuda grass (Cynodon pium sebiferum), as rass (Dichanthelium ora microcarpa), broomsedge Salix caroliniana),
Significant nearby features			Uniqueness (cor landscape.)	nsidering	the relative rarity in r	elation to the regional
Existing transmission line	ROW, roadways, subs	station	Not unique			
Functions			Mitigation for prev	vious perr	mit/other historic use	
Widlife habitat, water s	storage, aquifer rechar	ge			N/A	
Anticipated Wildlife Utilization Based that are representative of the assessibe found)				T, SSC), 1	isted Species (List sp type of use, and inter	
Wading birds, raccoon, variou	is amphibians and her	petofauna		SSC), sno	y wading birds such a owy egret (SSC), trico od stork (E).	, ,,
Observed Evidence of Wildlife Utiliza	tion (List species direc	tly observed, or of	her signs such as	tracks, d	roppings, casings, ne	sts, etc.):
	Cuban tree f	frog, leopard frog,	white tailed deer, k	kestrel		
Additional relevant factors:		· · · · · · · · · · · · · · · · · · ·				
Assessment conducted by:			Assessment date	/e)·		
M. Arrants, J. Styer, S. Rizzo, K. Bull	ock		10/8/09 through 1			
m. Allants, J. Styer, S. Rizzo, K. Bull	OU.		13/0/03 tillough 1	1012 1103		

	Site/Project Name Progress Energy Florida, Ir		Application Number		FLUCFCS 643 -	Name or Number Wetlands 66, 77, 108, 11
Scoring Guidance The scoring of each indicator is based on what would be suitable for the type of weltand or surface water assessed		2 Transmission Line	Assessment conducted by:			
The scoring of each indicator is based on what would be suitable for the year of water functions water functions water functions optimal and fully optimal, but sufficient to maintain most type of wetland or surface water functions Location and Landscape Support adjacent residential and agricultural areas. Individual parameter scores: a) Support to widlife listed in Part 1 by outside habitats = 6, reduced due to surrounding development. b) Invasive exotic species = 6, moderate coverar current (n/a for uplands) The water environment (n/a for uplands) The water environment (n/a for uplands) No pres or current (n/a for uplands) The water environment score is reduced due to impacts from landclearing, ditching, adjacent agricultural and residential landuses, and roadways. Individual parameter scores: a) water levels and flows = 4, altered due to ditching; d) soil erosion or deposition = 5, erosion from adjacent landuses; e) evidence of fire history = N/a (b) the province willow; d) direct observation of water quality = N/A, K) existing water quality data = N/A; l) water depth wave, wave energy, currents and light penetration = N/A. So0(6)(c)Community structure with 0 Socore = sum of above scores/30 (if uplands) (if preservation adjustment factor = (Adjusted mitigation delta = (If mitigation) and preservation adjustment factor = (Adjusted mitigation delta = (If mitigation) assessment areas (F) edital and sessessment areas (F) edital and sessessment areas (F) individual welland impact screege) and uplands, divide by 20) (if pre		- Fill	M. Arrants, J. Styer, S. Rizzo	through 10/21/09		
The scoring of each indicator is based on what would be suitable for the water functions wetland/surface water functions optimal and fully optimal, but sufficient to maintain most type of wetland or surface water assessed Location and Landscape Support Location and Landscape Support Location and Landscape Support With O Location and landscape support variable is reduced due to location within existing transmission line ROW with adjacent residential and agricultural areas. Individual parameter scores: a) Support to widifie listed in Part 1 by outside abbitats = 6, reduced due to surrounding development. b) Invasive exotic species = 6, moderate covera coverant (vidification in the provide water functions water functions Location and landscape support variable is reduced due to location within existing transmission line ROW with adjacent residential and agricultural areas. Individual parameter scores: a) Support to widifie listed in Part 1 by outside land uses = 6, reduced due to surrounding development. b) Invasive exotic species = 6, moderate covera residential areas; d) functions that benefit fish & widifie downstream distance or barriers = 5, limited connection to their habitats; e) Impacts to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding development. b) Invasive exotic species = 6, moderate covera residential areas; d) functions that benefit fish & wildlife downstream disassessment area = 2, limited hydrologic connections, typically isolated; g) Dependency of downstream areas on assessment area = 2, limited hydrologic connections, typically isolated; g) Dependency of downstream areas on assessment area = 2, limited by drologic connections, typically isolated; g) Dependency of downstream areas on assessment area = 2, limited by drologic and in the part of th	Seering Cuidence	Ontimal (40)	Moderate/7)	NA:	nimal (4)	Not Propert (0)
adjacent residential and agricultural areas. Individual parameter scores: a) Support to wildlife listed in Part 1 by outside Inabitates = 6, reduced due to surrounding development. b) Invitations imposed by surrounding agricultural and residential areas, of functions that benefit fish 8 wildlife downstream-distance or barriers = 5, limited connections of the rhabitats, e) Impacts to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding parcial to surrounding development. b) Invited connections of the rhabitats, e) Impacts to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding habital cost, it is to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding habital cost, it is to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding habital cost, it is to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding habital cost, it is to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding habital cost, it is to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding habital cost, it is to wildlife listed in Part 1 by outside land uses = 6, reduced due to surrounding habital cost, it is to wildlife listed in Part 1 by outside land uses = 6, reduced due to district and the part of the part of a session with the part of the part of a session in Part 1 by outside land uses = 6, reduced due to impacts from landclearing, ditching, adjacent agricultural and residential landuses, and roadways. Individual parameter scores: a) water levels and flows = 4, altered due to dearing, ditching, adjacent landuses, and roadways. Individual parameter scores: a) water levels and flows = 4, altered due to dearing, ditching; by water level indicators = 5, ession from adjacent landuses; e) evidence of fire history = N. 5.00(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community structure variable is reduced due to significant coverage of exotic species in the	The scoring of each indicator is based on what would be suitable for the type of wetland or surface	Condition is optimal and fully supports wetland/surface	Condition is less than optimal, but sufficient to maintain most wetland/surface Minimal level of support of wetland/surface water functions			Condition is insufficient provide wetland/surface
residential landuses, and roadways. Individual parameter scores: a) water levels and flows = 4, altered due to clearing, ditching, b) water level indicators = 5, less than typical of assessment area, c) soil moisture = 5, reduct due to ditching; d) soil erosion or deposition = 5, erosion from adjacent landuses; e) evidence of fire history = N, vegetation community zonation = 6, moderate upland species encroachment, g) hydrologic stress on vegetation in the vegetation community zonation = 6, moderate upland species encroachment, g) hydrologic stress on vegetation in the vegetation of and associated with water quality degradation = 6, some species indicative of high nutrients such as primrose willow; j) direct observation of water quality = N/A; K) existing water quality data = N/A; I) water depth wave, wave energy, currents and light penetration = N/A. The community structure variable is reduced due to significant coverage of exotic species of vegetation, mowing grazing, and ditching. Individual parameter scores: a) plant community species in the canopy, shrub, or ground stratum = 5, significant coverage by nuisance/exotic species; b) invasive exotics or other invasive plant species significant coverage; c) regeneration and recruitment = 5, impacted by mowing, grazing, d) age & size distributions, and due to alteration of community structure by clearing of adjacent native uplands; h) topographic features = 5, less than typical for assessment area; i) siltation or algal growth in submerged aquatic plant communities = N/A Score = sum of above scores/30 (if plants, divide by 20) current with or plants, divide by 20) current with or plants, divide by 20 and plants are an experiment of a diagratic plant communities = N/A adjusted mitigation delta = If preservation as mitigation, preservation as mitigation, preservation adjustment factor = Adjusted mitigation delta = For mitigation assessment areas For mitigation assessment areas	Landscape Support	adjacent residential and agric outside habitats = 6, reduced c) Wildlife access to and from residential areas; d) functions other habitats; e) Impacts to loss; f) Hydrologically connect	cultural areas. Individual paran due to surrounding developmen noutside = 6, decreased due to s that benefit fish & wildlife dow wildlife listed in Part 1 by outsion ted areas downstream of asse	meter scores ent; b) Invas o limitations vnstream-dis de land uses essment are	s: a) Support to we sive exotic species imposed by surrostance or barriers is = 6, reduced due a = 2, limited hydrostance or barriers.	ildlife listed in Part 1 by s = 6, moderate coverage; unding agricultural and = 5, limited connection to e to surrounding habitat ologic connections,
1. Vegetation and/or 2. Benthic Community vio pres or current with 0 Score = sum of above scores/30 uplands, divide by 20) current or w/o pres or w/o pres or w/o pres or uplands, divide by 20) current or w/o pres or uplands, divide by 20) current or w/o pres or uplands, divide by 20) current or w/o pres or or or or or or or or or o	(n/a for uplands) //o pres or current with	residential landuses, and roa clearing, ditching; b) water ledue to ditching; d) soil erosion vegetation community zonation, use by animal species with tolerant of and associated with primrose willow; j) direct observants.	dways. Individual parameter s vel indicators = 5, less than typ n or deposition = 5, erosion fro on = 6, moderate upland speci n specific hydrological requiren th water quality degradation = 0 ervation of water quality = N/A;	scores: a) worked of asset of adjacent es encroachnents = 5, po 6, some spe	rater levels and flo assment area; c) so landuses; e) evide ament; g) hydrolog oor wildlife habitat ecies indicative of	ws = 4, altered due to oil moisture = 5, reduced ence of fire history = N/A; jic stress on vegetation = ; i) vegetative species high nutrients such as
uplands, divide by 20) current or w/o pres 0.50 Preservation adjustment factor = Adjusted mitigation delta = FL = delta x acres = -0.50 x 0.44 = 0.22 (see impact table for individual wetland impact acreage) If mitigation For mitigation assessment areas	Vegetation and/or Benthic Community //o pres or current with	grazing, and ditching. Individ stratum = 5, significant cover- significant coverage; c) reger 5, altered due to grazing and cavity = N/A; f) plant condition due to alteration of communit	lual parameter scores: a) plant age by nuisance/exotic specie: neration and recruitment = 5, in maintenance of ROW; e) dens n = 6, reduced due to grazing, by structure by clearing of adjact	t community s; b) invasiv mpacted by sity and qua ROW maint cent native t	species in the car we exotics or other mowing, grazing; lity of coarse wood tenance; g) land m uplands; h) topogra	nopy, shrub, or ground invasive plant species = d) age & size distribution dy debris, snag, den, and nanagement practices = 5 aphic features = 5, less
current or w/o pres with 0.50	Score = sum of above scores/30 (if	If preservation as mitig	ation,		For impact asses	sment areas
If mitigation For mitigation assessment areas	current or w/o pres with	· · · · · · · · · · · · · · · · · · ·		(see	impact table for in	
For mitigation assessment areas	2.33	J				
Dena - Iwiti-Currenti Triffe lag (t-lag)(t) -	Dolta = [with ourront]	1		F	or mitigation asse	ssment areas
-0.50 Risk factor = RFG = delta/(t-factor x risk) =	<u> </u>		· · · · · · · · · · · · · · · · · · ·	RFG	= delta/(t-factor x	risk) =

Site/Project Name		Application Number	f	ľ	Assessment Area Name	or Number
Progress Energy Florida, Inc./Lev Transmission Lines/PHP Trans				Wetlands 112A, 117, CB		
FLUCCs code	Further classifica	tion (optional)		Impact	or Mitigation Site?	Assessment Area Size
643 - Wet Prairie		,			Existing Condition	0.96 acres (112A=0.70,
				<u> </u>	•	117=0.06, CB=0.20)
Basin/Watershed Name/Number Aff Tampa Bay (03100206) and	fected Waterbody (Clas	ss)	Special Classification	ON (i.e.O	FW, AP, other local/state/federal	designation of importance)
Hillsborough River (03100205)						
Geographic relationship to and hydrol	ogic connection with	wetlands, other st	urface water, upla	nds		
Typically isolated wet prairies, some of by cleared transmission line ROW, ag	_	-		ers out	tside the transmission l	ine ROW. Surrounded
Assessment area description						
Wet prairie wetlands vegetated with a include the nuisance/exotics rattlebox (Eichhornia crasspies), and alligator v dactyloides), dogfennel (Eupatorium obluestem (Andropogon virginicus), ca difusa), blue maidencane (Amphicarp (Polygonum sp.).	(Sesbania sp.), dove weed (Alternanthera p capillifolium), milkwei peweed (Phyla nodifi	eweed (Murdannia philoxeroides), as ed (Asclepias sp.) lora), sedges (Cyp	nudiflora), bermu well as the native by bushy broomsec perus sp.), maider ty (Rhexia sp.), w	uda gra specie ige (An ncane i atergra	ass (Cynodon dactylon es Eastern gamagrass idropogon glomeratus) (Panicum hemitomon), ass (Luziola fluitans), a), water hyacinth (<i>Tripsacum</i> , broomsedge dayflower (<i>Commelina</i> and smartweed
Significant nearby features		Uniqueness (considering the relative rarity in relation to the regional landscape.)				
Existing transmission line I	station			Not unique		
Functions			Mitigation for pre-	vious p	permit/other historic use	•
Widlife habitat, water s	torage, aquifer recha	rge			N/A	
Anticipated Wildlife Utilization Based of that are representative of the assessment of the assessment of the the that are representative of the assessment of the third in the				T, SSC	y Listed Species (List s C), type of use, and inte	
Wading birds, raccoon, various	s amphibians and he	rpetofauna		SSC), s	e by wading birds such snowy egret (SSC), tric wood stork (E).	
Observed Evidence of Wildlife Utilizat	ion (List species dire	ctly observed, or o	Iother signs such a	s track	s, droppings, casings,	nests, etc.):
		none obse	erved			
Additional relevant factors:						
Assessment conducted by:			Assessment date	e(s):		
M. Arrants, J. Styer, K. Bullock			10/07/09 through	• •	/09	

	ogress Energy		c./Levy Nuclear Plant -	Application Number			Name or Number Wetlands 112A, 116, 117,	
	Transmission Mitigation	Lines/PHF	Transmission Line	Assessment conducted by:		Assessment date	· CB	
impact of	willigation	Impact -	Fill	M. Arrants, J. Styer, K. E	Rullock	10/07/09 through 10/20/09		
		Impact	· · · · · · · · · · · · · · · · · · ·	W. Arranto, v. Otyor, N. L	10/0/10	Timodgii 10/20/00		
Scorir	ng Guidance		Optimal (10)	Moderate(7)	Mi	inimal (4)	Not Present (0)	
The sc	coring of each			Condition is less than				
	is based on wh e suitable for th		Condition is optimal and fully supports wetland/surface	optimal, but sufficient to maintain most		evel of support of l/surface water	Condition is insufficient to provide wetland/surface	
	etland or surfa		water functions	wetland/surface	ľ	unctions	water functions	
	er assessed			waterfunctions				
	e(6)(a) Location andscape Supp		ROW. Individual parameters due to adjacent agricultural a c) Wildlife access to and from development; d) functions that in Part 1 by outside land uses Hydrologically connected are	port variable is slightly reduced scores: a) Support to wildlife lind residential areas, cleared F a outside = 7, decreased due to at benefit fish & wildlife downst s = 7, slightly reduced due to c as downstream of assessmen prairies; g) Dependency of do	sted in Part ROW; b) Involutions ream-distar learing, roat t area = 5, t	1 by outside habit asive exotic specie imposed by clear nce or barriers = 7; dways, residential, ypically no connect	ats = 7, slightly reduced es = 6, moderate coverage ng, roadways, e) Impacts to wildlife listed agricultural areas; f) tion to adjacent wetlands,	
	(b)Water Envi n/a for upland: or		deposition = 6, moderate ero vegetation community zonation upland encroachment appare wildlife habitat; i) vegetative s consists of typical native spec	ed hydroperiod; c) soil moisture sion due to grazing, ditching, P on = 7, some upland species e ent; h) use by animal species v species tolerant of and associa- cies, moderate coverage of ex- kisting water quality data = N/A	ROW maintencroachme with specific ated with wa otic/nuisance	enance; e) evidence int; g) hydrologic si hydrological requi iter quality degrada ce species; j) direct	te of fire history = N/A; f) tress on vegetation = 6, rements = 5, relatively poo ation = 7, community t observation of water	
1.	(c)Community Vegetation an Benthic Comm	d/or	variable score. Individual pai 6, moderate coverage by nui- canopy species; b) invasive recruitment = 7, somewhat in ROW maintenance; e) densit g) land management practice	mixture of native and nuisance rameter scores: a) plant comm sance/exotic species within the exotics or other invasive plant inpacted by ROW maintenance y and quality of coarse woody is = 7, due to alteration of comittle topographic variability; i) s	unity specie ground str species = 6 ; d) age & s debris, sna munity stru	es in the canopy, statum, ROW main, so, moderate coverastize distribution = 6 g, den, and cavity cture by clearing o	hrub, or ground stratum = tenance reduces extent of ige; c) regeneration and in impacted due to grazing, = 7; f) plant condition = 7; f adjacent native uplands;	
Score - a	um of above so	ores/30 (if	If preservation as mitig	ation		For impact asses	sment areas	
JULIE - SI	lands, divide by		Preservation adjustmen			delta x acres = -0.	00 0 10 0 11	
upl			(Wetland 112A); -0.63 x 0.19 = 0.12					
upl current	e	with				land CR): total of	x 0.19 = 0.12	
upl current or w/o pres	s 1	with 0	Adjusted mitigation del	ta =		land CB); total of FL of 0.23		
upl current	s		Adjusted mitigation del	ta =		**	x 0.19 = 0.12	
upl current or w/o pres	\$ 		Adjusted mitigation del	ta =	total	FL of 0.23	x 0.19 = 0.12 0.37 acres and	
upl current or w/o pres 0.63	s lta = [with-curr	0		ta =	total	**	x 0.19 = 0.12 0.37 acres and	

Site/Project Name		Application Numbe	n Number Assessment Area Name or Number				
Progress Energy Florida, Inc./Le Transmission Lines/PHP Trar			Wetland CC			nd CC	
FLUCCs code	Further classifica	tion (optional)		Impac	t or Mitigation Site?	Assessment Area Size	
643 - Wet Prairie			Existing Condition 2.86 acres				
Basin/Watershed Name/Number A	ffected Waterbody (Clas	ted Waterbody (Class)			DFW, AP, other local/state/federal	designation of importance)	
Tampa Bay (03100206)					None		
Geographic relationship to and hydro	plogic connection with	wetlands, other su	urface water, uplar	nds			
Hydrologically connected to other we cleared transmission line ROW	etlands/surface waters	outside the transr	mission line ROW.	Surre	ounded by upland and v	vetland forest, within	
Assessment area description							
Wet prairie dominated by native herb (<i>Polygonum</i> sp.), dogfennel (Eupato buttonweed (<i>Diodia virginiana</i>), and and rattlebox (<i>Sesbania</i> sp.). Spars oak (<i>Quercus laurifolia</i>).	rium capillifolium), day peppervine (<i>Ampelops</i>	rflower (Commelin sis arborea), as w	a difusa), brooms ell as nuisance/ex ling red maple (<i>Ac</i>	edge l otic sp er rub	bluestem (Andropogon pecies primrose willow (rum), wax myrtle (Myrio	virginicus) , and Ludwigia peruviana) ca cerifera), and laurel	
Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)						
Existing transmission line RC	sion, lake			Not unique			
Functions			Mitigation for prev	vious	permit/other historic use)	
Widlife habitat, water	storage, aquifer rechar	rge .	N/A				
Anticipated Wildlife Utilization Based that are representative of the assess be found)			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)				
Wading birds, raccoon, variou	us amphibians and her	rpetofauna		SSC),	e by wading birds such snowy egret (SSC), tric wood stork (E).		
Observed Evidence of Wildlife Utiliza	ation (List species direc	ctly observed, or o	ther signs such as	s track	s, droppings, casings, r	nests, etc.):	
Additional relevant factors:							
Assessment conducted by:		· · · · · · · · · · · · · · · · · · ·	Assessment date	(s)·			
J. Styer, K. Bullock	9/23/2009						

Site/Project Name Progress Energy Florida, I	nc /I ew Nuclear Plant -	Application Number	t Area Name or Number		
Transmission Lines/Ph	•		FLU	JCFCS 643 - Wetland CC	
Impact or Mitigation		Assessment conducted by:	t date:		
Impact	- Fill	M. Arrants, J. Styer, S. Rizzo	/25/09 through 10/22/09		
Scoring Guidance	Optimal (10)	Moderate(7)	Minimal (4)	Not Present (0)	
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than	Minimal level of suppo wetland/surface wat functions	ort of Condition is insufficient to	
.500(6)(a) Location and Landscape Support w/o pres or current with 0	and adjacent residential subc habitats = 8, wetlands provid to and from outside = 8, sligh benefit fish & wildlife downstr = 8, slightly reduced due to c	division. Individual parameter see preferred habitat; b) Invasive atly decreased due to limitation	scores: a) Support to wi exotic species = 8, min s imposed by clearing and e) Impacts to wildlife liste ected areas downstream	. 0,	
.500(6)(b)Water Environment (n/a for uplands) w/o pres or current with 8	Individual parameter scores: surrounding areas; b) water I expected; d) soil erosion or d community zonation = 8; g) h hydrological requirements = 9 associated with water quality	a) water levels and flows = 8, evel indicators = 8, consistent leposition = 8, minimal erosion lydrologic stress on vegetation 9, high quality wading bird fora degradation = 8, community of the	slight alterations in wate with expected; c) soil m ; e) evidence of fire histo = 8, not apparent; h) us ging habitat; i) vegetativ onsists of typical species	oisture = 8, consistent with ory = N/A; f) vegetation e by animal species with specific	
.500(6)(c)Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 7	is slightly reduced due to pre parameter scores: a) plant con native wetland species; b) in and recruitment = 7, somewh density and quality of coarse practices = 7, due to alteratio	sence of exotic/nuisance spec ommunity species in the canop wasive exotics or other invasiv hat impacted by ROW mainten woody debris, snag, den, and on of community structure by cl	ies, specifically primrose y, shrub, or ground strat e plant species = 7, mod ance; d) age & size distri cavity = 8; f) plant condi earing of adjacent native	the community structure variable willow and rattlebox. Individual um = 8, dominated by desirable derate coverage; c) regeneration ibution = 7, typical of system; e) tion = 8; g) land management a uplands; h) topographic quatic plant communities = N/A	
Score = sum of above scores/30 (i	If preservation as mitigate	ation,	For impact a	assessment areas	
uplands, divide by 20) current or w/o pres 0.77 0	Preservation adjustmen Adjusted mitigation del		FL = delta x acres	s = -0.77 x 0.27 = 0.21	
Delta - fuith	If mitigation	For mitigation assessment areas			
Delta = [with-current]	Time lag (t-factor) =		RFG = delta/(t-fac	ctor x risk) =	
-0.77	Risk factor =				



1018 Thomasville Road Suite 200-C Tallahassee, FL 32303 850-224-8207 fax 850-681-9364 www.fnai.org

Stacy Rizzo Golder Associates, Inc. 6026 NW 1st Place Gainesville, FL 32607

Dear Ms. Rizzo,

Thank you for your request for information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

November 30, 2009

Project:

Pinellas-Hillsborough-Polk

Date Received:

November 24, 2009

Location:

Pinellas, Hillsborough, and Polk Counties

Element Occurrences

A search of our maps and database indicates that currently we have several Element Occurrences mapped within the vicinity of the study area (see enclosed maps and element occurrence tables). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The Element Occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, Element Occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant.

Several of the species and natural communities tracked by the Inventory are considered **data sensitive**. Occurrence records for these elements contain information that we consider sensitive due to collection pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Reports). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.



Florida Resources and Environmental Analysis Center

nstitute of Science and Public Affairs

The Florida State University

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

Managed Areas

Portions of the site appear to be located within Lake Park and Cone Ranch, both managed by Hillsborough County. Portions of the site also appear to be located within the Lower Hillsborough Flood Detention Area and Upper Hillsborough, both managed by the Southwest Florida Water Management District.

The Managed Areas data layer shows public and privately managed conservation lands throughout the state. Federal, state, local, and privately managed conservation lands are included.

Land Acquisition Projects

This site appears to be located within the Green Swamp Florida Forever BOT Project, which is part of the State of Florida's Conservation and Recreation Lands land acquisition program. A description of this project is enclosed. For more information on this Florida Forever Project, contact the Florida Department of Environmental Protection, Division of State Lands.

Florida Forever Board of Trustees (BOT) projects are proposed and acquired through the Florida Department of Environmental Protection, Division of State Lands. The state has no regulatory authority over these lands until they are purchased.

The Inventory always recommends that professionals familiar with Florida's flora and fauna should conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

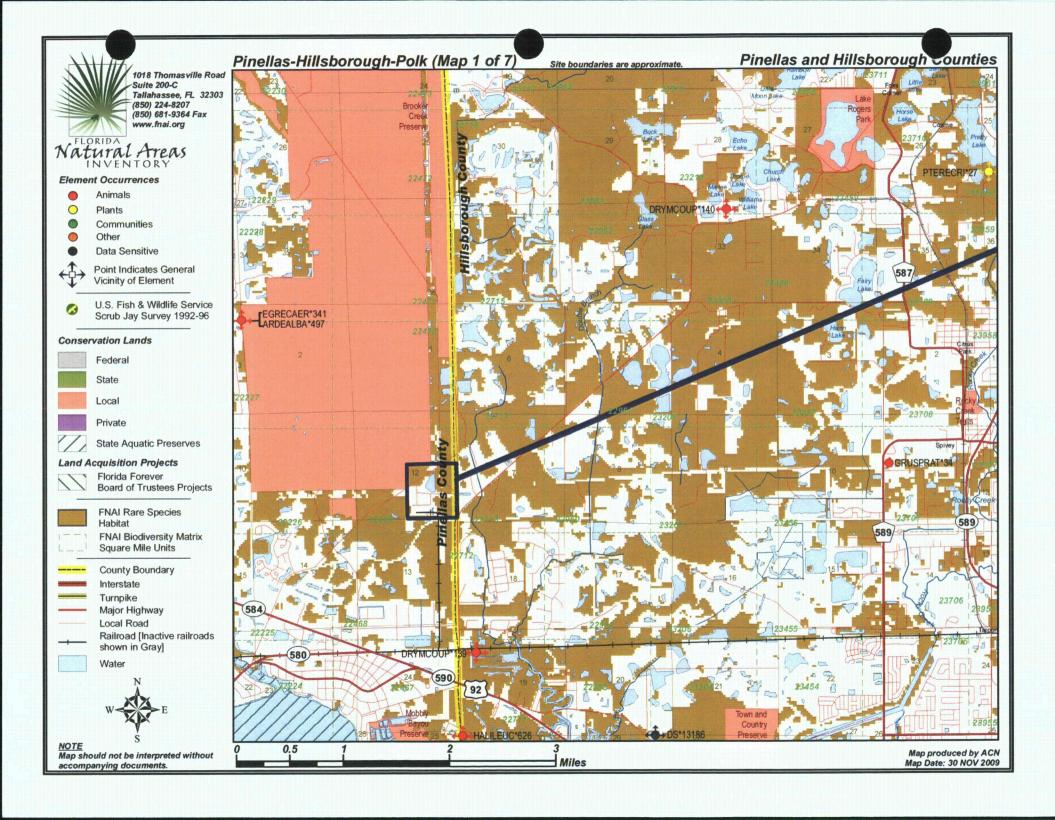
The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

Thank you for your use of FNAI services. If I can be of further assistance, please give me a call at (850) 224-8207.

Sincerely, Alicia C. Newberry

Alicia C. Newberry Data Services Coordinator Encl







ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 1 of 7)

INVENT	ÓRY		Global	State	Federal	State	Observatio	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
DRYMCOUP*140	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1965-	No general description given	INDIGO OBSERVED BY J. S. GODLEY OR MARTY MARTIN IN 1965 (MOLER INTERVIEW OF GODLEY & MARTIN, 1982-03-27).
PTERECRI*27	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	1977-09-13	1977-09-13: Open area in sandhill community (Wunderlin).	1977-09-13: Only one flowering specimen seen; specimen taken [fl] (Wunderlin).
GRUSPRAT*34	Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT	1990-04-28	GRASSY (MOWED) FIELDS WITH SCATTERED CYPRESS PONDS ON E SIDE OF RD. SOME OF THE PONDS HAVE BEEN CONVERTED TO RETENTION PONDS.	3 INDIVIDUALS SEEN, 2 ADULTS AND 1 CHICK. 1995: REPORT FROM RESIDENT SAYS NO HABITAT LEFT FOR BIRDS.
DRYMCOUP*139	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1970-<	No general description given	INDIGO OBSERVED BY J.S GODLEY OR MARTY MARTIN PRIOR TO 1970 (MOLER INTERVIEW OF GODLEY & MARTIN, 1982-03-27).
DS*13186	Data Sensitive Element	Data Sensitive	G2	S2	N	LE	1960-08-12	Data Sensitive	Data Sensitive
ARDEALBA*497	Ardea alba	Great Egret	G5	S4	N	N	1988-06-14	Hole in cypress swamp.	1988/06/14: B.A. Millsap, GFC; PI-R-06 Cattle Egrets or immature Little Blue Herons? Total = B (includes GREG, LBHE).
EGRECAER*341	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-06-14	Hole in cypress swamp	1988/06/14: B.A. Millsap, GFC, observation. PI-R-06 Cattle Egrets or immature Little Blue Herons? "Total" = B (includes GREG, LBHE). 1988/06/15: K.J. McGowan, GFC, observation. Est. breeding pairs (=25). Nesting stages: Young flying/ready, nests abandone
HALILEUC*626	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1999-2003: Active - 2003, 2002, 2001, 2000; Unknown/not assessed - 1999; Status 1995-98: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST; 1991: DESTROYED, 0 YOUNG; 1990: PRODUCED 1 YOUNG; 1989: PRODUCED 1 YOUNG;



Florida Natural Areas Inventory **Biodiversity Matrix Report**

Map 1 of 7



Natural Areas	Map I of I			18	51 .
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 22469					
Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	S3 S2S3 S4 S2	LT N N LE	LT LT N LE
Potential					
Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Corynorhinus rafinesquii Eumops floridanus Gopherus polyphemus Lechea cernua Linum carteri var. smallii Matelea floridana Mustela frenata peninsulae Nemastylis floridana Nolina atopocarpa Panicum abscissum Picoides borealis Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Ursus americanus floridanus	Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Rafinesque's Big-eared Bat Florida bonneted bat Gopher Tortoise Nodding Pinweed Small's Flax Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Florida Beargrass Cutthroat Grass Red-cockaded Woodpecker Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Florida Black Bear	G4T3 G2G3 G2Q G3G4 G1 G3 G3 G2T2 G2 G5T3 G2 G3 G3 G3 G3 G3 G3G4 G3 G2G3 G3 G5T3 G5T2	\$3 \$2\$3 \$2 \$2 \$1 \$3 \$3 \$2 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	ZZZZZZZZZZZZZZZZZZZ	LS LE N LE T T LE LE N LE T LE S LE S LT LE S LE S LT LE S LE S
Matrix Unit ID: 22713 Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	\$3 \$2\$3 \$4 \$2	LT N N LE	LT LT N LE
Potential					
Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Corynorhinus rafinesquii Eumops floridanus Glandularia tampensis Gopherus polyphemus Lechea cernua Linum carteri var. smallii Matelea floridana Mustela frenata peninsulae	Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Rafinesque's Big-eared Bat Florida bonneted bat Tampa Vervain Gopher Tortoise Nodding Pinweed Small's Flax Florida Spiny-pod Florida Long-tailed Weasel	G4T3 G2G3 G2Q G3G4 G1 G2 G3 G3 G2T2 G2 G5T3	\$3 \$2\$3 \$2 \$2 \$1 \$2 \$3 \$3 \$2 \$2 \$2 \$2	N	LS LE N LE LT LT LE LT LE N

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years. Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity. Potential - This site lies within the known or predicted range of the species listed.



Florida Natural Areas Inventory Biodiversity Matrix Report Map 1 of 7



Natural Areas

Natural Areas INVENTORY					-
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Nemastylis floridana Nolina atopocarpa Panicum abscissum Picoides borealis Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Ursus americanus floridanus	Celestial Lily Florida Beargrass Cutthroat Grass Red-cockaded Woodpecker Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Florida Black Bear	G2 G3 G3 G3G4 G3 G2G3 G3 G5T3 G5T2	\$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$2	N N N LE N N N N N N N N N N N N N N N N	LE LT LS LS LS LT LS LT*
Matrix Unit ID: 22960					
Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	S3 S2S3 S4 S2	LT N N LE	LT LT N LE
Potential					
Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Corynorhinus rafinesquii Eumops floridanus Glandularia tampensis Gopherus polyphemus Linum carteri var. smallii Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Picoides borealis Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Ursus americanus floridanus	Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Rafinesque's Big-eared Bat Florida bonneted bat Tampa Vervain Gopher Tortoise Small's Flax Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Red-cockaded Woodpecker Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Florida Black Bear	G4T3 G2G3 G2Q G3G4 G1 G2 G3 G2T2 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G4 G3 G5T3 G5T2	\$3 \$2\$3 \$2 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	S S S S S S S S S S S S S S S S S S S	LS LE NELE LE NENTS LS LT LS LT*
Matrix Unit ID: 22961					
Likely	Eggtorn Indias Casks	Ca	C 2	1 T	1 T
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	\$3 \$2\$3 \$4 \$2	LT N N LE	LT LT N LE
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

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Florida Natural Areas Inventory Biodiversity Matrix Report

Map 1 of 7



Natural Areas

NATUTAL FITEAS INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	LT
Eumops floridanus	Florida bonneted bat	G1	S1	N	LE
Glandularia tampensis	Tampa Vervain	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Platanthera integra	Yellow Fringeless Orchid	G3G4	S3	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 23208					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	LT
Eumops floridanus	Florida bonneted bat	G1	S1	N	LE
Glandularia tampensis	Tampa Vervain	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cemua	Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	Ν	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE

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Florida Natural Areas Inventory Biodiversity Matrix Report Map 1 of 7



Natural Areas				185	1 0
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Picoides borealis Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Stilosoma extenuatum Ursus americanus floridanus	Red-cockaded Woodpecker Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Short-tailed Snake Florida Black Bear	G3 G3G4 G3 G2G3 G3 G5T3 G3 G5T2	\$2 \$3 \$3 \$2 \$3 \$3 \$3 \$2	LE N N N N N N N N	LS LE LS LT LS LS LT LT*
Matrix Unit ID: 23457					
Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana Sandhill upland lake	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4 G3	S3 S2S3 S4 S2 S2	LT N N LE N	LT LT N LE N
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Chrysopsis floridana Coelorachis tuberculosa Eumops floridanus Glandularia tampensis Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Lechea cernua Linum carteri var. smallii Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Stilosoma extenuatum Ursus americanus floridanus	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Piedmont Jointgrass Florida bonneted bat Tampa Vervain Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Small's Flax Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Short-tailed Snake Florida Black Bear	G3 G4T3 G2G3 G2Q G1 G3 G1 G2 G3 G3 G2T2 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$2 \$3 \$2 \$3 \$3 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz	NSEEETEETNNTEENENTEESTSST*
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity. Potential - This site lies within the known or predicted range of the species listed.



Biodiversity Matrix Report Map 1 of 7



Natural Areas				18	51.0
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Grus canadensis pratensis Mycteria americana Sandhill upland lake	Florida Sandhill Crane Wood Stork	G5T2T3 G4 G3	S2S3 S2 S2	N LE N	LT LE N
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Chrysopsis floridana Coelorachis tuberculosa Eumops floridanus Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Lechea cernua Linum carteri var. smallii Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Stilosoma extenuatum Ursus americanus floridanus	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Piedmont Jointgrass Florida bonneted bat Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Small's Flax Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Short-tailed Snake Florida Black Bear	G3 G4T3 G2G3 G2Q G1 G3 G3 G3 G2 G3 G2T2 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$2 \$3 \$2 \$1 \$3 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	zzzzzzzzzzzzzzzzzzzzzzzzzzzz	N S LE LE LT LE T N N T LE LE N LE N LE LE S T LE S LE
Matrix Unit ID: 23709					
Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana Sandhill upland lake	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G3	S3 S2S3 S2 S2	LT N LE N	LT LT LE N
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Chrysopsis floridana Coelorachis tuberculosa Eumops floridanus Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Piedmont Jointgrass Florida bonneted bat Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake	G3 G4T3 G2G3 G2Q G1 G3 G1 G3 G3 G3	\$3 \$3 \$2\$3 \$2 \$1 \$3 \$1 \$3 \$3 \$2	X	N LS LE LE LT LE LT N N

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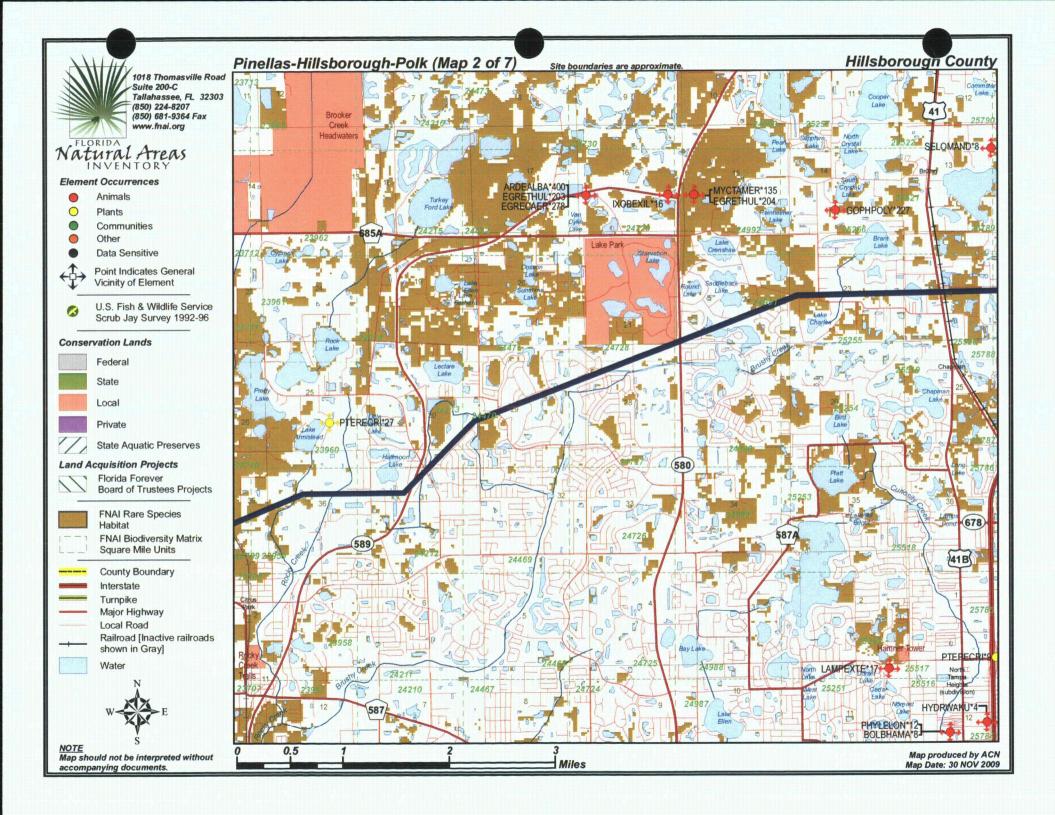
Florida Natural Areas Inventory **Biodiversity Matrix Report** Map 1 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	_
Lechea cernua	Nodding Pinweed	G3	S3	N	LT	_
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE	
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N	
Nemastylis floridana	Celestial Lily	G2	S2	Ν	LE	
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	Ν	
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT	
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE	
Platanthera integra	Yellow Fringeless Orchid	G3G4	S3	N	LE	
Podomys floridanus	Florida Mouse	G3	S3	N	LS	
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	Ν	LT	
Rana capito	Gopher Frog	G3	S3	N	LS	
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT	
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*	

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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 2 of 7)

NATUTAL			Global	State	Federa	l State	Observation	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
PTERECRI*27	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	1977-09-13	1977-09-13: Open area in sandhill community (Wunderlin).	1977-09-13: Only one flowering specimen seen; specimen taken [fl] (Wunderlin).
GOPHPOLY*227	Gopherus polyphemus	Gopher Tortoise	G3	S 3	N	LT	1987-pre	OLD FIELD	1987-pre: Species occurrence noted here in Diemer's unpublished map set (U86DIE01FLUS).
PTERECRI*9	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	1989-09-02	SANDY OAK WOODLANDS, QUERCUS VIRGINIANA VAR. GEMINATA AND QUERCUS LAEVIS DOMINANT.	1 PLANT, FLOWERING, IN LEAF.
EGRETHUL*204	Egretta thula	Snowy Egret	G5	S 3	N	LS	1988-05-19	Cypress pond.	1988/05/19: K.J. McGowan, GFC. WOST young flying/ready and loafing on colony. 3 active WOST nests. SNEG and ANHI not nesting. No obs. on other spp (GRHE). "Total" (individuals?) = 15.
EGRETHUL*203	Egretta thula	Snowy Egret	G5	S3	N	LS	1988-05-19	Willows at lake edge.	1988/05/19: K.J. McGowan, GFC. Est. breeding pairs. GREG not nesting? CAEG incubating. LBHE incubating(most), hatching(most), downy(most), flying/ready. No obs. on other spp (SNEG, GRHE). "Total" = B.
LAMPEXTE*17	Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	LT	1960-11-22	No general description given	SPECIMEN IN USF COLLECTION, COLLECTED 22 NOVEMBER 1960.
MYCTAMER*135	Mycteria americana	Wood Stork	G4	S2	LE	LE	1988-06-07	Cypress swamp	1988/06/07: K.J. McGowan, GFC. HI-R-05 One stork incubating. Several old nests. "Total" = A.
ARDEALBA*400	Ardea alba	Great Egret	G5	S4	N	N	1988-05-19	1988-05-19: Willows at lake edge (U97GFC02FLUS).	1988-05-19: K.J. McGowan, GFC; Est. breeding pairs. Great egret not nesting? Cattle egret incubating. Little blue heron incubating(most), hatching(most), downy(most), flying/ready. No obs. on other spp (snowy egret, great heron). Total = B.
EGRECAER*278	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-05-19	Willows at lake edge.	1988/05/19: K.J. McGowan, GFC, observation. Est. breeding pairs. GREG not nesting? CAEG incubating. LBHE incubating (most), hatching (most), downy (most), flying/ready. No obs. on other spp (SNEG, GRHE). "Total" = B.
IXOBEXIL*16	Ixobrychus exilis	Least Bittern	G5	S4	N	N	1988-05-19	Strand Swamp	1988-05-19: K.J. McGowan, GFC, observed 1 bittern. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF.





ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 2 of 7)

INVEN			Global	State	Federal	State	Observation	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
SELOMAND*8	Selonodon mandibularis	Large-Jawed Cebrionid Beetle	G2G3	S2S3	N	N	1958-08-08	1958-08-08: No description given (B99GAL01FLUS).	1958-08-08: 1 specimen was collected and deposited at FSCA (B99GAL01FLUS). 1916-05-18: 3 specimens were collected and deposited at LACM (B99GAL01FLUS). 1916-05-10: 1 specimen was collected and deposited to LACM (B99GAL01FLUS).
PHYLELON*12	Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N	1966-08-29	1966-08-29: No description given (B89WOO01FLUS).	1966-08-29: One specimen was collected by T.J. Favoroso using a Steiner trap. 1965-08-12: T.J. Favoroso collected 2 specimens in a Japanese beetle trap. 1952-08: J. Gross collected 1 specimen(B89WOO01FLUS).
BOLBHAMA*8	Bolbocerosoma hamatum	Bicolored Burrowing Scarab Beetle	GNR	S3S4	N	N	1964-11-04	1964-11-04: No description given (B73WOO01FLUS).	1964-11-04: One specimen was collected by Jean Beem (B73WOO01FLUS).
HYDRWAKU*4	Hydroptila wakulla	Wakulla Springs Vari-colored Microcaddisfly	G2	S2	N	N	1962-Pre	1962-Pre: No description given (U06RAS01FLUS).	1962-Pre: Specimens were collected before 1962 (U06RAS01FLUS).



Biodiversity Matrix Report Map 2 of 7



Natural Areas				30	01
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 23959					
Likely					
Drymarchon couperi Mycteria americana	Eastern Indigo Snake Wood Stork	G3 G4	S3 S2	LT LE	LT LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Chrysopsis floridana Coelorachis tuberculosa Eumops floridanus Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Heterodon simus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Stilosoma extenuatum Ursus americanus floridanus	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Piedmont Jointgrass Florida bonneted bat Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Short-tailed Snake Florida Black Bear	G3 G4T3 G2G3 G2Q G1 G3 G1 G3 G5T2T3 G3 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G4 G3 G2G3 G3 G5T3	\$3 \$3 \$2 \$3 \$2 \$1 \$3 \$1 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz	N S E E E T E T T N N T E N E N T E E S T S S T T L E E S T S S T T T
	Tiorida Black Bear	0012	OL.	,,	_,
Matrix Unit ID: 24212					
Likely					
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Chrysopsis floridana Coelorachis tuberculosa Drymarchon couperi Gopherus polyphemus Grus canadensis pratensis Gymnopogon chapmanianus Lechea cernua	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Piedmont Jointgrass Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed	G3 G4T3 G2G3 G2Q G1 G3 G3 G5T2T3 G3 G3	\$3 \$3 \$2\$3 \$2 \$1 \$3 \$3 \$3 \$2\$3 \$3 \$3	X X X Z E X T X X X X	N LS LE LE LT LT LT LT

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Florida Natural Areas Inventory Biodiversity Matrix Report Map 2 of 7



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Natural	August 19
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ITTYPUTTER	1 11
INVEN	
LINEVEIN	IVICT

INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Stilosoma extenuatum	Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Short-tailed Snake	G2 G5T3 G2 G3 G3 G3 G3G4 G3 G2G3 G3 G5T3 G3	\$2 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$2 \$3 \$3	N	LE N LE N LT LE LS LT LS LT LS LT
Matrix Unit ID: 24213 Likely					
Grus canadensis pratensis Mycteria americana Sandhill upland lake	Florida Sandhill Crane Wood Stork	G5T2T3 G4 G3	S2S3 S2 S2	N LE N	LT LE N
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Chrysopsis floridana Coelorachis tuberculosa Drymarchon couperi Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Stilosoma extenuatum Ursus americanus floridanus	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Piedmont Jointgrass Eastern Indigo Snake Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Short-tailed Snake Florida Black Bear	G3 G4T3 G2G3 G2Q G1 G3 G3 G3 G3 G3 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz	N S E E E L T T T N T E E N E N T E E S T S S T T
Matrix Unit ID: 24470					
Likely Mycteria americana	Wood Stork	G4	S2	LE	LE

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Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity. Potential - This site lies within the known or predicted range of the species listed.



Biodiversity Matrix Report Map 2 of 7



	Global	Stato	Fodoral	State
Common Name	Rank	Rank		Listing
Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Piedmont Jointgrass Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel	G3 G4T3 G2G3 G2Q G1 G3 G3 G3 G5T2T3 G3 G3 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$2\$3 \$2 \$1 \$3 \$3 \$3 \$3 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	X X X Z E X L X X X X X X X X X X X X X X X X X	NSEEETTTTNTEENENTEESTSS
Large-Jawed Cebrionid Beetle Short-tailed Snake	G2G3 G3	S2S3 S3	N N	N LT
Florida Black Bear	G5T2	S2	N	LT*
·				
Florida Sandhill Crane Wood Stork	G5T2T3 G4	S2S3 S2	N LE	LT LE
Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Piedmont Jointgrass Eastern Indigo Snake Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat	G3 G4T3 G2G3 G2Q G3 G3 G3 G3 G3 G2 G5T3 G2 G3	\$3 \$3 \$2\$3 \$2 \$3 \$3 \$3 \$3 \$3 \$2 \$2 \$3 \$2 \$3	X	N SELETT LT N LT LE N LE N
	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Piedmont Jointgrass Eastern Indigo Snake Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Large-Jawed Cebrionid Beetle Short-tailed Snake Florida Black Bear Florida Back Bear Florida Sandhill Crane Wood Stork Bachman's Sparrow Florida Black Bear Florida Sandhill Crane Gopher Tortoise Chapman's Skeletongrass Rastern Indigo Snake Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily	Bachman's Sparrow Florida Burrowing Owl G4T3 Many-flowered Grass-pink Sand Butterfly Pea Florida Goldenaster Florida Goldenaster Fledmont Jointgrass G3 Eastern Indigo Snake G3 Gopher Tortoise Florida Sandhill Crane Chapman's Skeletongrass G3 Florida Spiny-pod G2 Florida Long-tailed Weasel G3 Florida Beargrass G3 Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Gas Short-tailed Snake Florida Black Bear Florida Black Bear G5T2T3 Florida Sandhill Crane G5T2T3 G3 G4 Florida G7 G5T3 G2 G3 G4 Florida Black Bear G5T3 G2 G3 G4 Florida G7 G5T3 G2 G3 G4 Florida G7 G5 G3 G5 G4 Florida G7 G5 G3 G5 G6 G7	Common Name Rank Rank Bachman's Sparrow G3 S3 Florida Burrowing Owl G4T3 S3 Many-flowered Grass-pink G2G3 S2S3 Sand Butterfly Pea G2Q S2 Florida Goldenaster G1 S1 Piedmont Jointgrass G3 S3 Eastern Indigo Snake G3 S3 Gopher Tortoise G3 S3 Florida Sandhill Crane G5T2T3 S2S3 Rodding Pinweed G3 S3 Pondspice G3 S3 Florida Spiny-pod G2 S2 Florida Long-tailed Weasel G5T3 S3 Celestial Lily G2 S2 Round-tailed Muskrat G3 S3 Florida Beargrass G3 S3 Culthroat Grass G3 S3 Yellow Fringeless Orchid G3G4 S3 Florida Mouse G3 S3 Giant Orchid G2G3 S2 Gopher Frog <td>Common Name Rank Rank Status Bachman's Sparrow G3 S3 N Florida Burrowing Owl G4T3 S3 N Many-flowered Grass-pink G2C3 S2S3 N Sand Butterfly Pea G2Q S2 N Florida Goldenaster G1 S1 LE Piedmont Jointgrass G3 S3 N Eastern Indigo Snake G3 S3 N Gopher Tortoise G3 S3 N Florida Sandhill Crane G5T2T3 S2S3 N Chapman's Skeletongrass G3 S3 N Nodding Pinweed G3 S3 N Pondspice G3 S2 N Florida Spiny-pod G2 S2 N Celestial Lily G2 S2 N Celestial Lily G2 S2 N Cuthroat Grass G3 S3 N Vellow Fringeless Orchid G3(CA) S3</td>	Common Name Rank Rank Status Bachman's Sparrow G3 S3 N Florida Burrowing Owl G4T3 S3 N Many-flowered Grass-pink G2C3 S2S3 N Sand Butterfly Pea G2Q S2 N Florida Goldenaster G1 S1 LE Piedmont Jointgrass G3 S3 N Eastern Indigo Snake G3 S3 N Gopher Tortoise G3 S3 N Florida Sandhill Crane G5T2T3 S2S3 N Chapman's Skeletongrass G3 S3 N Nodding Pinweed G3 S3 N Pondspice G3 S2 N Florida Spiny-pod G2 S2 N Celestial Lily G2 S2 N Celestial Lily G2 S2 N Cuthroat Grass G3 S3 N Vellow Fringeless Orchid G3(CA) S3

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Biodiversity Matrix Report Map 2 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Nolina atopocarpa Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Sciurus niger shermani Selonodon mandibularis Stilosoma extenuatum Ursus americanus floridanus	Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Sherman's Fox Squirrel Large-Jawed Cebrionid Beetle Short-tailed Snake Florida Black Bear	G3 G3 G3G4 G3 G2G3 G3 G5T3 G2G3 G3 G5T2	\$3 \$3 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$2	2222222	LT LE LS LT LS LS N LT*
Matrix Unit ID: 24728					
Likely					
Ardea alba Egretta caerulea Egretta thula Grus canadensis pratensis Ixobrychus exilis Mesic flatwoods Mycteria americana	Great Egret Little Blue Heron Snowy Egret Florida Sandhill Crane Least Bittern Wood Stork	G5 G5 G5 G5T2T3 G5 G4 G4	\$4 \$4 \$3 \$2\$3 \$4 \$4 \$2	2 2 2 2 2 LE	N LS LT N N LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Coelorachis tuberculosa Conradina brevifolia Drymarchon couperi Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Sciurus niger shermani Selonodon mandibularis Stilosoma extenuatum Ursus americanus floridanus Warea carteri	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Piedmont Jointgrass Short-leaved Rosemary Eastern Indigo Snake Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Snail Kite Sherman's Fox Squirrel Large-Jawed Cebrionid Beetle Short-tailed Snake Florida Black Bear Carter's Warea	G3 G4T3 G2G3 G2Q G3 G3 G3 G3 G3 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$2 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	Mzzzzg Zzzzzg Zzzzz T Zzzzz T	N S E E T E T T N T E E N E N T E E S T S E S N T * E

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Biodiversity Matrix Report Map 2 of 7



NATUTAL FITEAS		Global	State	Federal	
Scientific Name	Common Name	Rank	Rank	Status	Listing
Matrix Unit ID: 24991					
Likely					
Egretta thula Grus canadensis pratensis Ixobrychus exilis Mycteria americana	Snowy Egret Florida Sandhill Crane Least Bittern Wood Stork	G5 G5T2T3 G5 G4	\$3 \$2\$3 \$4 \$2	N N N LE	LS LT N LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Coelorachis tuberculosa Drymarchon couperi Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Sciurus niger shermani Selonodon mandibularis Stilosoma extenuatum Ursus americanus floridanus Warea carteri	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Piedmont Jointgrass Eastern Indigo Snake Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Snail Kite Sherman's Fox Squirrel Large-Jawed Cebrionid Beetle Short-tailed Snake Florida Black Bear Carter's Warea	G3 G4T3 G2G3 G2Q G3 G3 G3 G3 G3 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G4G5T3Q G5T3 G5T3 G2G3 G5T3 G5T2 G3	\$3 \$3 \$2 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3		N S E E T T T N T E E N E N T E E S T S E S N T T E E
Matrix Unit ID: 25255					
Likely					•
Grus canadensis pratensis Mycteria americana	Florida Sandhill Crane Wood Stork	G5T2T3 G4 ^	S2S3 S2	N LE	LT LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Coelorachis tuberculosa Drymarchon couperi Glandularia tampensis	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Piedmont Jointgrass Eastern Indigo Snake Tampa Vervain	G3 G4T3 G2G3 G2Q G3 G3 G2	\$3 \$3 \$2\$3 \$2 \$3 \$3 \$2	N N N N L T N	N LS LE LE LT LT LE

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Florida Natural Areas Inventory **Biodiversity Matrix Report**

Map 2 of 7



Natural Areas

Natural Areas					
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	Ň	N.
Lechea cemua	Nodding Pinweed	G3	S3	N	ĹŤ
Litsea aestivalis	Pondspice	G3	S2	N	ĹĖ
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
	Florida Spiriy-pod Florida Long-tailed Weasel	G5T3	S3	N	N
Mustela frenata peninsulae	Celestial Lily	G2	S2	N	LE
Nemastylis floridana	Round-tailed Muskrat	G2 G3	S2 S3	N	N
Neofiber alleni		G3	S3	N	LT
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LE
Panicum abscissum	Cutthroat Grass	G3	S2	LE	LS
Picoides borealis	Red-cockaded Woodpecker	G3G4	S2 S3		LE
Platanthera integra	Yellow Fringeless Orchid	G3G4 G3	53 S3	N	LS
Podomys floridanus	Florida Mouse	G2G3	S2	N N	LT
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2 S3	N	LS
Rana capito	Gopher Frog	G4G5T3Q	53 S2	LE	LS
Rostrhamus sociabilis plumbeus	Snail Kite				LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	
Selonodon mandibularis	Large-Jawed Cebrionid Beetle	G2G3	S2S3	N	N
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Warea carteri	Carter's Warea	G3	S3	LE	LE
atrix Unit ID: 25520					
Likely					
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill upland lake		G3	S2	N	N
Potential	•				
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	Ν	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Glandularia tampensis	Tampa Vervain	G2	S2	Ν	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Lechea cemua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	Ν
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Platanthera integra	Yellow Fringeless Orchid	G3G4	S3	Ñ	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	ĹS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q		LE	LE
r courramae ecolabillo piamboae	CHAIL LAND	J. 3010W	~_		

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Florida Natural Areas Inventory **Biodiversity Matrix Report** Map 2 of 7



Natural Areas

INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	
Selonodon mandibularis	Large-Jawed Cebrionid Beetle	G2G3	S2S3	N	N	
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT	
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*	
Warea carteri	Carter's Warea	G3	S3	LE	LE	

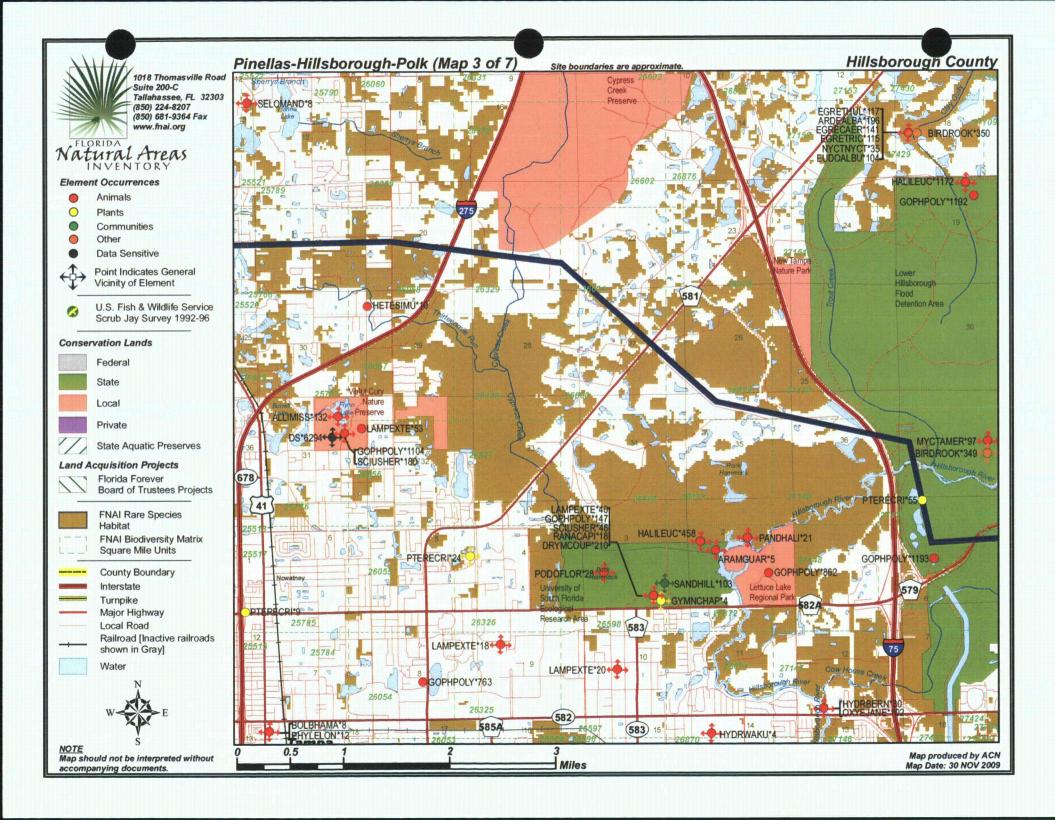
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Potential - This site lies within the known or predicted range of the species listed.







INVENT			Global	State	Federal	State (Observation	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
LAMPEXTE*18	Lampropeltis extenuata	Short-tailed Snake	G3	S 3	N	LT	1977-04-27	"TURKEY OAK SANDHILL HABITAT".	SPECIMEN FOUND CROSSING SAND ROAD AT 1730 HR, 27 APRIL 1977, BY LEO GARCIA.
PTERECRI*24	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	1981-09-15	1981-09-15: Wet pinelands (R. Day).	1981-09-15: Specimen taken [fl] (R. Day).
PODOFLOR*28	Podomys floridanus	Florida Mouse	G3	S3	N	LS	1969	ISLAND OF SAND PINE SCRUB SURROUNDED BY WETLANDS OF HILLSBOROUGH RIVER.	2 USF SPECIMENS (ADULT M & F) COLL. 4 DEC 1969 BY R. JONES (ADJ-010,011).
LAMPEXTE*20	Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	LT	1974-11	DEVELOPED AREA ON FORMER SANDHILL.	R 1974-01-18: SPECIMEN COLLECTED DOR (DEAD ON ROAD) BY LARRY N. BROWN; BROWN COLLECTED A 2ND SPECIMEN IN NOVEMBER OR DECEMBER 1974 (S74BROSF). 1961-04-28: SINGLE SPECIMEN (GEW-1880) FOUND IN GARAGE (A62WOO01FL).
PTERECRI*9	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	1989-09-02	SANDY OAK WOODLANDS, QUERCUS VIRGINIANA VAR. GEMINATA AND QUERCUS LAEVIS DOMINANT.	1 PLANT, FLOWERING, IN LEAF.
GOPHPOLY*763	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1992-05-21	SANDHILL COMMUNITY WITH LONGLEAF PINE AND INTACT WIREGRASS GROUNDCOVER. QUERCUS LAEVIS, Q. GEMINATA, DIOSPYROS VIRGINIANA, BAPTISIA LECONTEI, LUPINUS DIFFUSUS PSORALEA CANESCENS, PETALOSTEMON CARNEA, AND DYSCHORISTE OBLONGIFOLIA.	1
HETESIMU*10	Heterodon simus	Southern Hognose Snake	G2	S2	N	N	1994-POST		Post-1994: H. Mushinsky observed species in yard, though hasn't observed it in 2000-2001.
SCIUSHER*180	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1998	98-December: Oak hammock (U98BOW01FLUS).	00-01-24: Observed on site (U98BOW01FLUS).
ALLIMISS*132	Alligator mississippiensis	American Alligator	G5	S4	SAT	LS	1998	98-December: Freshwater lake (U98BOW01FLUS).	00-01-24: Observed on site (U98BOW01FLUS).





INVEN			Global	State	Federa	State	Observation	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
SCIUSHER*46	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1979-10-10	SANDHILL HABITAT WITH LONGLEAF OF VARIOUS AGES (NO OLD GROWTH), ON EDGE OF HILLSBOROUGH RIVER FLOODPLAIN.	SPECIMEN (UF-22166) COLL. 10 OCT 1979 BY L.N. BROWN (MN #6).
DS*6294	Data Sensitive Element	Data Sensitive	G2	S2	N	LE	1964-06-17	Data Sensitive	Data Sensitive
EGRECAER*141	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-06-07	No general description given	Species present 1988-06-07.
BIRDROOK*350	Bird Rookery		G5	SNR	N	N	1988-06-07	No general description given	Multi-species rookery, 9 species. >1,000 birds 1988-06-07. Great Egret, Snowy Egret, Cattle Egret, Little Blue Heron, Tricolored Heron, Green-backed Heron, Black-crowned Night Heron, White Ibis, and Anhinga present 1988.
BIRDROOK*349	Bird Rookery		G5	SNR	N	N	1988-06-07	No general description given	Single-species rookery. 101-250 birds 1987-06-30, 1-10 birds 1988-05-27 and 1988-06-07. Wood Stork present 1987 and 1988.
EGRETRIC*115	Egretta tricolor	Tricolored Heron	G5	S4	N	LS	1988-06-07	No general description given	Species present 1988-06-07.
PANDHALI*21	Pandion haliaetus	Osprey	G5	S3S4	N	LS*	1985-08-07		Nest (one) in large cypress on W. bank of Hillsborough River, two adult ospreys feeding in adjacent river.
RANACAPI*18	Rana capito	Gopher Frog	G3	S3	N	LS	1985-07-06	SANDHILL SURROUNDED BY FLOODPLAIN SWAMP (CYPRESS) OF HILLSBOROUGH RIVER; SANDHILL TIMBERED IN PAST BUT REGENERATING, A SMALL REMNANT OF PAST LARGE NC; USF BURNS EXPERIMENTALLY.	
ARDEALBA*196	Ardea alba	Great Egret	G5	S4	N	N	1988-06-07	No general description given	Species present 1988-06-07.
NYCTNYCT*35	Nycticorax nycticorax	Black-crowned Night-heron	G5	S3	N	N	1988-06-07	No general description given	Species present 1988-06-07.





Natural	Areas FORY		Global	State	Federal	State	Observatio	n	1001
Map Label	Scientific Name	Common Name				Listing	Date	Description	EO Comments
DRYMCOUP*210	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1984-10-03		MUSHINSKY HAS OBSERVED 6 ADULTS IN 3 YEARS (1982-1984); I SNAKES USE SWAMP IN SUMMER, SANDHILL IN SPRING/ AUTUMN (+4 WINTER?)
MYCTAMER*97	Mycteria americana	Wood Stork	G4	S2	LE	LE	1988-06-07	No general description given	Species present 1987-06-30 (101-250 birds), 1988-05-27 (1-10 birds), and 1988-06-07 (1-10 birds).
GYMNCHAP*4	Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N	1974-10-24	Sandhill community.	Infrequent; specimen flowering and fruiting.
GOPHPOLY*147	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1989-09		POPULATION ESTIMATED AT 200-300, BASED ON CAPTURE OF 284 I INDIVIDUALS FROM 1982-1991. GOOD, VIABLE POP., VERY ACTIVE COLONY. A83RAS01 EST. POP. DENSITY AT 17.1/HECTARE, MIXED AGES W/LARGE PROP. OF YOUNG. STUDIES OF FOOD HABITS (A89MAC01FL), LOW ANNUAL SUR
LAMPEXTE*40	Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	LT	1984-02-02	SANDHILL SURROUNDED BY FLOODPLAIN SWAMP (CYPRESS) OF HILLSBOROUGH RIVER; SANDHILL TIMBERED IN PAST BUT REGENERATING, A SMALL REMNANT OF PAST LARGE NC; USF BURNS EXPERIMENTALLY.	
ARAMGUAR*5	Aramus guarauna ·	Limpkin	G5	S3	N	LS	1985-08-07		PAIR OBSERVED ACTIVELY S INTERACTING ALONG N BANK OF & RIVER (D. JACKSON, 85-08-08).
EUDOALBU*104	Eudocimus albus	White Ibis	G5	S4	N	LS	1988-06-07	No general description given	Species present 1988-06-07.
EGRETHUL*117	Egretta thula	Snowy Egret	G5	S3	N	LS	1988-06-07	No general description given	Species present 1988-06-07.
GOPHPOLY*1104	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1998	98-December: Pine flatwoods and oak hammock (U98BOW01FLUS)	
GOPHPOLY*862	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1993-10-21	Sandy flatwoods.	21 Oct. 93: observed one individual feeding along road.





INVENT	ORY						Observation	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
PTERECRI*55	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2000-08-26	2000-08-26: Plants occurring on powerline corridor in association with Serenoa repens, Rhus copallina, Diospyros virginiana, Smilax auriculata, Elephantopus elatus, Euthamia caroliniana, Andropogon virginicus, and Cyperus sp. Bounding either side of the	2000-08-26: 8 individuals (62% flowering) found in area of 900 square yards with marginal vigor(U03SCH03FLUS).
HALILEUC*1172	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	2005-07-12: Source does not provide a description.	Nest status: Active, 2003; Unknown status or not assessed, 2002, 2001, 2000, 1999; (U03FWC01FLUS)
SANDHILL*103	Sandhill		G3	S2	N	N	2004	Longleaf pine overstory, turkey oak, blue-jack oak mid-story, good wiregrass and rich herbaceous groundcover.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993) (U05FNA02FLUS). Occurrence on site.
HALILEUC*458	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1999-2003: Active - 2003, 2001, 2000, 1999; Unknown/not assessed - 2002; Status 1995-98: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST: 1984-1988 ACTIVE; FLEDGED YOUNG, UNKNOWN 1984-1986.
LAMPEXTE*53	Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	LT	2001-05-03	2001-05-03: Fire-suppressed flatwoods/oak hammock (old sandhill?). Most of land surrounding this small preserve is in residential development (U01BOW01FLUS)	2001-05-03: Sheryl Bowman observed/photographed snake 3 May 2001 (U01BOW01FLUS).
GOPHPOLY*1192	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	ŁТ	2006-07-28	2007-01-29: tortoise burrows are found in a large, actively managed mesic flatwoods that is part of a busy county park located in an urban setting (PNDGUL01FLUS).	2006-07-28: two active burrows observed in open mesic flatwoods within county park (F06FNA22FLUS).
GOPHPOLY*1193	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	2006-08-01	2007-01-29: disturbed remnant sandhill is adjacent to Tampa Bypass Canal and associated spolareas. Major roads form southern and western boundarys. The Hillsborough River and its associated floodplain surround the area to the north and east (PNDGUL01	





INVENTORY			Global	State	Federal	State	Observation	7			
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments		
OXYEFLOR*4	Oxyethira florida	Florida Cream and Brown Microcaddisfly	G1G2	S1S2	N	N	1962-Pre	1962-Pre: No description given (U06RAS01FLUS).	1962-Pre: An unknown number of specimens were collected (U06RAS01FLUS).		
SELOMAND*8	Selonodon mandibularis	Large-Jawed Cebrionid Beetle	G2G3	S2S3	N	N	1958-08-08	1958-08-08: No description given (B99GAL01FLUS).	1958-08-08: 1 specimen was collected and deposited at FSCA (B99GAL01FLUS). 1916-05-18: 3 specimens were collected and deposited at LACM (B99GAL01FLUS). 1916-05-10: 1 specimen was collected and deposited to LACM (B99GAL01FLUS).		
PHYLELON*12	Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N	1966-08-29	1966-08-29: No description given (B89WOO01FLUS).	1966-08-29: One specimen was collected by T.J. Favoroso using a Steiner trap. 1965-08-12: T.J. Favoroso collected 2 specimens in a Japanese beetle trap. 1952-08: J. Gross collected 1 specimen(B89WOO01FLUS).		
BOLBHAMA*8	Bolbocerosoma hamatum	Bicolored Burrowing Scarab Beetle	GNR	S3S4	N	N	1964-11-04	1964-11-04: No description given (B73WOO01FLUS).	1964-11-04: One specimen was collected by Jean Beem (B73WOO01FLUS).		
HYDRWAKU*4	Hydroptila wakulla	Wakulla Springs Vari-colored Microcaddisfly	G2	S2	N	N	1962-Рге	1962-Pre: No description given (U06RAS01FLUS).	1962-Pre: Specimens were collected before 1962 (U06RAS01FLUS).		
HYDRBERN*30	Hydroptila berneri	Berner's Microcaddisfly	G4G5	S3	N	N	2007-04-03	2007-04-03: No description given other than that the locality was near a river (U09RAS01FLUS).	2007-04-03: Twenty-one specimens were collected using a 15 watt black light over an alcohol-filled white pan (U09RAS01FLUS).		
OXYEJANE*102	Oxyethira janella	Little-entrance Oxyethiran Microcaddisfly	G5	S4S5	N	N	2007-04-03	2007-04-03: No description given other than that the locality was near a river (U09RAS01FLUS).	2007-04-03: Twenty-seven specimens were collected using a 15 watt black light over an alcohol-filled white pan (U09RAS01FLUS).		



Biodiversity Matrix Report Map 3 of 7



Natural Areas		 .			
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 25788					
Likely					
Glandularia tampensis Grus canadensis pratensis Mycteria americana	Tampa Vervain Florida Sandhill Crane Wood Stork	G2 G5T2T3 G4	S2 S2S3 S2	N N LE	LE LT LE
Potential				,	
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Drymarchon couperi Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Sciurus niger shermani Selonodon mandibularis Stilosoma extenuatum Ursus americanus floridanus Warea carteri	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Eastern Indigo Snake Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Snail Kite Sherman's Fox Squirrel Large-Jawed Cebrionid Beetle Short-tailed Snake Florida Black Bear Carter's Warea	G3 G4T3 G2G3 G2Q G3 G3 G3 G2 G5T3 G2 G3 G3 G3G4 G3 G2G3 G3 G4G5T3Q G5T3 G2G3 G3 G5T2 G3	\$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$2 \$3 \$3 \$3 \$2 \$3 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	zzzzzzzzzzzzzzzzzzzzz	NSEETTNNTENENESTSESNT*LE
Matrix Unit ID: 26058					
Documented 2000					
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Likely	Country of the control		-		.,
Glandularia tampensis Grus canadensis pratensis Mycteria americana	Tampa Vervain Florida Sandhill Crane Wood Stork	G2 G5T2T3 G4	S2 S2S3 S2	N N LE	LE LT LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Corynorhinus rafinesquii Drymarchon couperi	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Rafinesque's Big-eared Bat Eastern Indigo Snake	G3 G4T3 G2G3 G2Q G3G4 G3	S3 S3 S2S3 S2 S2 S2 S3	N N N N LT	N LS LE LE N LT

finitions: Documented - Rare species and natural communities documented on or near this site.





Map 3 of 7

NATUTAL FITEN) INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Sciurus niger shermani Selonodon mandibularis Stilosoma extenuatum Ursus americanus floridanus Warea carteri	Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Snail Kite Sherman's Fox Squirrel Large-Jawed Cebrionid Beetle Short-tailed Snake Florida Black Bear Carter's Warea	G3 G3 G2 G5T3 G2 G3 G3 G3G4 G3 G2G3 G3 G4G5T3Q G5T3 G2G3 G3 G5T2 G3	\$3 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	N Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	LT NT LE N LE N LE LS N LT * LE LS LT S LE S N LT * LE LS LS N LT * LE LS N LT * LT * LE LS N LT * LT * LE LS N LT * LT
Matrix Unit ID: 26329 Likely	Callel S Walea	63	33	LE	LE
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	S3 S2S3 S4 S2	LT N N LE	LT LT N LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Coelorachis tuberculosa Conradina brevifolia Corynorhinus rafinesquii Glandularia tampensis Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Hydroptila wakulla Lechea cemua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Panicum abscissum Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Piedmont Jointgrass Short-leaved Rosemary Rafinesque's Big-eared Bat Tampa Vervain Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Wakulla Springs Vari-colored Microcal Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Cutthroat Grass Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog	G3 G4T3 G2G3 G2Q G3 G2Q G3G4 G2 G3 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$2 \$3 \$2 \$3 \$2 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz	NSEETENETNNTENENESTS

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years. Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity. Potential - This site lies within the known or predicted range of the species listed.

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(850) 681-9364 Fax Biodiversity Matrix Repo

INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Selonodon mandibularis	Large-Jawed Cebrionid Beetle	G2G3	S2S3	N	Ν
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Warea carteri	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 26600					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	LE	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	LT
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Glandularia tampensis	Tampa Vervain	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Hydropitila wakulla	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q		LE	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3 -	N	LS
Selonodon mandibularis	Large-Jawed Cebrionid Beetle	G2G3	S2S3	N	N
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Warea carteri	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 26601					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G31213 G4	S2	LE	LE
муста атыпсана	VVOOG OLOIK	34	GZ.		

Potential

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11/30/2009 Page 3 of 8



Map 3 of 7



Global State Federal State Scientific Name Common Name Rank Rank Status Listing Bachman's Sparrow G3 S3 Ν Ν Aimophila aestivalis G4T3 S3 Ν LS Athene cunicularia floridana Florida Burrowing Owl S2S3 Calopogon multiflorus Many-flowered Grass-pink G2G3 Ν LE Ν LE Centrosema arenicola Sand Butterfly Pea G2Q S2 Piedmont Jointgrass S3 Ν LT G3 Coelorachis tuberculosa S2 LE LE Short-leaved Rosemary G2Q Conradina brevifolia S2 Rafinesque's Big-eared Bat G3G4 Ν Ν Corynorhinus rafinesquii Tampa Vervain S2 Ν LE Glandularia tampensis G2 Gopherus polyphemus Gopher Tortoise G3 **S3** Ν LT **S**3 Ν Gymnopogon chapmanianus Chapman's Skeletongrass G3 Ν Southern Hognose Snake G2 S2 Ν Ν Heterodon simus Wakulla Springs Vari-colored Microca G1G2 S1S2 Ν Ν Hydroptila wakulla Lechea cernua Nodding Pinweed G3 **S3** Ν LT Matelea floridana Florida Spiny-pod G2 S2 Ν LE Pygmy Pipes G₁Q S₁ Ν LE Monotropsis reynoldsiae Mustela frenata peninsulae Florida Long-tailed Weasel G5T3 S3 Ν Ν Celestial Lilv S2 Ν LE Nemastylis floridana G2 Round-tailed Muskrat **S3** Ν Ν Neofiber alleni G3 S3 Ν LE Panicum abscissum **Cutthroat Grass** G3 Yellow Fringeless Orchid G3G4 Ν LE Platanthera integra **S3** Podomys floridanus Florida Mouse G3 S3 Ν LS Pteroglossaspis ecristata Giant Orchid G2G3 S2 Ν LT Rana capito Gopher Frog G3 S3 Ν LS Rostrhamus sociabilis plumbeus Snail Kite G4G5T3Q S2 LE LE Sciurus niger shermani Sherman's Fox Squirrel G5T3 Ν LS S3 Large-Jawed Cebrionid Beetle G2G3 **S2S3** Ν Selonodon mandibularis Ν Stilosoma extenuatum Short-tailed Snake G3 S3 Ν LT S2 LT* Ursus americanus floridanus Florida Black Bear G5T2 Ν LE LE Carter's Warea S3 Warea carteri G3 Matrix Unit ID: 26874 Likely Drymarchon couperi Eastern Indigo Snake G3 **S3** LT LT Grus canadensis pratensis Florida Sandhill Crane **G5T2T3 S2S3** Ν LT Mesic flatwoods G4 **S4** Ν Ν Wood Stork G4 S₂ LE LE Mycteria americana Short-tailed Snake G3 S3 Stilosoma extenuatum LT **Potential S3** Bachman's Sparrow G3 Ν Ν Aimophila aestivalis Athene cunicularia floridana Florida Burrowing Owl G4T3 S3 N LS Many-flowered Grass-pink G2G3 S2S3 Calopogon multiflorus Ν LE Sand Butterfly Pea Centrosema arenicola G2Q S2 Ν LE **Piedmont Jointgrass** S3 Ν LT Coelorachis tuberculosa G3 LE Conradina brevifolia Short-leaved Rosemary G2Q S2 LE Corynorhinus rafinesquii Rafinesque's Big-eared Bat G3G4 S2 Ν Ν Gopherus polyphemus Gopher Tortoise G3 S3 Ν LT

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Wakulla Springs Vari-colored Microca

G3

G1G2

S3

S1S2

Ν

Ν

Ν

Ν

Chapman's Skeletongrass

Page 4 of 8

Gymnopogon chapmanianus

Hydroptila wakulla





Biodiversity Matrix Report Map 3 of 7

INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Lechea cemua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	ĹŤ
Panicum abscissum	Cutthroat Grass	G3	S3	N	ĽΕ
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
	Sherman's Fox Squirrel	G5T3	S3	N	LS
Sciurus niger shermani Selonodon mandibularis		G2G3	S2S3	N	N
	Large-Jawed Cebrionid Beetle Florida Black Bear	G2G3 G5T2	S2	N	LT*
Ursus americanus floridanus					
Warea carteri	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 27149					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	ĹĖ	LE
	Wood Olon	0.	O.L		
Potential	0.150	00-			
Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2	S2	LT	LS
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Aramus guarauna	Limpkin	G5	S3	N	LS
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Hydroptila wakulla	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2 .	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Pandion haliaetus	Osprey	G5	S3S4	N	LS*
Panicum abscissum	Cutthroat Grass	G3	S3	Ň	LE
Podomys floridanus	Florida Mouse	G3	S3	Ň	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	Ň	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	ĹĔ	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Stilosoma extenuatum	Short-tailed Snake	G313	S3	N	LT
Suiosoma extenuatum	Onon-tailed Onaide	33	00	14	- 1

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Natural Areas				. 18	51
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Ursus americanus floridanus Warea carteri	Florida Black Bear Carter's Warea	G5T2 G3	S2 S3	N LE	LT* LE
Matrix Unit ID: 27150					
Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	S3 S2S3 S4 S2	LT N N LE	LT LT N LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Carex chapmanii Centrosema arenicola Conradina brevifolia Corynorhinus rafinesquii Forestiera godfreyi Gopherus polyphemus Gymnopogon chapmanianus Hydroptila wakulla Lechea cernua Matelea floridana Monotropsis reynoldsiae Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Sciurus niger shermani Stilosoma extenuatum Ursus americanus floridanus Warea carteri	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Short-leaved Rosemary Rafinesque's Big-eared Bat Godfrey's Swampprivet Gopher Tortoise Chapman's Skeletongrass Wakulla Springs Vari-colored Microcal Nodding Pinweed Florida Spiny-pod Pygmy Pipes Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Florida Mouse Giant Orchid Gopher Frog Snail Kite Sherman's Fox Squirrel Short-tailed Snake Florida Black Bear Carter's Warea	G3 G4T3 G2G3 G3 G2Q G3G4 G2 G3 G1G2 G3 G2 G1Q G5T3 G2 G3 G3 G3 G3 G3 G4G5T3Q G5T3 G3 G5T3 G3 G5T3 G3	\$3 \$3 \$2 \$3 \$3 \$2 \$2 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	zzzzzzzzzzzzzzzzzzzzz	NSHEHENETNATHENETSEST*E
Matrix Unit ID: 27425					
Documented					
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	S3 S2S3 S4 S2	LT N N LE	LT LT N LE
Mycteria americana	Wood Stork	G4	S2	LE	

initions: Documented - Rare species and natural communities documented on or near this site.





(850) 681-9364 Fax Map 3 of 7

NATUTAL FITEAS INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Sandhill		G3	S2	N	N
Potential					
Aimophila aestivalis Athene cunicularia floridana Carex chapmanii Centrosema arenicola Chrysopsis floridana Conradina brevifolia Corynorhinus rafinesquii Forestiera godfreyi Gymnopogon chapmanianus Heterodon simus Hydroptila wakulla Lechea cemua Litsea aestivalis Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Oxyethira florida Platanthera integra Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Sciurus niger shermani	Bachman's Sparrow Florida Burrowing Owl Chapman's Sedge Sand Butterfly Pea Florida Goldenaster Short-leaved Rosemary Rafinesque's Big-eared Bat Godfrey's Swampprivet Chapman's Skeletongrass Southern Hognose Snake Wakulla Springs Vari-colored Microcal Nodding Pinweed Pondspice Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Cream and Brown Microcaddis Yellow Fringeless Orchid Florida Mouse Giant Orchid Gopher Frog Snail Kite Sherman's Fox Squirrel	G3 G4T3 G3 G2Q G1 G2Q G3G4 G2 G3 G2 G3 G5T3 G2 G3 G1G2 G3 G4G5T3Q G5T3 G5T3	\$3 \$3 \$3 \$2 \$1 \$2 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	N S E E E E N E N N N E S T S E S F
Stilosoma extenuatum Ursus americanus floridanus	Short-tailed Snake Florida Black Bear	G3 G5T2	S3 S2	N N	LT LT*
Matrix Unit ID: 27426					
Documented					
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Likely					
Bird Rookery Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	GNR G3 G5T2T3 G4 G4	SNR S3 S2S3 S4 S2	N LT N N LE	N LT LT N LE
Potential					
Acipenser oxyrinchus desotoi Aimophila aestivalis Athene cunicularia floridana Carex chapmanii Centrosema arenicola Chrysopsis floridana Conradina brevifolia Corynorhinus rafinesquii	Gulf Sturgeon Bachman's Sparrow Florida Burrowing Owl Chapman's Sedge Sand Butterfly Pea Florida Goldenaster Short-leaved Rosemary Rafinesque's Big-eared Bat	G3T2 G3 G4T3 G3 G2Q G1 G2Q G3G4	\$2 \$3 \$3 \$3 \$2 \$1 \$2 \$2	LT N N N N LE LE N	LS N LS LE LE LE LE

finitions: Documented - Rare species and natural communities documented on or near this site.

11/30/2009

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity. Potential - This site lies within the known or predicted range of the species listed.

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Trichechus manatus

Florida Natural Areas Inventory Biodiversity Matrix Report Map 3 of 7



G2

S2

LE

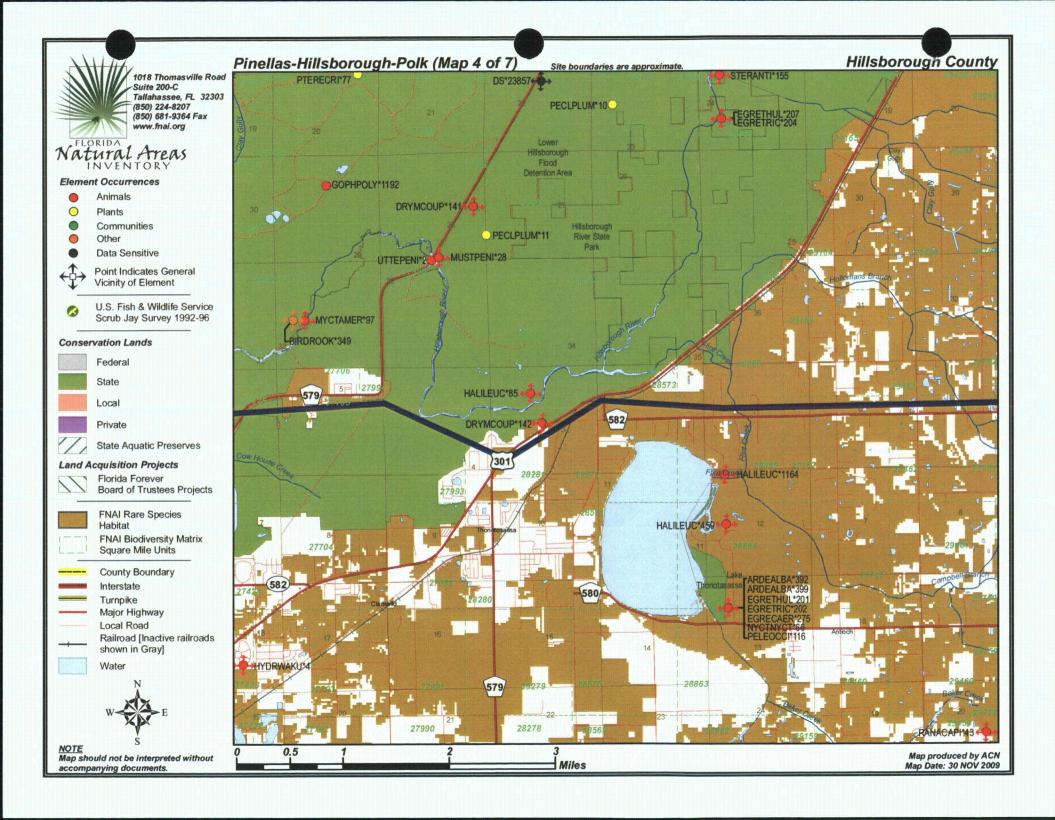
LE

Global State Federal State Scientific Name Common Name Rank Rank Status Listing S2 LE G2 N Forestiera godfreyi Godfrey's Swampprivet S3 LT Gopherus polyphemus Gopher Tortoise G3 Ν Gymnopogon chapmanianus Chapman's Skeletongrass G3 **S3** Ν Ν G1G2 Hydroptila wakulla Wakulla Springs Vari-colored Microca S1S2 Ν Ν Ν Litsea aestivalis **Pondspice** S2 LE G3 Florida Spiny-pod S2 Ν Matelea floridana G2 LE Florida Long-tailed Weasel S3 Ν Mustela frenata peninsulae G5T3 Ν Nemastylis floridana Celestial Lily S2 N LE G2 Neofiber alleni Round-tailed Muskrat G3 S3 Ν Ν Podomys floridanus Florida Mouse G3 S3 Ν LS G3 S3 N LS Rana capito Gopher Frog LE Rostrhamus sociabilis plumbeus Snail Kite G4G5T3Q S2 LE LS Sciurus niger shermani Sherman's Fox Squirrel G5T3 S3 Ν **S3** LT Stilosoma extenuatum Short-tailed Snake G3 Ν

Manatee

finitions:

Documented - Rare species and natural communities documented on or near this site.







INVENT			Global	State	Federal	State (Observatio	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
RANACAPI*43	Rana capito	Gopher Frog	G3	S3	N	LS	ZZ	No general description given	3 SPEC. (UK-7890-2), COLLECTOR N/A, DATE N/A.
EGRETHUL*201	Egretta thula	Snowy Egret	G5	S3	N	LS	1988-05-05	Willow stand in corner of lake, surrounded by larger trees on thre sides.	1988/05/05: B.A. Millsap, GFC. HI-R-09 e Brown Pelicans loafing at colony. "Total" = E (includes GREG, SNEG, CAEG, LBHE, ANHI, BRPE, DCCO).
EGRECAER*275	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-05-05	Willow stand in corner of lake, surrounded by larger trees on thre sides.	1988/05/05: B.A. Millsap, GFC, e observation. HI-R-09 Brown Pelicans loafing at colony. "Total" = E (includes GREG, SNEG, CAEG, LBHE, ANHI, BRPE, DCCO).
PELEOCCI*116	Pelecanus occidentalis	Brown Pelican	G4	S3	N	LS	1988-05-18	Willow stand in corner of lake, surrounded by larger trees on thre sides.	1988: B.A. Millsap, GFC. HI-R-09 Brown e Pelicans loafing at colony. "Total" = E (includes GREG, SNEG, CAEG, LBHE, ANHI, BRPE, DCCO) on 5/05; K. J. McGowan - 5 juvenile pelicans seen on 5/09, and noted as not nesting on 5/18.
DRYMCOUP*142	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1970-	No general description given	INDIGO OBSERVED BY MARTY MARTIN IN 1970 (MOLER INTER- VIEW OF GODLEY & MARTIN, 1982-03-27).
MUSTPENI*28	Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S 3	N	N	197?	Floodplain Forest	197?: L. N. Brown, ISU, observation. General reference. Tracks and scat observed. See L.N. Brown, pgs. 67-80 in B.C. Cowell, et al., Biological assessment of the Lower Hillsborough Flood Detention Area, Univ. South Florida, Tampa. 1974 (pg. 69).
BIRDROOK*349	Bird Rookery		G5	SNR	N	N	1988-06-07	No general description given	Single-species rookery. 101-250 birds 1987-06-30, 1-10 birds 1988-05-27 and 1988-06-07. Wood Stork present 1987 and 1988.
DRYMCOUP*141	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1974-	No general description given	INDIGO OBSERVED BY J.S. GODLEY OR MARTY MARTIN IN 1974 (MOLER INTERVIEW OF GODLEY & MARTIN, 1982-03-27).
STERANTI*155	Sterna antillarum	Least Tern	G4	S3	N	LT	1987-05-13	Dredge spoil	1987/05/13: G. Parsons, NAS, observed 50 nests (U97GFC02FLUS).
ARDEALBA*392	Ardea alba	Great Egret	G5	S4	N	N	1988-05-05	Willow stand in corner of lake, surrounded by larger trees on thre sides.	1988/05/05: B.A. Millsap, GFC; HI-R-09 eBrown Pelicans loafing at colony. Total = E (includes GREG, SNEG, CAEG, LBHE, ANHI, BRPE, DCCO).





INVENT	ORY		Global	State	Federal	State	Observatio	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
EGRETHUL*207	Egretta thula	Snowy Egret	G5	S3	N	LS	1987-06-01	Floodplain swamp	1987/06/01: G. Parsons, NAS. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF
NYCTNYCT*66	Nycticorax nycticorax	Black-crowned Night-heron	G5	S 3	N	N	1988-05-18	Lake	1988: K. J. McGowan, GFC - on 5/09 - ANHI and GBHE may be nesting here or across road.DCCO incubating (most), and feathered. CAEG incubating? and downy. BCNH young flying/ready; 5 juvenile BRPE seen. No obs. On other spp (GREG, SNEG, LBHE, TCHE, GRHE). "
MYCTAMER*97	Mycteria americana	Wood Stork	G4	S2	LE	LE	1988-06-07	No general description given	Species present 1987-06-30 (101-250 birds), 1988-05-27 (1-10 birds), and 1988-06-07 (1-10 birds).
DS*23857	Data Sensitive Element	Data Sensitive	G5	S2	N	LE	1980-02-23	Data Sensitive	Data Sensitive
EGRETRIC*204	Egretta tricolor	Tricolored Heron	G5	S4	N	LS	1987-06-01	Floodplain swamp	1987/06/01: G. Parsons, NAS, observed 3 individuals. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF
ARDEALBA*399	Ardea alba	Great Egret	G5	S4	N	N	1988-05-09	Willow stand in corner of lake, surrounded by larger trees on thre sides.	1988/05/09: K.J. McGowan, GFC; ANHI te and GBHE may be nesting here or across the road. DCCO incubating(most), downy(most), and feathered. CAEG incubating? and downy. BCNH young flying/ready. 5 juv. BRPE seen. No obs. on other spp (GREG, SNEG, LBHE, TCHE, G
EGRETRIC*202	Egretta tricolor	Tricolored Heron	G5	S4	N	LS	1988-05-18	Willow stand in corner of lake, surrounded by larger trees on thre sides.	1988/05/18: K.J. McGowan, GFC. Est. # the breeding pairs. CAEG incubating(most) and downy young? LBHE with downy young? DCCO incubating,hatching?, downy, and renesting?. BRPE not nesting. No obs. on other spp (GBHE, TCHE, GRHE, BCNH). "Total" = D.
UTTEPENI*2	Utterbackia peninsularis	Peninsular Floater	G3	S2	N	N	1994-pre	No general description given	1994-Pre: collection of 13 specimens cited (A95BOG01FLUS).
PTERECRI*77	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2003-08	2003-08: One individual found in mesic flatwoods which burned 2003-08-13 (F03FRE01FLUS).	2003-08: One plant found in flower (F03FRE01FLUS).
HALILEUC*1164	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	2005-07-12: Source does not provide a description.	Nest status: Active, 2003, 2002, 2001; Unknown status or not assessed, 2000, 1999;(U03FWC01FLUS)





INVENT	ORY		Global	State	Federal	State	Observatio	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
HALILEUC*85	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1999-2003: Active - 2003, 2002, 2001; Unknown/not assessed - 2000, 1999; Status 1995-98: Unknown/not assessed - 1998, 1997, 1996, 1995; (U03FWC01FLUS). Previous data (note different format) NEST: 1979-1981, 1983-1984 ACTIVE, USURPED BY OWL 19
HALILEUC*459	Haliaeetus leucocephalus	Bald Eagle	G5	S 3	PS	N	1997	No general description given	Nest status 1999-2003: Inactive - 2003, 2001, 1999; Unknown/not assessed - 2002, 2000; Status 1995-98: Active - 1997, 1996, 1995; Inactive - 1998; (U03FWC01FLUS). Previous data (note different format) NEST: 1985, 1988 ACTIVE, GONE 1986, INACTIVE 1987; FL
PECLPLUM*10	Pecluma plumula	Plume Polypody	G5	S2	N	LE	2006-07-10	2006-11-02: Large hammock grades to floodplain swamp bordering the Hillsborough River to the east. Land to west is mostly disturbed flatwoods used for equestrian recreation (PNDGUL01FLUS).	2006-07-10: 100-200 plants observed as dominant epiphytes on trunks and lower of limbs of Quercus virginiana as well as a few on Sabal palmetto in mesic hammock along road and trail (F06FNA22FLUS).
PECLPLUM*11	Pecluma plumula	Plume Polypody	G5	S2	N	LE	2006-07-11	2006-11-02: Extensive hammock i a mosaic with floodplain swamp along the Hillsborough River (PNDGUL01FLUS).	n2006-07-11: 30-150 plants observed as epiphytes on lower trunks of Quercus virginiana, on Q. virginiana stump, and on a dying Q. virginiana; occurring with Pleopeltis polypodioides, Vittaria lineata, and Tillandsia setacea; in hydric hammock along road (
GOPHPOLY*1192	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	2006-07-28	2007-01-29: tortoise burrows are found in a large, actively managed mesic flatwoods that is part of a busy county park located in an urban setting (PNDGUL01FLUS).	2006-07-28: two active burrows observed in open mesic flatwoods within county park (F06FNA22FLUS).
HYDRWAKU*4	Hydroptila wakulla	Wakulla Springs Vari-colored Microcaddisfly	G2	S2	N	N	1962-Pre	1962-Pre: No description given (U06RAS01FLUS).	1962-Pre: Specimens were collected before 1962 (U06RAS01FLUS).





Natural Areas				10	31
INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Matrix Unit ID: 27705					
Likely					
Bird Rookery		GNR	SNR	N	Ν
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Carex chapmanii	Chapman's Sedge	G3	S3	Ν	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Chrysopsis floridana	Florida Goldenaster	G1	S1	LE	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Hydroptila wakulla	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
Lechea cemua	Nodding Pinweed	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana Neofiber alleni	Celestial Lily Round-tailed Muskrat	G2 G3	S2 S3	N N	LE N
Podomys floridanus	Florida Mouse	G3	53 S3	N N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G2G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q		ĽÈ	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	Ň	LT*
Matrix Unit ID: 27993					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Chrysopsis floridana	Florida Goldenaster	G1	S1	LE	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

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Biodiversity Matrix Report Map 4 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Glandularia tampensis	Tampa Vervain	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Hydroptila wakulla	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Warea carteri	Carter's Warea	G3	S3	ĹĖ	LE
Matrix Unit ID: 28281 Likely					
Drymarchon couperi	Eastern Indigo Snake	G3 ·	S3	LT	LT
Haliaeetus leucocephalus	Bald Eagle	G5	S3	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Chrysopsis floridana	Florida Goldenaster	G1	S1	LE	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Glandularia tampensis	Tampa Vervain	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N.
Heterodon simus	Southern Hognose Snake	G2	S2	N	Ň
Hydroptila wakulla	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	Ň
Lechea cemua	Nodding Pinweed	G3	S3	N	ĹŤ
				. •	

finitions: Documented - Rare species and natural communities documented on or near this site.



Scientific Name

Florida Natural Areas Inventory Biodiversity Matrix Report

Common Name

TATE OF THE REST. 1851.

State Listing

Federal

Status

Biodiversity Matrix Report Map 4 of 7

Global

Rank

State

Rank

Matelea floridana	Florida Spiny-pod	G2 S2	N LE	
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3 S3	N N	
	Celestial Lily	G2 S2	N LE	
Nemastylis floridana				
Neofiber alleni	Round-tailed Muskrat	G3 S3	N N	
Nolina atopocarpa	Florida Beargrass	G3 S3	N LT	
Panicum abscissum	Cutthroat Grass	G3 S3	N LE	
Podomys floridanus	Florida Mouse	G3 S3	N LS	
Pteroglossaspis ecristata	Giant Orchid	G2G3 S2	N LT	
Rana capito	Gopher Frog	G3 S3	N LS	
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q S2	LE LE	
Salix floridana	Florida Willow	G2 S2	N LE	
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3 S3	N LS	
Stilosoma extenuatum	Short-tailed Snake	G3 S3	N LT	
Warea carteri	Carter's Warea	G3 S3	LE LE	
Matrix Unit ID: 28572				
Likely				
Drymarchon couperi	Eastern Indigo Snake	G3 S3	LT LT	
Mycteria americana	Wood Stork	G4 S2	LE LE	
Potential				
Aimophila aestivalis	Bachman's Sparrow	G3 S3	N N	
Athene cunicularia floridana	Florida Burrowing Owl	G4T3 S3	Ņ LS	
Calopogon multiflorus	Many-flowered Grass-pink	G2G3 S2S3		
Carex chapmanii	Chapman's Sedge	G3 S3	N LE	
Centrosema arenicola	Sand Butterfly Pea	G2Q S2	N LE	
Conradina brevifolia	Short-leaved Rosemary	G2Q S2	LE LE	
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4 S2	N N	
Forestiera godfreyi	Godfrey's Swampprivet	G2 S2	N LE	
Gopherus polyphemus	Gopher Tortoise	G3 S3	N LT	
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3 S2S3		
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3 S3	N N	
Heterodon simus		G2 S2	N N	
	Southern Hognose Snake			
Lechea cernua	Nodding Pinweed			
Matelea floridana	Florida Spiny-pod	G2 S2	N LE	
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3 S3	N N	
Nemastylis floridana	Celestial Lily	G2 S2	N LE	
Neofiber alleni	Round-tailed Muskrat	G3 S3	N N	
Nolina atopocarpa	Florida Beargrass	G3 S3	N LT	
Panicum abscissum	Cutthroat Grass	G3 S3	N LE	
Podomys floridanus	Florida Mouse	G3 S3	N LS	
Pteroglossaspis ecristata	Giant Orchid	G2G3 S2	N LT	
Rana capito [']	Gopher Frog	G3 S3	N LS	
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q S2	LE LE	
Salix floridana	Florida Willow	G2 S2	N LE	
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3 S3	N LS	
Stilosoma extenuatum	Short-tailed Snake	G3 S3	N LT	
	Florida Black Bear	G5T2 S2		
Ursus americanus floridanus				
Warea carteri	Carter's Warea	G3 S3	LE LE	

finitions: Documented - Rare species and natural communities documented on or near this site.



Map 4 of 7



LE

S2S3

G2G3

Natural Areas	Map 4 of 7		1851 - 18		
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 28865					
Documented					
Haliaeetus leucocephalus	Bald Eagle	G5	S3	Ν	N
Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE
Potential					
Aimophila aestivalis Andropogon arctatus Athene cunicularia floridana Calopogon multiflorus Carex chapmanii Centrosema arenicola Conradina brevifolia Corynorhinus rafinesquii Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Lechea cemua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Panicum abscissum Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Ursus americanus floridanus Warea carteri	Bachman's Sparrow Pine-woods Bluestem Florida Burrowing Owl Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Short-leaved Rosemary Rafinesque's Big-eared Bat Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Cutthroat Grass Florida Mouse Giant Orchid Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Florida Black Bear Carter's Warea	G3 G3 G4T3 G2G3 G3 G2Q G2Q G3G4 G3 G3 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	Rzzzzzzzzzzz Azzzzzz A	NTSEEENTNATENENTESTSEES*E
Matrix Unit ID: 29162					
Likely	`				
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE
Potential					
Aimophila aestivalis Andropogon arctatus Athene cunicularia floridana	Bachman's Sparrow Pine-woods Bluestem Florida Burrowing Owl	G3 G3 G4T3	S3 S3 S3	N N N	N LT LS

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

Many-flowered Grass-pink

11/30/2009 Page 4 of 6

Calopogon multiflorus



Natural Areas

Florida Natural Areas Inventory Biodiversity Matrix Report Map 4 of 7



INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	Ň	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	Ň	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	N	LT
kely Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	LE	LE
otential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Andropogon arctatus	Pine-woods Bluestem	G3	S3	N	LT
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	Ν	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LΕ
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cemua	Nodding Pinweed	G3	S3	Ν	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	Ň	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	Ň	ĹĔ
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	ĹŤ
	Cuthanat Canan	00	00	IN NI	

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

G3

G3

G2G3

S3

S3

S2

Ν

Ν

Ν

LE

LS

LT

Cutthroat Grass

Florida Mouse

Giant Orchid

Page 5 of 6

Panicum abscissum

Podomys floridanus

Pteroglossaspis ecristata

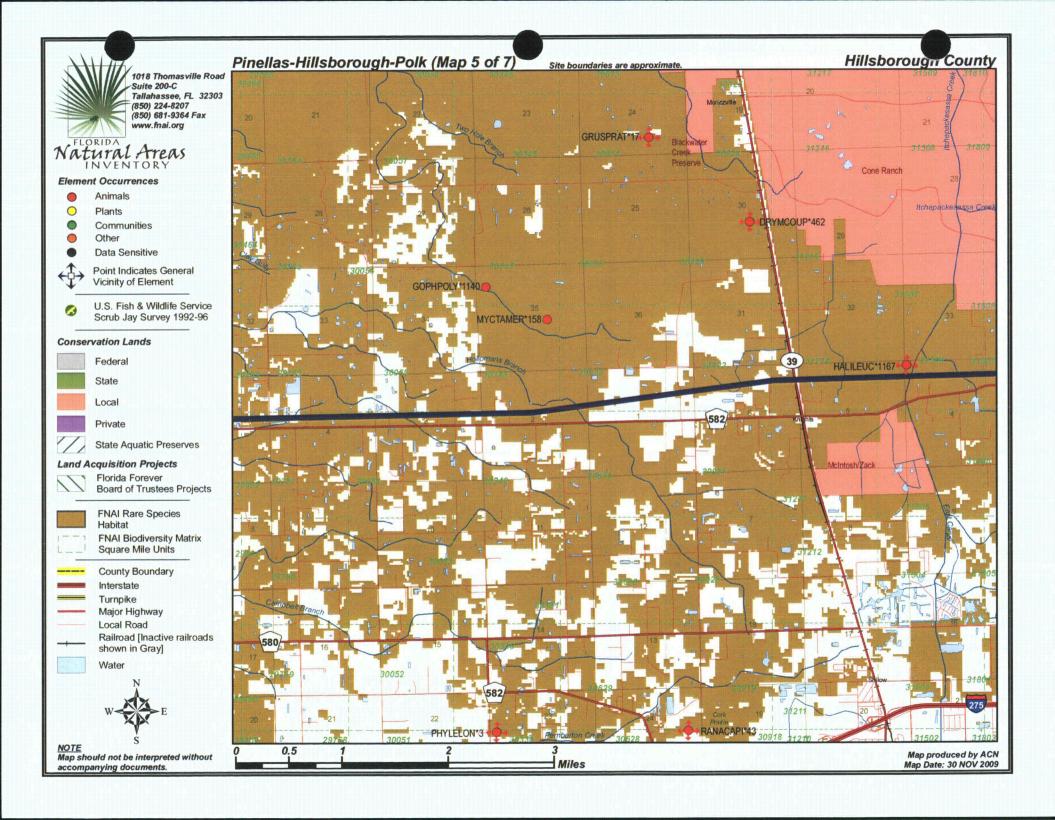




Natural Areas

INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	N	LT

finitions: Documented - Rare species and natural communities documented on or near this site.









2004-10-05: Two adults foraging on edge

Nest status: Active, 2003, 2002, 2001,

2000; Unknown status or not assessed.

collected at night by Hubbell and Friauf

of wetland (PNDTAN01FLUS).

1999;(U03FWC01FLUS)

(B89WOO01FLUS).

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 5 of 7)

INVENT	ÖRY		Global	State	Federal	State	Observation	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
RANACAPI*43	Rana capito	Gopher Frog	G3	S3	N	LS	ZZ	No general description given	3 SPEC. (UK-7890-2), COLLECTOR N/A, DATE N/A.
DRYMCOUP*462	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1997-04-07	Herbaceous wetland surrounded by cypress system. Some evidence of agricultural/cattle ditching, probably disturbed aroun 1930.	1997-04-07: One snake seen in early stages of shed.
GRUSPRAT*17	Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT	1986-	SMALL PERMANENT PONDS SCATTERED THROUGHOUT AREA.	CA. 12-15 PAIRS FROM EARLY 1970'S THROUGH 1986.
GOPHPOLY*1140	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	2004-10-05	2004-10-05: Mesic flatwoods disturbed by cattle (PNDSCH03FLUS).	2004-10-05: One adult tortoise and active burrow (PNDSCH03FLUS).

LE

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2003

2004-10-05 2004-10-05: Edge of Taxodium

(PNDTAN01FLUS).

provide a description.

(B89WOO01FLUS).

ascendens dome swamp in

2005-07-12: Source does not

improved pasture of bahia grass

1939-08-19 1939-08-19: No description given 1939-08-19: Eleven specimens were

MYCTAMER*158

HALILEUC*1167

PHYLELON*3

Mycteria americana

Haliaeetus leucocephalus

Phyllophaga elongata

Wood Stork

Bald Eagle

Elongate June Beetle

G4

G5

G2G4

S2

S3

S2S4

LE

PS



Biodiversity Matrix Report Map 5 of 7



Natural Areas INVENTORY		Clahal	Ctoto	Fodoral	State	
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	
Matrix Unit ID: 29761						
Likely						
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE	
Potential						
Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Conradina brevifolia Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Lechea cemua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Zephyranthes simpsonii	Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Short-leaved Rosemary Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Giant Orchid Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Rain Lily	G4T3 G2G3 G2Q G2Q G3 G3 G3 G3 G2 G5T3 G2 G3 G3 G3 G2G3 G3 G4G5T3Q G2 G5T3 G2	\$3 \$2\$3 \$2 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	zzz Ezzzzzzzzz Ezzz	LS LE LE LT N N LT LE LE N LE N LS LS LE LE LS LT	
Matrix Unit ID: 30054						
Likely						
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE	
Potential						
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Conradina brevifolia Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Short-leaved Rosemary Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat	G3 G4T3 G2G3 G2Q G2Q G3 G3 G3 G3 G2 G5T3 G2 G3	\$3 \$3 \$2\$3 \$2 \$2 \$3 \$3 \$3 \$2 \$2 \$2 \$3	zzzzzzzzzzzzzzzz	N S E E E E T N T E E N E N	

finitions: Documented - Rare species and natural communities documented on or near this site.





Natural Areas

Natural Areas			1031				
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing		
Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Zephyranthes simpsonii	Florida Mouse Giant Orchid Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Rain Lily	G3 G2G3 G3 G4G5T3Q G2 G5T3 G2G3	S3 S2 S3	N N N LE N N	LS LT LS LE LE LS LT		
Matrix Unit ID: 30342 Likely							
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE		
Potential		00	-00				
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Conradina brevifolia Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Ursus americanus floridanus Zephyranthes simpsonii	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Short-leaved Rosemary Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Giant Orchid Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Florida Black Bear Rain Lily	G3 G4T3 G2G3 G2Q G2Q G3 G3 G3 G2 G5T3 G2 G3 G3 G4G5T3Q G2 G5T3 G5T2 G2G3	\$3 \$3 \$2\$3 \$2 \$2 \$3 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	N N N N E N N N N N N N N N N N N N N N	N S L L L L L L L L L L L L L L L L L L		
Matrix Unit ID: 30343							
Documented							
Mycteria americana	Wood Stork	G4	S2	LE	LE		
Likely							
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods	Eastern Indigo Snake Florida Sandhill Crane	G3 G5T2T3 G4	S3 S2S3 S4	LT N N	LT LT N		
Potential							
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N		

Finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

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Biodiversity Matrix Report Map 5 of 7

NATUTAL FITENS INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Andropogon arctatus	Pine-woods Bluestem	G3	S3	N	LT
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calamintha ashei	Ashe's Savory	G3	S3	N	LT
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q		ĹĖ	ĹĔ
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	Ň	LT
Matrix Unit ID: 30632 Likely					
•					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Andropogon arctatus	Pine-woods Bluestem	G3	S3	N	LT
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calamintha ashei	Ashe's Savory	G3	S3	N	LT
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	Ň	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	ĹĚ	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Lechea cernua	Nodding Pinweed	G3	S3	Ň	ĹŤ
Litsea aestivalis	Pondspice	G3	S2	N	ĽĒ.
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Cong-tailed Weasel	G5T3	S3	Ň	N
Nemastylis floridana	Celestial Lily	G2	S2	Ň	ĽĒ
Neofiber alleni	Round-tailed Muskrat	G2 G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
า นาแบนกา นมอบเออนกา	Julinoul Grass	00	-	1.4	

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

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Natural Areas					
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Podomys floridanus Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani	Florida Mouse Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel	G3 G3 G4G5T3Q G2 G5T3	S3 S3 S2 S2 S2 S3	N N LE N	LS LS LE LE LS
Matrix Unit ID: 30922					
Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE
Potential					
Athene cunicularia floridana Calopogon multiflorus Carex chapmanii Centrosema arenicola Conradina brevifolia Forestiera godfreyi Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Litsea aestivalis Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Picoides borealis Podomys floridanus Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Zephyranthes simpsonii	Florida Burrowing Owl Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Short-leaved Rosemary Godfrey's Swampprivet Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Pondspice Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Red-cockaded Woodpecker Florida Mouse Giant Orchid Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Rain Lily	G4T3 G2G3 G3 G2Q G2Q G2 G3 G3 G3 G3 G2 G5T3 G2 G3 G3 G3 G3 G3 G2 G3	\$3 \$2\$3 \$3 \$2 \$2 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	N N N N E N N N N N N N N N N N N N N N	LS LELELTNTEENENSSTSEEST LUST
Matrix Unit ID: 31214					
Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Carex chapmanii Centrosema arenicola	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea	G3 G4T3 G2G3 G3 G2Q	\$3 \$3 \$2\$3 \$3 \$2	N N N N	N LS LE LE LE

finitions: Documented - Rare species and natural communities documented on or near this site.

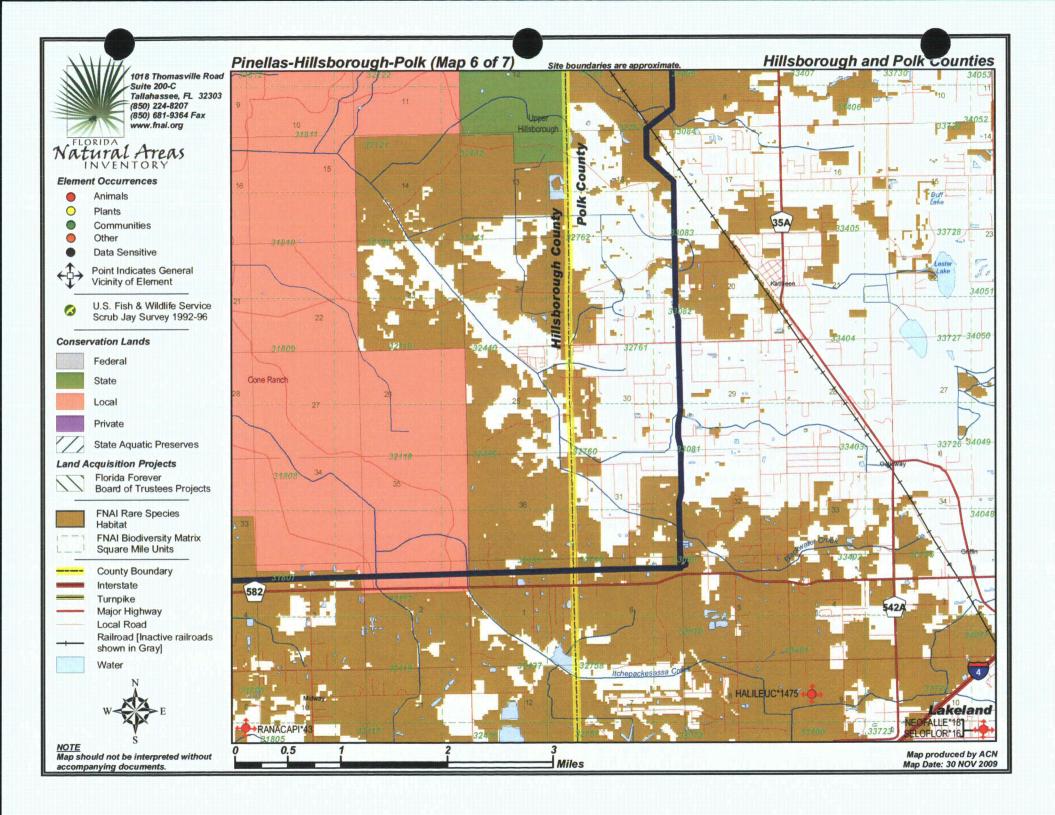




Natural Areas

Natural Areas					_
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Lechea cemua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	.N_	N
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N_	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Matrix Unit ID: 31506					
Documented					
Haliaeetus leucocephalus	Bald Eagle	G5	S3	N	N
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Conradina brevifolia	Short-leaved Rosemary	G2Q	S2	LE	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Lechea cemua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	Ν
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Warea carteri	Carter's Warea	G3	S3	LE	LE
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	N	LT

finitions: Documented - Rare species and natural communities documented on or near this site.









INVENT	ORY		Global	State	Federa.	l State (Observatio.	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
RANACAPI*43	Rana capito	Gopher Frog	G3	S3	N	LS	ZZ	No general description given	3 SPEC. (UK-7890-2), COLLECTOR N/A, DATE N/A.
NEOFALLE*18	Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N	1970-11-09	No general description given	FSM SPECIMENS: ONE SPECIMEN FSM #10188, COLLECTED BY D.S. LEE 1970-11-09.
HALILEUC*1475	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	2005-07-12: Source does not provide a description.	Nest status: Active, 2003, 2002, 2001, 2000, 1999;(U03FWC01FLUS)
SELOFLOR*16	Selonodon floridensis	Florida Cebrionid Beetle	G2G3	S2S3	N	N	1942-05-30	1942-05-30: No description given (B99GAL01FLUS).	1942-05-30: Five specimens were collected on this date. There in an undated record for two more specimens (B99GAL01FLUS).



Biodiversity Matrix Report Map 6 of 7



INVENTORY Scientific Name				Federal Status	State Listing
Matrix Unit ID: 31807					
Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Carex chapmanii Centrosema arenicola Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Podomys floridanus Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Warea carteri Zephyranthes simpsonii	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Carter's Warea Rain Lily	G3 G4T3 G2G3 G3 G2Q G3 G3 G2 G5T3 G2 G3 G3 G4G5T3Q G2 G5T3 G3 G3	\$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	X	N SEELET N T LE N LE N S SEELE SELT
Matrix Unit ID: 32117 Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Podomys floridanus Rana capito Rostrhamus sociabilis plumbeus	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Gopher Frog Snail Kite	G3 G4T3 G2G3 G2Q G3 G3 G2 G5T3 G2 G3 G3 G3 G4G5T3Q	\$3 \$3 \$2 \$3 \$3 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2	ZZZZZZZZZZ	N S L E L T N T L E N L S S L E

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

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Natural Areas	1851					
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	
Salix floridana Zephyranthes simpsonii	Florida Willow Rain Lily	G2 G2G3	S2 S2S3	N N	LE LT	
Matrix Unit ID: 32438						
Likely						
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE	
Potential						
Aimophila aestivalis Athene cunicularia floridana Calopogon multiflorus Centrosema arenicola Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Podomys floridanus Rana capito Rostrhamus sociabilis plumbeus Salix floridana Zephyranthes simpsonii	Bachman's Sparrow Florida Burrowing Owl Many-flowered Grass-pink Sand Butterfly Pea Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Mouse Gopher Frog Snail Kite Florida Willow Rain Lily	G3 G4T3 G2G3 G2Q G3 G3 G2 G5T3 G2 G3 G3 G3 G4G5T3Q G2 G2G3	\$3 \$3 \$2\$3 \$2 \$3 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3	ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	N S LE LT N T LE N LS S LE LT LT LS S LE LT LT LT LS S LE LT LT LS S LE LT LT LT LS S LS LE LT LT LS S LS L	
Matrix Unit ID: 32759 Likely						
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE	
Potential						
Athene cunicularia floridana Bonamia grandiflora Centrosema arenicola Eriogonum longifolium var. gnaphalifolium Gopherus polyphemus Gymnopogon chapmanianus Lechea cemua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina brittoniana Podomys floridanus	Florida Burrowing Owl Florida Bonamia Sand Butterfly Pea Scrub Buckwheat Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Britton's Beargrass Florida Mouse	G4T3 G3 G2Q G4T3 G3 G3 G2 G5T3 G2 G3 G3 G3	\$3 \$3 \$2 \$3 \$3 \$3 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3	N	LS LE LE LT N LT LE N LE N LE S LE	

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

G3

S3

LE

LE

Lewton's Polygala

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Polygala lewtonii





Natural Areas	1851 ®				
INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Rana capito Rostrhamus sociabilis plumbeus Salix floridana Ursus americanus floridanus Zephyranthes simpsonii	Gopher Frog Snail Kite Florida Willow Florida Black Bear Rain Lily	G3 G4G5T3Q G2 G5T2 G2G3	\$3 \$2 \$2 \$2 \$2 \$2\$3	N LE N N	LS LE LE LT* LT
Matrix Unit ID: 32763					
Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	S3 S2S3 S4 S2	LT N N LE	LT LT N LE
Potential					
Athene cunicularia floridana Bonamia grandiflora Calamintha ashei Calopogon multiflorus Carex chapmanii Centrosema arenicola Eriogonum longifolium var. gnaphalifolium Eumeces egregius lividus Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina brittoniana Panicum abscissum Paronychia chartacea ssp. chartacea Picoides borealis Pituophis melanoleucus mugitus Podomys floridanus Polygala lewtonii Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Warea carteri Zephyranthes simpsonii	Florida Burrowing Owl Florida Bonamia Ashe's Savory Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Scrub Buckwheat Blue-tailed Mole Skink Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Britton's Beargrass Cutthroat Grass Paper-like Nailwort Red-cockaded Woodpecker Florida Pine Snake Florida Mouse Lewton's Polygala Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Carter's Warea Rain Lily	G4T3 G3 G3 G2G3 G3 G2Q G4T3 G5T2 G3 G2 G3 G2 G5T3 G2 G3 G3 G3 G3 G3 G4T3 G3 G3 G4G5T3Q G2 G5T3 G3 G2 G5T3	\$3 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	N L N N N N L T N N N N N N N N N N N N	S E T E E E E T T N N T E N E N E E E E S S S E S E E S E E S E T
Matrix Unit ID: 33080 Likely					
Drymarchon couperi Grus canadensis pratensis	Eastern Indigo Snake Florida Sandhill Crane	G3 G5T2T3	S3 S2S3	LT N	LT LT

initions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

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Florida Natural Areas Inventory Biodiversity Matrix Report Map 6 of 7



Natural Areas

NATUTAL ATTEAS		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Bonamia grandiflora Calamintha ashei Calopogon multiflorus Carex chapmanii Centrosema arenicola Eriogonum longifolium var. gnaphalifolium Gopherus polyphemus Gymnopogon chapmanianus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina brittoniana Panicum abscissum Paronychia chartacea ssp. chartacea Picoides borealis Podomys floridanus Polygala lewtonii Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Selonodon floridensis Ursus americanus floridanus Zephyranthes simpsonii	Bachman's Sparrow Florida Burrowing Owl Florida Bonamia Ashe's Savory Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Scrub Buckwheat Gopher Tortoise Chapman's Skeletongrass Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Britton's Beargrass Cutthroat Grass Paper-like Nailwort Red-cockaded Woodpecker Florida Mouse Lewton's Polygala Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Florida Cebrionid Beetle Florida Black Bear Rain Lily	G3 G4T3 G3 G3 G2G3 G3 G2Q G4T3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$	z z z z z z z z z z z z z z z z z z z	NSETEELT NTE NENEELSSESEEN N'TT
Matrix Unit ID: 33081					
Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Bonamia grandiflora Calamintha ashei Carex chapmanii Centrosema arenicola Eriogonum longifolium var. gnaphalifolium Eumeces egregius lividus Gopherus polyphemus Gymnopogon chapmanianus	Bachman's Sparrow Florida Burrowing Owl Florida Bonamia Ashe's Savory Chapman's Sedge Sand Butterfly Pea Scrub Buckwheat Blue-tailed Mole Skink Gopher Tortoise Chapman's Skeletongrass	G3 G4T3 G3 G3 G3 G2Q G4T3 G5T2 G3 G3	\$3 \$3 \$3 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3	N N N N N N LT LT N N	N LS LE LT LE LE LT LT N

finitions: Documented - Rare species and natural communities documented on or near this site.



STATE STATE OF THE
Biodiversity Matrix Report Map 6 of 7

Common Name	Global Rank	State Rank	Federal Status	State Listing
Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily	G3 G2 G5T3 G2	S3 S2 S3 S2	N N N	LT LE N LE
Round-tailed Muskrat Britton's Beargrass Cutthroat Grass	G3 G3 G3	S3 S3 S3	N LE N	N LE LE
Red-cockaded Woodpecker Florida Pine Snake Florida Mouse Lewton's Polygala	G3 G4T3 G3 G3	S2 S3 S3 S3	LE N N LE	LE LS LS LS LE LT
Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel	G3 G4G5T3Q G2 G5T3	S3 S2 S2 S3	N LE N N	LY LS LE LS LT
	3233	0200		
Florida Sandhill Crane Wood Stork	G5T2T3 G4	S2S3 S2	N LE	LT LE
Blue-tailed Mole Skink Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Britton's Beargrass Cutthroat Grass Paper-like Nailwort Red-cockaded Woodpecker	G3 G4T3 G3 G3 G2G3 G3 G2Q G3 G4T3 G5T2 G3 G2 G3 G2 G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$3 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	N N L N N N N N N N N N N N N N N N N N	N S LET LE LE LT LT N N LT LE N LE N LT LE LE LS S
	Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Britton's Beargrass Cutthroat Grass Paper-like Nailwort Red-cockaded Woodpecker Florida Pine Snake Florida Mouse Lewton's Polygala Giant Orchid Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Rain Lily Florida Bonamia Ashe's Savory Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Eastern Indigo Snake Scrub Buckwheat Blue-tailed Mole Skink Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Britton's Beargrass Cutthroat Grass Paper-like Nailwort	Common NameRankNodding PinweedG3Florida Spiny-podG2Florida Long-tailed WeaselG5T3Celestial LilyG2Round-tailed MuskratG3Britton's BeargrassG3Cutthroat GrassG3Paper-like NailwortG3T3Red-cockaded WoodpeckerG3Florida Pine SnakeG4T3Florida MouseG3Lewton's PolygalaG3Giant OrchidG2G3Gopher FrogG3Snail KiteG4G5T3QFlorida WillowG2Sherman's Fox SquirrelG5T3Rain LilyG2G3Florida BonamiaG3Ashe's SavoryG3Many-flowered Grass-pinkG2G3Chapman's SedgeG3Sand Butterfly PeaG2QEastern Indigo SnakeG3Scrub BuckwheatG4T3Blue-tailed Mole SkinkG5T2Gopher TortoiseG3Chapman's SkeletongrassG3Southern Hognose SnakeG2Nodding PinweedG3Florida Spiny-podG2Florida DeargrassG3Florida BeargrassG3Britton's BeargrassG3Celestial LilyG2Round-tailed MuskratG3Florida BeargrassG3Cutthroat GrassG3Paper-like NailwortG3T3Red-cockaded WoodpeckerG3	Common Name Rank Rank Nodding Pinweed G3 S3 Florida Spiny-pod G2 S2 Florida Long-tailed Weasel G5T3 S3 Celestial Lily G2 S2 Round-tailed Muskrat G3 S3 Britton's Beargrass G3 S3 Cutthroat Grass G3 S3 Paper-like Nailwort G3T3 S3 Red-cockaded Woodpecker G3 S2 Florida Pine Snake G4T3 S3 Florida Pine Snake G4T3 S3 Florida Mouse G3 S3 Lewton's Polygala G3 S3 Giant Orchid G2G3 S2 Gopher Frog G3 S3 Snail Kite G465T3Q S2 Florida Willow G2 S2 Sherman's Fox Squirrel G5T3 S3 Rain Lily G2T3 S2S3 Florida Bonamia G3 S3 Kood Stork G4	Common Name Rank Rank Status Nodding Pinweed Florida Spiny-pod G2 S2 N Florida Long-tailed Weasel G5T3 S3 N Celestial Lily G2 S2 N Round-tailed Muskrat G3 S3 N Britton's Beargrass G3 S3 N Euthroat Grass G3 S3 N Paper-like Nailwort G3T3 S3 LT Red-cockaded Woodpecker G3 S2 LE Florida Pine Snake G473 S3 N Florida Mouse G3 S3 N Lewton's Polygala G3 S3 N Giant Orchid G2G3 S3 N Gopher Frog G3 S3 N Sherman's Fox Squirrel G5T3 S3 N Florida Willow G2 S2 N Rain Lily G2G3 S2S3 N Florida Burrowing Owl G4T3 S3

initions: Documented - Rare species and natural communities documented on or near this site.





Biodiversity Matrix Report Map 6 of 7

Natural Areas				30	
INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Polygala lewtonii	Lewton's Polygala	G3	S3	ĹĔ	LÉ
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	ĹĔ	LE
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Warea carteri	Carter's Warea	G313	S3	LE	LE
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	N	LT
Zepriyrantiles simpsomi	Trail Lily	0200	0200	14	
Matrix Unit ID: 33083					
Likely					
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bonamia grandiflora	Florida Bonamia	G3	S3	LT	LE
Calamintha ashei	Ashe's Savory	G3	S3	N	LT
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Eriogonum longifolium var. gnaphalifolium		G4T3	S3	LT	LE
Eumeces egregius lividus	Blue-tailed Mole Skink	G5T2	S2	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cemua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	Ν	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Nolina brittoniana	Britton's Beargrass	G3	S3	LE	LE
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Paronychia chartacea ssp. chartacea	Paper-like Nailwort	G3T3	S3	LT	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Polygala lewtonii	Lewton's Polygala	G3	S3	LE	LE
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	Ν	LS
Warea carteri	Carter's Warea	G3 ·	S3	LE	LE
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	N	LT

finitions: Documented - Rare species and natural communities documented on or near this site.

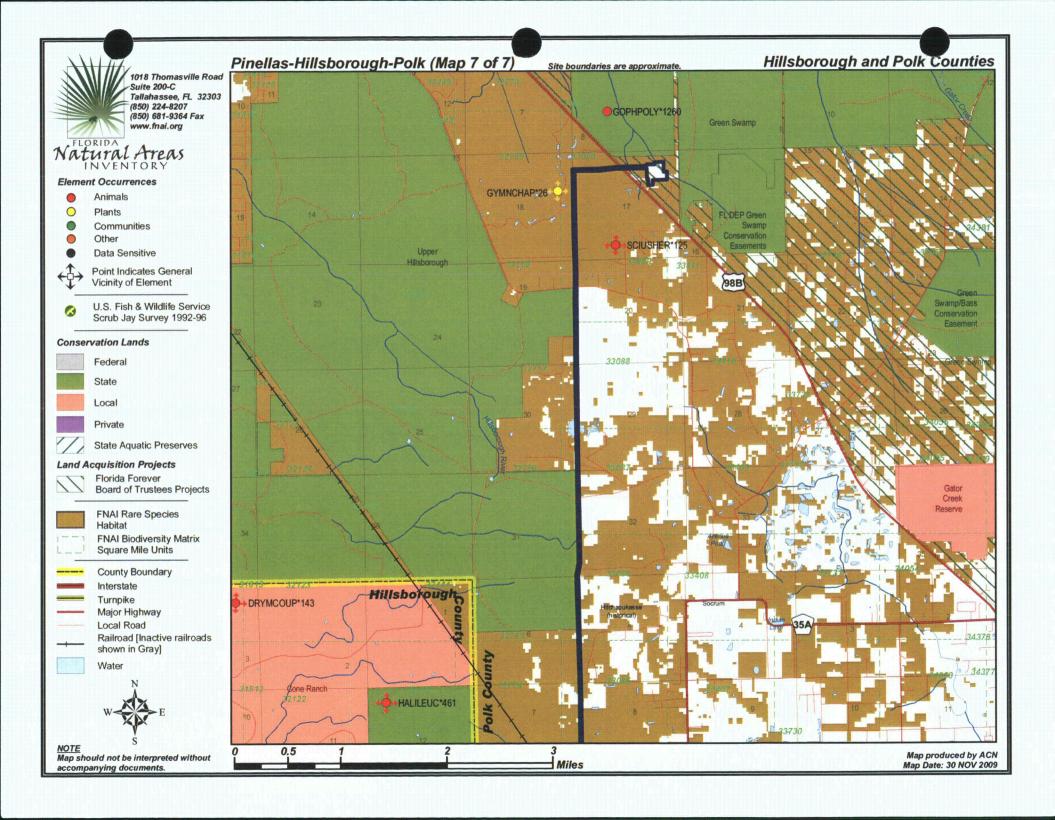


Biodiversity Matrix Report Map 6 of 7



NATUTAL FITEUS INVENTORY Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 33084					
Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4 G4	S3 S2S3 S4 S2	LT N N LE	LT LT N LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Bonamia grandiflora Calamintha ashei Calopogon multiflorus Carex chapmanii Centrosema arenicola Chionanthus pygmaeus Eriogonum longifolium var. gnaphalifolium Eumeces egregius lividus Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Nolina brittoniana Panicum abscissum Paronychia chartacea ssp. chartacea Picoides borealis Pituophis melanoleucus mugitus Podomys floridanus Polygala lewtonii Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Warea carteri	Bachman's Sparrow Florida Burrowing Owl Florida Bonamia Ashe's Savory Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Pygmy Fringe Tree Scrub Buckwheat Blue-tailed Mole Skink Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Britton's Beargrass Cutthroat Grass Paper-like Nailwort Red-cockaded Woodpecker Florida Pine Snake Florida Mouse Lewton's Polygala Giant Orchid Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Carter's Warea	G3 G4T3 G3 G3 G3 G2G3 G3 G4T3 G5T2 G3 G2 G3 G2 G5T3 G2 G3 G4T3 G3 G3 G4T3 G3 G4T3 G3 G4T3 G3 G4T3 G3 G4T3 G3 G4T3 G3 G4G5T3Q G2 G5T3 G3	\$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$	N N N N N N N N N N N N N N N N N N N	N S E T E E E E E T T N N T E N E N T E E E S S E E S E E E E E E S E E E E
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	N	LT

finitions: Documented - Rare species and natural communities documented on or near this site.







ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 7 of 7)

INVENT			Global	State	Federa	State	Observatio	n	
Map Label	Scientific Name	Common Name	Rank	Rank	Status	Listing	Date	Description	EO Comments
DRYMCOUP*143	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1970-	No general description given	INDIGO OBSERVED BY MARTY MARTIN IN 1970 (MOLER INTER- VIEW OF GODLEY & MARTIN, 1982-03-27).
SCIUSHER*125	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1988-07-28	Cypress Swamp; Mesic Flatwoods	. 1988-07-28: B.A. Millsap, GFC, observed 1 adult male.
GYMNCHAP*26	Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N	1987-11-02	1987-11-02: Flatwoods (Hall).	1987-11-02: Infrequent; scattered in flatwoods; specimen taken [leaves, inflor., and few roots] (Hall).
HALILEUC*461	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1995-2003: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST: 1987-1988 ACTIVE; FLEDGED YOUNG 1987-1988.
GOPHPOLY*1260	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	2008-07-25	2008-07-25: one adult tortoise foraging in grassy road that passes through mesic flatwoods; area is moderately disturbed by a clearing and an ORV trail (PNDHER03FLUS).	2008-07-25: one adult tortoise foraging in s grassy road that passes through mesic flatwoods (PNDHER03FLUS).



Biodiversity Matrix Report Map 7 of 7



INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Matrix Unit ID: 33085					
Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE
Potential					
Aimophila aestivalis Athene cunicularia floridana Bonamia grandiflora Calamintha ashei Calopogon multiflorus Carex chapmanii Centrosema arenicola Chionanthus pygmaeus Corynorhinus rafinesquii Eriogonum longifolium var. gnaphalifolium Eumeces egregius lividus Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Lechea cernua Matelea floridana Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina atopocarpa Nolina brittoniana Panicum abscissum Paronychia chartacea ssp. chartacea Picoides borealis Pituophis melanoleucus mugitus Podomys floridanus Polygala lewtonii Pteroglossaspis ecristata Rana capito Rostrhamus sociabilis plumbeus Salix floridana Sciurus niger shermani Warea carteri Zephyranthes simpsonii	Bachman's Sparrow Florida Burrowing Owl Florida Bonamia Ashe's Savory Many-flowered Grass-pink Chapman's Sedge Sand Butterfly Pea Pygmy Fringe Tree Rafinesque's Big-eared Bat Scrub Buckwheat Blue-tailed Mole Skink Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Nodding Pinweed Florida Spiny-pod Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Florida Beargrass Britton's Beargrass Cutthroat Grass Paper-like Nailwort Red-cockaded Woodpecker Florida Pine Snake Florida Mouse Lewton's Polygala Giant Orchid Gopher Frog Snail Kite Florida Willow Sherman's Fox Squirrel Carter's Warea Rain Lily	G3 G4T3 G3 G3 G3 G2G3 G3 G3G4 G4T3 G5T2 G3 G2 G3 G2 G5T3 G2 G3	\$3 \$3 \$3 \$3 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	z	N S LE L'ELE N EL L'IN N L'ENENLE LE L'ES S SELL SE LE L'ELE SELL
Matrix Unit ID: 33086					
Likely					
Drymarchon couperi Grus canadensis pratensis Mycteria americana	Eastern Indigo Snake Florida Sandhill Crane Wood Stork	G3 G5T2T3 G4	S3 S2S3 S2	LT N LE	LT LT LE

finitions: Documented - Rare species and natural communities documented on or near this site.



Biodiversity Matrix Report Map 7 of 7



Natural Areas				7.20	9
INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	Ν	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bonamia grandiflora	Florida Bonamia	G3	S3	LT	LE
Calamintha ashei	Ashe's Savory	G3	S3	N	LT
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Chionanthus pygmaeus	Pygmy Fringe Tree	G3	S3	LE	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	G4T3	S3	LT	LE
Eumeces egregius lividus	Blue-tailed Mole Skink	G5T2	S2	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	Ν
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina brittoniana	Britton's Beargrass	G3	S3	LE	LE
Panicum abscissum	Cutthroat Grass	Ģ3	S3	N	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3 ·	N	LS
Polygala lewtonii	Lewton's Polygala	G3	S3	LE	LE
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Warea carteri	Carter's Warea	G3	S3	LE	LE
Zephyranthes simpsonii	Rain Lily	G2G3	S2S3	N	LT
Matrix Unit ID: 33087					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT.
Mycteria americana	Wood Stork	G4	S2	ĹÈ	LE
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	აა S1	N	N
Aspierium neteroresiliens Athene cunicularia floridana	Florida Burrowing Owl	GNA G4T3	S3	N	LS
Bonamia grandiflora	Florida Burrowing Owi	G3	S3	LT	LS
Calamintha ashei	Ashe's Savory	G3	S3	N	LT
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Caron onapmann	Chapman o Coago		-		

finitions: Documented - Rare species and natural communities documented on or near this site.



Florida Natural Areas Inventory Biodiversity Matrix Report



Biodiversity Matrix Report Map 7 of 7

Natural Areas					
INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Eriogonum longifolium var. gnaphalifolium		G4T3	S3	ĹŤ	ĹĖ
Eumeces egregius lividus	Blue-tailed Mole Skink	G5T2	S2	LT.	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Heterodon simus	Southern Hognose Snake	G2	S2	Ň	N
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	Ň	N
Nemastylis floridana	Celestial Lily	G2	S2	Ň	ĹĚ
Neofiber alleni	Round-tailed Muskrat	G3	S3	Ň	N
Nolina brittoniana	Britton's Beargrass	G3	S3	LE	ĹĚ
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Paronychia chartacea ssp. chartacea	Paper-like Nailwort	G3T3	S3	ĹŤ	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	ĹĖ	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Polygala lewtonii	Lewton's Polygala	G3	S3	LE	LE
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	ĹŤ
Rana capito	Gopher Frog	G3	· S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	ĹĖ	ĹĔ
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Warea carteri	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 33088					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bonamia grandiflora	Florida Bonamia	G3	S3	LT	LE
Calamintha ashei	Ashe's Savory	G3	S3	N	LT
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	. N
Eriogonum longifolium var. gnaphalifolium		G4T3	S3	LT	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N
Heterodon simus	Southern Hognose Snake	G2	S2	N	N

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.

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Florida Natural Areas Inventory Biodiversity Matrix Report



Biodiversity Matrix Report

INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Lechea cemua Matelea floridana Monotropsis reynoldsiae Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Nolina brittoniana Panicum abscissum Paronychia chartacea ssp. chartacea Picoides borealis Podomys floridanus Polygala lewtonii Pycnanthemum floridanum Rana capito	Nodding Pinweed Florida Spiny-pod Pygmy Pipes Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Britton's Beargrass Cutthroat Grass Paper-like Nailwort Red-cockaded Woodpecker Florida Mouse Lewton's Polygala Florida Mountain-mint Gopher Frog	G3 G2 G1Q G5T3 G2 G3 G3 G3 G3 G3 G3 G3 G3	\$3 \$2 \$1 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	N N N N N N N N N N N N N N N N N N N	LT LE N LE N LE LE LE LE LE LS
Rostrhamus sociabilis plumbeus Salix floridana	Snail Kite Florida Willow	G4G5T3Q G2	S2 S2	LE N	LE LE
Warea carteri	Carter's Warea	G2 G3	S3	LE	LE
Matrix Unit ID: 33089 Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana Sciurus niger shermani	Eastern Indigo Snake Florida Sandhill Crane Wood Stork Sherman's Fox Squirrel	G3 G5T2T3 G4 G4 G5T3	S3 S2S3 S4 S2 S3	LT N N LE N	LT LT N LE LS
Potential					
Agrimonia incisa Aimophila aestivalis Asplenium heteroresiliens Athene cunicularia floridana Centrosema arenicola Corynorhinus rafinesquii Gopherus polyphemus Gymnopogon chapmanianus Heterodon simus Matelea floridana Monotropsis reynoldsiae Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Picoides borealis Podomys floridanus Pycnanthemum floridanum Rana capito Rostrhamus sociabilis plumbeus	Incised Groove-bur Bachman's Sparrow Wagner's Spleenwort Florida Burrowing Owl Sand Butterfly Pea Rafinesque's Big-eared Bat Gopher Tortoise Chapman's Skeletongrass Southern Hognose Snake Florida Spiny-pod Pygmy Pipes Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Red-cockaded Woodpecker Florida Mouse Florida Mountain-mint Gopher Frog Snail Kite	G3 G3 GNA G4T3 G2Q G3G4 G3 G2 G2 G1Q G5T3 G2 G3 G3 G3 G3 G3 G3 G3	\$2 \$3 \$1 \$3 \$2 \$2 \$3 \$3 \$2 \$1 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$5 \$2 \$5 \$2 \$5 \$3 \$5 \$2 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5 \$5	ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	LE N N S LE N T N N LE LN L N S S L L S L L S L L S L L S L L S L

Matrix Unit ID: 33090

finitions: Documented - Rare species and natural communities documented on or near this site.



Florida Natural Areas Inventory **Biodiversity Matrix Report** Map 7 of 7



Natural Areas				. 18	51 .
Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Documented					
Gopherus polyphemus	Gopher Tortoise	G3	S3	Ν	LT
Likely					
Drymarchon couperi Grus canadensis pratensis Mesic flatwoods Mycteria americana Sciurus niger shermani	Eastern Indigo Snake Florida Sandhill Crane Wood Stork Sherman's Fox Squirrel	G3 G5T2T3 G4 G4 G5T3	S3 S2S3 S4 S2 S3	LT N N LE N	LT LT N LE LS
Potential	•				
Agrimonia incisa Aimophila aestivalis Asplenium heteroresiliens Athene cunicularia floridana Centrosema arenicola Corynorhinus rafinesquii Gymnopogon chapmanianus Matelea floridana Monotropsis reynoldsiae Mustela frenata peninsulae Nemastylis floridana Neofiber alleni Picoides borealis Podomys floridanus Pycnanthemum floridanum Rana capito Rostrhamus sociabilis plumbeus	Incised Groove-bur Bachman's Sparrow Wagner's Spleenwort Florida Burrowing Owl Sand Butterfly Pea Rafinesque's Big-eared Bat Chapman's Skeletongrass Florida Spiny-pod Pygmy Pipes Florida Long-tailed Weasel Celestial Lily Round-tailed Muskrat Red-cockaded Woodpecker Florida Mouse Florida Mountain-mint Gopher Frog Snail Kite	G3 G3 GNA G4T3 G2Q G3G4 G3 G2 G1Q G5T3 G2 G3 G3 G3 G3 G3 G3	\$2 \$3 \$1 \$3 \$2 \$2 \$3 \$2 \$1 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$2 \$3 \$3 \$2 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3 \$3	X	LENNSENNEENENSSTSL

finitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity. Potential - This site lies within the known or predicted range of the species listed.

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11/30/2009

GLOBAL AND STATE RANKS

Florida Natural Areas Inventory (FNAI) defines an **element** as any rare or exemplary component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature. FNAI assigns two ranks to each element found in Florida: the **global rank**, which is based on an element's worldwide status, and the **state rank**, which is based on the status of the element within Florida. Element ranks are based on many factors, including estimated number of occurrences, estimated abundance (for species and populations) or area (for natural communities), estimated number of adequately protected occurrences, range, threats, and ecological fragility.

GLOBAL RANK DEFINITIONS

G1	Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2	Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3	Either very rare and local throughout its range (21-100 occurrences or less than 10,0000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4	Apparently secure globally (may be rare in parts of range).
G5	Demonstrably secure globally.
G#?	Tentative rank (e.g., G2?)
<i>G#G#</i>	Range of rank; insufficient data to assign specific global rank (e.g., G2G3)
<i>G#T</i> #	Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)
G#Q	Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)
G#T#Q	Same as above, but validity as subspecies or variety is questioned.
GH	Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
GNA	Ranking is not applicable because element is not a suitable target for conservation (e.g. as for hybrid species)
GNR	Not yet ranked (temporary)
GNRTNR	Neither the full species nor the taxonomic subgroup has yet been ranked (temporary)
GX	Believed to be extinct throughout range
GXC	Extirpated from the wild but still known from captivity/cultivation
GU	Unrankable. Due to lack of information, no rank or range can be assigned (e.g., GUT2).

STATE RANK DEFINITIONS

Definition parallels global element rank: substitute "S" for "G" in above global ranks, and "in Florida" for "globally" in above global rank definitions.

FEDERAL AND STATE LEGAL STATUSES (U.S. Fish and Wildlife Service – USFWS) PROVIDED BY FNAI FOR INFORMATION ONLY.

For official definitions and lists of protected species, consult the relevant state or federal agency.

FEDERAL LEGAL STATUS

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

- LE Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species which is in danger of extinction throughout all or a significant portion of its range.
- LE,XN A non essential experimental population of a species otherwise Listed as an Endangered Species in the List of Endangered and Threatened Wildlife and Plants. LE,XN for Grus americana (Whooping crane), Federally listed as XN (Non essential experimental population) refers to the Florida experimental population only. Federal listing elsewhere for Grus americana is LE.
- PE Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.
- LT Listed as Threatened Species, defined as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- LT,PDL Species currently listed Threatened but has been proposed for delisting.
- **PT** Proposed for listing as Threatened Species.
- C Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants, Category 1. Federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
- **SAT** Threatened due to similarity of appearance to a threatened species.
- SC Species of Concern, species is not currently listed but is of management concern to USFWS.
- Not currently listed, nor currently being considered for addition to the List of Endangered and Threatened Wildlife and Plants.

FLORIDA LEGAL STATUSES (Florida Fish and Wildlife Conservation Commission – FFWCC/ Florida Department of Agriculture and Consumer Services – FDACS)

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission - FFWCC, 1 August 1997, and subsequent updates.

- LE Listed as Endangered Species by the FFWCC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state, or which may attain such a status within the immediate future.
- LT Listed as Threatened Species by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
- LT* Indicates that a species has LT status only in selected portions of its range in Florida. LT* for Ursus americanus floridanus (Florida black bear) indicates that LT status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. LT* for Neovison vison pop. 1 (Southern mink, South Florida population) state listed as Threatened refers to the Everglades population only (Note: species formerly listed as Mustela vison mink pop. 1. Also, priorly listed as Mustela evergladensis).
- LS Listed as Species of Special Concern by the FFWCC, defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification,

environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species.

LS* Indicates that a species has LS status only in selected portions of its range in Florida. LS* for Pandion haliaetus (Osprey) state listed as LS (Species of Special Concern) in Monroe County only.

PE Proposed for listing as Endangered.PT Proposed for listing as Threatened.

PS Proposed for listing as a Species of Special Concern.

Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or please visit: http://DOACS.State.FL.US/PI/Images/Rule05b.pdf

LE Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.

PE Proposed by the FDACS for listing as Endangered Plants.

LT Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered. LT* indicates that a species has LT status only in selected portions of its range in Florida.

PT Proposed by the FDACS for listing as Threatened Plants.

Not currently listed, nor currently being considered for listing.

