

Wetland Feature Datasheet

Feature No.: W-15	Map No.: 3e	Feature ID.: 02wet09N	Type: Forested & Scrub - Shrub
Date Surveyed: 4/27/2011	County: McDuffie	Watershed: Brier	
8-Digit HUC: 03060108		12-Digit HUC: 030601080201	
Total Acreage: 1.65		Forested Acreage: 1.00	
Dominant Vegetation: Liriodendron tulipifera, Nyssa sylvatica, Acer rubrum, Magnolia virginiana, Arundinaria gigantea, Smilax rotundifolia			
Comments:			



¹ HUC – U.S. Geological Survey Hydrologic Unit Code

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Thomson-Vogtle Transmission Line City/County: McDuffie County Sampling Date: 4/27/2011
 Applicant/Owner: Georgia Power Company State: GA Sampling Point: DP30 (W-15)
 Investigator(s): MEN, MWW Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR P Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: WaC, NhC NWI classification: none
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks:			
02wet09N			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input checked="" type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	

Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>12</u>	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>4</u>	
(includes capillary fringe)		

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Buttressed trees

VEGETATION – Use scientific names of plants.

 Sampling Point: **DP30**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <i>Betula nigra</i>	5	<input type="checkbox"/>	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. <i>Liriodendron tulipifera</i>	10	<input checked="" type="checkbox"/>	FAC	
3. <i>Acer rubrum</i>	15	<input checked="" type="checkbox"/>	FAC	
4. <i>Liquidambar styraciflua</i>	5	<input type="checkbox"/>	FAC	
5. _____	_____	<input type="checkbox"/>	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
	35	= Total Cover		
Sapling Stratum (Plot size: _____)				
1. <i>Ilex opaca</i>	10	<input checked="" type="checkbox"/>	FAC	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <i>Nyssa sylvatica</i>	5	<input checked="" type="checkbox"/>	FAC	
3. <i>Magnolia virginiana</i>	5	<input checked="" type="checkbox"/>	FACW	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
	20	= Total Cover		
Shrub Stratum (Plot size: _____)				
1. _____	_____	<input type="checkbox"/>	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
	_____	= Total Cover		
Herb Stratum (Plot size: _____)				
1. <i>Arundinaria gigantea</i>	20	<input checked="" type="checkbox"/>	FACW	
2. <i>Woodwardia areolata</i>	2	<input type="checkbox"/>	OBL	
3. <i>Athyrium filix-femina</i>	1	<input type="checkbox"/>	FAC	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
	_____	= Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. <i>Smilax rotundifolia</i>	3	<input type="checkbox"/>	FAC	
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
	3	= Total Cover		
Remarks: (If observed, list morphological adaptations below).				

SOIL

Sampling Point: DP30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	5YR3/4	100					Muck	Fibric Peat with Sandy Loam
2 - 15	2.5Y3/1	100					S. Loam	Sandy Loam

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☒ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Thomson-Vogtle Transmission Line City/County: McDuffie County Sampling Date: 4/27/2011
 Applicant/Owner: Georgia Power Company State: GA Sampling Point: DP31 (W-15)
 Investigator(s): MEN, MWW Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR P Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: NhC NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: upland point for 02wet09N		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
		<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (includes capillary fringe)	Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrologic indicators not present.
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VEGETATION – Use scientific names of plants.

 Sampling Point: **DP31**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <i>Quercus falcata</i>	10	<input checked="" type="checkbox"/>	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71%</u> (A/B)
2. <i>Tulip poplar</i>	15	<input checked="" type="checkbox"/>	FAC	
3. <i>Liquidambar styraciflua</i>	15	<input checked="" type="checkbox"/>	FAC	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
		40	= Total Cover	
Sapling Stratum (Plot size: _____)				
1. <i>Liquidambar styraciflua</i>	5	<input checked="" type="checkbox"/>	FAC	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
		5	= Total Cover	
Shrub Stratum (Plot size: _____)				
1. <i>Callicarpa americana</i>	5	<input checked="" type="checkbox"/>	FACU	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
		5	= Total Cover	
Herb Stratum (Plot size: _____)				
1. <i>Arundinaria gigantea</i>	10	<input checked="" type="checkbox"/>	FACW	Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
2. <i>Asplenium platyneuron</i>	1	<input type="checkbox"/>	FACU	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
8. _____	_____	<input type="checkbox"/>	_____	
9. _____	_____	<input type="checkbox"/>	_____	
10. _____	_____	<input type="checkbox"/>	_____	
11. _____	_____	<input type="checkbox"/>	_____	
12. _____	_____	<input type="checkbox"/>	_____	
		11	= Total Cover	
Woody Vine Stratum (Plot size: _____)				
1. <i>Smilax rotundifolia</i>	10	<input checked="" type="checkbox"/>	FAC	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. <i>Toxicodendron radicans</i>	1	<input type="checkbox"/>	FAC	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
		11	= Total Cover	

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

SOIL

Sampling Point: DP31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	2.5Y5/2	100					S. Loam	Sandy Loam
4 - 15	2.5Y6/4	100					S. Loam	Sandy Loam

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) (LRR P, T, U)
- ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
- ☐ Muck Presence (A8) (LRR U)
- ☐ 1 cm Muck (A9) (LRR P, T)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) (MLRA 150A)
- ☐ Sandy Mucky Mineral (S1) (LRR O, S)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
- ☐ Thin Dark Surface (S9) (LRR S, T, U)
- ☐ Loamy Mucky Mineral (F1) (LRR O)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (LRR U)
- ☐ Depleted Ochric (F11) (MLRA 151)
- ☐ Iron-Manganese Masses (F12) (LRR O, P, T)
- ☐ Umbric Surface (F13) (LRR P, T, U)
- ☐ Delta Ochric (F17) (MLRA 151)
- ☐ Reduced Vertic (F18) (MLRA 150A, 150B)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
- ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- ☐ (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12) (LRR T, U)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Hydric soil indicators not present.

Stream Feature Datasheet

Feature No.: I-2	Map No.: 3e	Feature ID.: 02into1N	Type: Intermittent
Date Surveyed: 4/27/2011	County: McDuffie	Watershed: Brier	
8-Digit HUC¹: 03060108		12-Digit HUC: 030601080102	
Acreage: 0.08		Length: 355 linear feet	
Substrate: Sand and Silt	Width²: 4.0 linear feet	Depth³: 0.5 foot	

Comments:



¹ HUC – U.S. Geological Survey Hydrologic Unit Code

² Width was measured in linear feet from Ordinary High-water Mark (OHWM) to OHWM.

³ Depth was measured in feet from the OHWM to thalweg.

NCDWQ Stream Identification Data Collected Within the Corridor for the Proposed Thomson-Vogtle 500 kV Transmission Line.

Date: 4/27/11

Project Site: Thomson-Vogtle

Feature No: I-2

Evaluator: MEN & MWW

County: McDuffie, GA

Feature ID: 02into1N

Parameter	Scoring Category	Numerical Score
A. Geomorphology		
1. Continuity of bed and bank	Strong	3
2. Sinuosity of channel along thalweg	Moderate	2
3. In-channel structure: ex. riffle/pool sequence	Weak	1
4. Particle size of stream substrate	Weak	1
5. Active/relict floodplain	Absent	0
6. Depositional bars or benches	Absent	0
7. Recent alluvial deposits	Absent	0
8. Headcuts	Absent	0
9. Grade control	Absent	0
10. Natural valley or drainage way	Strong	1.5
11. 2 nd order channel on USGS or NRCS map? (Yes =3/No=0)	No	0
B. Hydrology		
12. Presence of Baseflow	Moderate	2
13. Iron oxidizing bacteria	Absent	0
14. Leaf litter	Absent	1.5
15. Sediment on plants or debris	Weak	0.5
16. Organic debris lines or piles	Weak	0.5
17. Soil-based evidence of high water table? (Yes =3/No=0)	Yes	3
C. Biology		
18. Fibrous roots in streambed	Absent	3
19. Rooted upland plants in streambed	Absent	3
20. Macrobenthos	Moderate	2
21. Aquatic mollusks	Absent	0
22. Fish	Absent	0
23. Crayfish	Strong	1.5
24. Amphibians	Strong	1.5
25. Algae	Moderate	1
26. Wetland plants in streambed (FACW=0.75; OBL=1.5; Other=0)	Other	0
Total Points:		28
Stream Type:		Intermittent

Prepared by: MDH; Date: 3/23/2012

Checked by: MEN : Date: 5/7/2012

Stream Feature Datasheet

Feature No.: I-3	Map No.: 3e	Feature ID.: 02into2N	Type: Intermittent
Date Surveyed: 4/27/2011	County: McDuffie	Watershed: Brier	
8-Digit HUC¹: 03060108		12-Digit HUC: 030601080102	
Acreage: 0.01		Length: 55 linear feet	
Substrate: Sand and Silt	Width²: 5.0 linear feet	Depth³: 0.5 foot	

Comments:



¹ HUC – U.S. Geological Survey Hydrologic Unit Code

² Width was measured in linear feet from Ordinary High-water Mark (OHWM) to OHWM.

³ Depth was measured in feet from the OHWM to thalweg.

NCDWQ Stream Identification Data Collected Within the Corridor for the Proposed Thomson-Vogtle 500 kV Transmission Line.

Date: 4/27/11

Project Site: Thomson-Vogtle

Feature No.: I-3

Evaluator: MEN & MWW

County: McDuffie, GA

Feature ID: 02into2N

Parameter	Scoring Category	Numerical Score
A. Geomorphology		
1. Continuity of bed and bank	Moderate	2
2. Sinuosity of channel along thalweg	Moderate	2
3. In-channel structure: ex. riffle/pool sequence	Moderate	2
4. Particle size of stream substrate	Moderate	2
5. Active/relict floodplain	Weak	1
6. Depositional bars or benches	Weak	1
7. Recent alluvial deposits	Absent	0
8. Headcuts	Absent	0
9. Grade control	Absent	0
10. Natural valley or drainage way	Strong	1.5
11. 2 nd order channel on USGS or NRCS map? (Yes =3/No=0)	No	0
B. Hydrology		
12. Presence of Baseflow	Moderate	2
13. Iron oxidizing bacteria	Absent	0
14. Leaf litter	Absent	1.5
15. Sediment on plants or debris	Absent	0
16. Organic debris lines or piles	Absent	0
17. Soil-based evidence of high water table? (Yes =3/No=0)	Yes	3
C. Biology		
18. Fibrous roots in streambed	Absent	3
19. Rooted upland plants in streambed	Absent	3
20. Macroenthos	Moderate	2
21. Aquatic mollusks	Absent	0
22. Fish	Weak	0.5
23. Crayfish	Strong	1.5
24. Amphibians	Strong	1.5
25. Algae	Absent	0
26. Wetland plants in streambed (FACW=0.75; OBL=1.5; Other=0)	Other	0
Total Points:		29.5
Stream Type:		Intermittent

Wetland Feature Datasheet

Feature No.: W-16		Feature ID.: 02wet010N	Type: Forested, Scrub-Shrub & Emergent
Date Surveyed: 4/27/2011	County: McDuffie	Watershed: Brier	
8-Digit HUC¹: 03060108		12-Digit HUC: 030601080201	
Total Acreage: 0.18		Forested Acreage: 0.03	
Dominant Vegetation: <i>Acer rubrum</i> , <i>Alnus serrulata</i> , <i>Sambucus canadensis</i> , <i>Commelina virginica</i> , <i>Smilax rotundifolia</i>			
Comments:			



¹ HUC – U.S. Geological Survey Hydrologic Unit Code

VEGETATION – Use scientific names of plants.

 Sampling Point: DP32

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <i>Acer rubrum</i>	15	<input checked="" type="checkbox"/>	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
		15	= Total Cover	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling Stratum (Plot size: _____)				
1. <i>Acer rubrum</i>	5	<input checked="" type="checkbox"/>	FAC	
2. <i>Liquidambar styraciflua</i>	2	<input type="checkbox"/>	FAC	
3. <i>Alnus serrulata</i>	10	<input checked="" type="checkbox"/>	FACW	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
		17	= Total Cover	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Shrub Stratum (Plot size: _____)				
1. <i>Alnus serrulata</i>	5	<input checked="" type="checkbox"/>	FACW	
2. <i>Sambucus canadensis</i>	2	<input checked="" type="checkbox"/>	FACW	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
		7	= Total Cover	Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: _____)				
1. <i>Carex lurida</i>	5	<input type="checkbox"/>	OBL	
2. <i>Boehmeria cylindrica</i>	2	<input type="checkbox"/>	FACW	
3. <i>Glyceria striata</i>	2	<input type="checkbox"/>	OBL	
4. <i>Woodwardia areolata</i>	4	<input type="checkbox"/>	OBL	
5. <i>Athyrium filix-femina</i>	4	<input type="checkbox"/>	FAC	
6. <i>Arundinaria gigantea</i>	5	<input type="checkbox"/>	FACW	
7. <i>Sagittaria latifolia</i>	2	<input type="checkbox"/>	OBL	
8. <i>Commelina virginica</i>	25	<input checked="" type="checkbox"/>	FACW	
9. _____	_____	<input type="checkbox"/>	_____	
10. _____	_____	<input type="checkbox"/>	_____	
		49	= Total Cover	
Woody Vine Stratum (Plot size: _____)				
1. <i>Smilax rotundifolia</i>	3	<input type="checkbox"/>	FAC	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
		3	= Total Cover	
Remarks: (If observed, list morphological adaptations below).				

SOIL

Sampling Point: DP32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 15	2.5Y7/2	100					S. Loam	Sandy Loam

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Thomson-Vogtle Transmission Line City/County: McDuffie County Sampling Date: 4/27/2011
 Applicant/Owner: Georgia Power Company State: GA Sampling Point: DP33 (W-16)
 Investigator(s): MEN, MWW Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR P Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: NhC NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: upland point for 02wet10N		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		

Remarks:

Hydrologic indicators not present.

VEGETATION – Use scientific names of plants.

 Sampling Point: **DP33**

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Ulmus alata</i>	10	<input checked="" type="checkbox"/>	FACU
2.	<i>Quercus nigra</i>	15	<input checked="" type="checkbox"/>	FAC
3.	<i>Liquidambar styraciflua</i>	10	<input checked="" type="checkbox"/>	FAC
4.			<input type="checkbox"/>	
5.			<input type="checkbox"/>	
6.			<input type="checkbox"/>	
7.			<input type="checkbox"/>	

35 = Total Cover

Sapling Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Quercus nigra</i>	5	<input checked="" type="checkbox"/>	FAC
2.	<i>Ulmus alata</i>	5	<input checked="" type="checkbox"/>	FACU
3.			<input type="checkbox"/>	
4.			<input type="checkbox"/>	
5.			<input type="checkbox"/>	
6.			<input type="checkbox"/>	
7.			<input type="checkbox"/>	

10 = Total Cover

Shrub Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Quercus nigra</i>	5	<input checked="" type="checkbox"/>	FAC
2.	<i>Vaccinium elliotii</i>	4	<input checked="" type="checkbox"/>	FAC
3.	<i>Ilex opaca</i>	4	<input checked="" type="checkbox"/>	FAC
4.			<input type="checkbox"/>	
5.			<input type="checkbox"/>	
6.			<input type="checkbox"/>	
7.			<input type="checkbox"/>	

13 = Total Cover

Herb Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Chasmanthium sessiliflorum</i>	15	<input checked="" type="checkbox"/>	FAC
2.			<input type="checkbox"/>	
3.			<input type="checkbox"/>	
4.			<input type="checkbox"/>	
5.			<input type="checkbox"/>	
6.			<input type="checkbox"/>	
7.			<input type="checkbox"/>	
8.			<input type="checkbox"/>	
9.			<input type="checkbox"/>	
10.			<input type="checkbox"/>	
11.			<input type="checkbox"/>	
12.			<input type="checkbox"/>	

15 = Total Cover

Woody Vine Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Smilax rotundifolia</i>	2	<input type="checkbox"/>	FAC
2.	<i>Parthenocissus quinquefolia</i>	10	<input checked="" type="checkbox"/>	FAC
3.	<i>Vitis rotundifolia</i>	2	<input type="checkbox"/>	FAC
4.	<i>Lonicera japonica</i>	5	<input checked="" type="checkbox"/>	FAC
5.			<input type="checkbox"/>	

19 = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 9 (A)

Total Number of Dominant Species Across All Strata: 11 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 82% (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by: _____

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☒ Dominance Test is >50%
- ☐ Prevalence Index is $\leq 3.0^1$
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic
Vegetation
Present?

Yes ☒ No ☐

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

SOIL

Sampling Point: DP33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--------------------------|---------------------------------------|
| <input type="checkbox"/> | Histosol (A1) |
| <input type="checkbox"/> | Histic Epipedon (A2) |
| <input type="checkbox"/> | Black Histic (A3) |
| <input type="checkbox"/> | Hydrogen Sulfide (A4) |
| <input type="checkbox"/> | Stratified Layers (A5) |
| <input type="checkbox"/> | Organic Bodies (A6) (LRR P, T, U) |
| <input type="checkbox"/> | 5 cm Mucky Mineral (A7) (LRR P, T, U) |
| <input type="checkbox"/> | Muck Presence (A8) (LRR U) |
| <input type="checkbox"/> | 1 cm Muck (A9) (LRR P, T) |
| <input type="checkbox"/> | Depleted Below Dark Surface (A11) |
| <input type="checkbox"/> | Thick Dark Surface (A12) |
| <input type="checkbox"/> | Coast Prairie Redox (A16) (MLRA 150A) |
| <input type="checkbox"/> | Sandy Mucky Mineral (S1) (LRR O, S) |
| <input type="checkbox"/> | Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> | Sandy Redox (S5) |
| <input type="checkbox"/> | Stripped Matrix (S6) |
| <input type="checkbox"/> | Dark Surface (S7) (LRR P, S, T, U) |

- ☐ Polyvalue Below Surface (S8) (**LRR S, T, U**)
- ☐ Thin Dark Surface (S9) (**LRR S, T, U**)
- ☐ Loamy Mucky Mineral (F1) (**LRR O**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (**LRR U**)
- ☐ Depleted Ochric (F11) (**MLRA 151**)
- ☐ Iron-Manganese Masses (F12) (**LRR O, P, T**)
- ☐ Umbric Surface (F13) (**LRR P, T, U**)
- ☐ Delta Ochric (F17) (**MLRA 151**)
- ☐ Reduced Vertic (F18) (**MLRA 150A, 150B**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149A**)
- ☐ Anomalous Bright Loamy Soils (F20) (**MLRA 1**)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (**outside MLRA 150A,B**)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- ☐ (MLRA 153B)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12) (LRR T, U)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒



Remarks:
 10/11/1975

Hydric soil indicators not present.



Base Map Source: USDA National Agricultural Imagery Program (NAIP): 2010 Natural Color Imagery for Georgia acquired between July 3, 2010 and October 6, 2010.

Legend

- | | | |
|--|---|--|
|  Upland Data Point |  Surveyed Area |  Perennial Stream |
|  Wetland Data Point |  Wetland |  25-ft. Buffer |

0 50 100 200 300 400 Feet
1 inch = 250 feet
1:3,000



Georgia Power
Thomson-Vogtle 500kV
Transmission Line
McDuffie and Warren
Counties, Georgia


WETLAND & ECOLOGICAL
CONSULTANTS, LLC
Woodstock, Georgia

Features Map 3f
WEC Project No. 02-050508

Wetland Feature Datasheet

Feature No.: W-17	Map No.: 3f	Feature ID.: 02wet11N	Type: Forested
Date Surveyed: 4/27/2011	County: McDuffie	Watershed: Brier	
8-Digit HUC ¹ : 03060108		12-Digit HUC: 030601080201	
Total Acreage: 1.11		Forested Acreage: 1.11	
Dominant Vegetation: <i>Betula nigra</i> , <i>Magnolia virginiana</i> , <i>Fagus grandifolia</i> , <i>Ilex opaca</i> , <i>Arundinaria gigantea</i> , <i>Lonicera japonica</i>			
Comments:			



¹ HUC – U.S. Geological Survey Hydrologic Unit Code

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Thomson-Vogtle Transmission Line City/County: McDuffie County Sampling Date: 4/27/2011
 Applicant/Owner: Georgia Power Company State: GA Sampling Point: DP34 (W-17)
 Investigator(s): MEN, MWW Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR P Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: WaD, Ck (hydric) NWI classification: PF01A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: 02wet11N	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>8</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP34

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <i>Betula nigra</i>	15	<input checked="" type="checkbox"/>	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)
2. <i>Nyssa sylvatica</i>	5	<input type="checkbox"/>	FAC	
3. <i>Magnolia virginiana</i>	10	<input checked="" type="checkbox"/>	FACW	
4. <i>Fagus grandiflora</i>	10	<input checked="" type="checkbox"/>	FACU	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
		40	= Total Cover	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling Stratum (Plot size: _____)				
1. <i>Ilex opaca</i>	20	<input checked="" type="checkbox"/>	FAC	
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
		20	= Total Cover	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Shrub Stratum (Plot size: _____)				
1. _____	_____	<input type="checkbox"/>	_____	
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
		_____	= Total Cover	Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
Herb Stratum (Plot size: _____)				
1. <i>Arundinaria gigantea</i>	15	<input checked="" type="checkbox"/>	FACW	
2. <i>Athyrium filix-femina</i>	2	<input type="checkbox"/>	FAC	
3. <i>Woodwardia areolata</i>	4	<input type="checkbox"/>	OBL	
4. <i>Osmunda cinnamomea</i>	1	<input type="checkbox"/>	FACW	
5. _____	_____	<input type="checkbox"/>	_____	
		22	= Total Cover	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Woody Vine Stratum (Plot size: _____)				
1. <i>Lonicera japonica</i>	2	<input type="checkbox"/>	FAC	
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
		2	= Total Cover	

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

SOIL

Sampling Point: DP34

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 15	2.5Y3/1	100					S. Loam	Sandy loam

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) <input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U) <input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U) <input type="checkbox"/> Muck Presence (A8) (LRR U) <input type="checkbox"/> 1 cm Muck (A9) (LRR P, T) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A) <input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S) <input type="checkbox"/> Sandy Gleyed Matrix (S4) <input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U) <input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U) <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Marl (F10) (LRR U) <input type="checkbox"/> Depleted Ochric (F11) (MLRA 151) <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T) <input checked="" type="checkbox"/> Umbric Surface (F13) (LRR P, T, U) <input type="checkbox"/> Delta Ochric (F17) (MLRA 151) <input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B) <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A) <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 1 cm Muck (A9) (LRR O) <input type="checkbox"/> 2 cm Muck (A10) (LRR S) <input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B) <input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T) <input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 153B) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Very Shallow Dark Surface (TF12) (LRR T, U) <input type="checkbox"/> Other (Explain in Remarks)
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Thomson-Vogtle Transmission Line City/County: McDuffie County Sampling Date: 4/27/2011
 Applicant/Owner: Georgia Power Company State: GA Sampling Point: DP35 (W-17)
 Investigator(s): MEN, MWW Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR P Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: WaD NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: upland from 02wet11N			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			

Remarks:

Hydrologic indicators not present.

VEGETATION – Use scientific names of plants.

 Sampling Point: **DP35**

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. Liquidambar styraciflua	15	<input checked="" type="checkbox"/>	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. Carya alba	5	<input type="checkbox"/>	N/A	
3. Carya sp.	5	<input type="checkbox"/>	N/A	
4. _____		<input type="checkbox"/>		
5. _____		<input type="checkbox"/>		
6. _____		<input type="checkbox"/>		
7. _____		<input type="checkbox"/>		
		25	= Total Cover	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling Stratum (Plot size: _____)				
1. _____		<input type="checkbox"/>		
2. _____		<input type="checkbox"/>		
3. _____		<input type="checkbox"/>		
4. _____		<input type="checkbox"/>		
5. _____		<input type="checkbox"/>		
Shrub Stratum (Plot size: _____)				
1. Ilex opaca	10	<input checked="" type="checkbox"/>	FAC	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Quercus michauxii	5	<input checked="" type="checkbox"/>	FACW	
3. _____		<input type="checkbox"/>		
4. _____		<input type="checkbox"/>		
5. _____		<input type="checkbox"/>		
6. _____		<input type="checkbox"/>		
7. _____		<input type="checkbox"/>		
		15	= Total Cover	
Herb Stratum (Plot size: _____)				
1. Rubus argutus	2	<input type="checkbox"/>	FACU	Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
2. Chasmanthium sessiliflorum	20	<input checked="" type="checkbox"/>	FAC	
3. Panicum anceps	2	<input type="checkbox"/>	FAC	
4. _____		<input type="checkbox"/>		
5. _____		<input type="checkbox"/>		
6. _____		<input type="checkbox"/>		
7. _____		<input type="checkbox"/>		
8. _____		<input type="checkbox"/>		
9. _____		<input type="checkbox"/>		
10. _____		<input type="checkbox"/>		
11. _____		<input type="checkbox"/>		
12. _____		<input type="checkbox"/>		
		24	= Total Cover	
Woody Vine Stratum (Plot size: _____)				
1. Vitis rotundifolia	5	<input checked="" type="checkbox"/>	FAC	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. Parthenocissus quinquefolia	5	<input checked="" type="checkbox"/>	FAC	
3. _____		<input type="checkbox"/>		
4. _____		<input type="checkbox"/>		
5. _____		<input type="checkbox"/>		
		10	= Total Cover	

 Remarks: (If observed, list morphological adaptations below).
 Species with "N/A" indicator status were not used in the dominance calculation.

SOIL

Sampling Point: DP35

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	2.5Y4/1	100					S. Loam	Sandy Loam
3 - 15	2.5Y5/4	100					S. Loam	Sandy Loam

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Hydric soil indicators not present.

Wetland Feature Datasheet

Feature No.: W-18	Map No.: 3f	Feature ID.: 02wet012N	Type: Forested
Date Surveyed: 4/27/2011	County: McDuffie	Watershed: Brier	
8-Digit HUC: 03060108		12-Digit HUC: 030601080201	
Total Acreage: 1.81		Forested Acreage: 1.81	

Dominant Vegetation: *Fagus grandifolia*, *Ilex opaca*, *Quercus nigra*, *Carpinus caroliniana*, *Ilex opaca*, *Ligustrum sinense*, *Liquidambar styraciflua*, *Microstegium vimineum*, *Lonicera japonica*, *Smilax rotundifolia*, *Toxicodendron radicans*

Comments:



¹ HUC – U.S. Geological Survey Hydrologic Unit Code

VEGETATION – Use scientific names of plants.

 Sampling Point: **DP36**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <i>Fagus grandiflora</i>	10	<input checked="" type="checkbox"/>	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>11</u> (A) Total Number of Dominant Species Across All Strata: <u>12</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>92%</u> (A/B)
2. <i>Ilex opaca</i>	10	<input checked="" type="checkbox"/>	FAC	
3. <i>Quercus nigra</i>	15	<input checked="" type="checkbox"/>	FAC	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
		35	= Total Cover	
Sapling Stratum (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <i>Carpinus caroliniana</i>	5	<input checked="" type="checkbox"/>	FAC	
2. <i>Ilex opaca</i>	5	<input checked="" type="checkbox"/>	FAC	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
		10	= Total Cover	
Shrub Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) _____ ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Ligustrum sinense</i>	4	<input checked="" type="checkbox"/>	FAC	
2. <i>Ilex opaca</i>	5	<input checked="" type="checkbox"/>	FAC	
3. <i>Liquidambar styraciflua</i>	3	<input checked="" type="checkbox"/>	FAC	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
		12	= Total Cover	
Herb Stratum (Plot size: _____)				Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
1. <i>Parthenocissus quinquefolia</i>	3	<input type="checkbox"/>	FAC	
2. <i>Boehmeria cylindrica</i>	1	<input type="checkbox"/>	FACW	
3. <i>Microstegium vimineum</i>	12	<input checked="" type="checkbox"/>	FAC	
4. <i>Athyrium filix-femina</i>	2	<input type="checkbox"/>	FAC	
5. <i>Rubus argutus</i>	3	<input type="checkbox"/>	FACU	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
8. _____	_____	<input type="checkbox"/>	_____	
9. _____	_____	<input type="checkbox"/>	_____	
10. _____	_____	<input type="checkbox"/>	_____	
11. _____	_____	<input type="checkbox"/>	_____	
12. _____	_____	<input type="checkbox"/>	_____	
		21	= Total Cover	
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <i>Lonicera japonica</i>	8	<input checked="" type="checkbox"/>	FAC	
2. <i>Smilax rotundifolia</i>	6	<input checked="" type="checkbox"/>	FAC	
3. <i>Toxicodendron radicans</i>	4	<input checked="" type="checkbox"/>	FAC	
4. <i>Campsis radicans</i>	2	<input type="checkbox"/>	FAC	
5. _____	_____	<input type="checkbox"/>	_____	
		20	= Total Cover	

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

SOIL

Sampling Point: DP36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 18	2.5Y4/1	100					Si. Loam	Silt loam

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☒ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12) (LRR T, U)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Data Point was taken within the floodplain of Brier Creek approximately 4 miles downstream of the Southern Outer Piedmont Ecoregion. Approximately 47 square-miles of Brier Creeks drainage basin is within the Southern Outer Piedmont Ecoregion.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Thomson-Vogtle Transmission Line City/County: McDuffie County Sampling Date: 4/27/2011
 Applicant/Owner: Georgia Power Company State: GA Sampling Point: DP37 (W-18)
 Investigator(s): MEN, MWW Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR P Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: WhB NWI classification: PEM1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: upland point for 02wet12N		

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		

Remarks:

Hydrologic indicators not present.

VEGETATION – Use scientific names of plants.

 Sampling Point: **DP37**

Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Liquidambar styraciflua</u>	15	<input checked="" type="checkbox"/>	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71%</u> (A/B)
2. <u>Pinus palustris</u>	15	<input checked="" type="checkbox"/>	FACU	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
30 = Total Cover				
1. <u>Liquidambar styraciflua</u>	10	<input checked="" type="checkbox"/>	FAC	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
10 = Total Cover				
1. _____	_____	<input type="checkbox"/>	_____	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
_____ = Total Cover				
1. <u>Galium aparine</u>	5	<input checked="" type="checkbox"/>	FACU	Definitions of Vegetation Strata: Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size. Includes woody plants, except woody vines, less than approximately 3 ft (1 m) in height. Woody vine – All woody vines, regardless of height.
2. _____	_____	<input type="checkbox"/>	_____	
3. _____	_____	<input type="checkbox"/>	_____	
4. _____	_____	<input type="checkbox"/>	_____	
5. _____	_____	<input type="checkbox"/>	_____	
6. _____	_____	<input type="checkbox"/>	_____	
7. _____	_____	<input type="checkbox"/>	_____	
8. _____	_____	<input type="checkbox"/>	_____	
9. _____	_____	<input type="checkbox"/>	_____	
10. _____	_____	<input type="checkbox"/>	_____	
11. _____	_____	<input type="checkbox"/>	_____	
12. _____	_____	<input type="checkbox"/>	_____	
5 = Total Cover				
1. <u>Vitis rotundifolia</u>	5	<input checked="" type="checkbox"/>	FAC	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. <u>Parthenocissus quinquefolia</u>	2	<input type="checkbox"/>	FAC	
3. <u>Smilax rotundifolia</u>	5	<input checked="" type="checkbox"/>	FAC	
4. <u>Lonicera japonica</u>	4	<input checked="" type="checkbox"/>	FAC	
5. _____	_____	<input type="checkbox"/>	_____	
16 = Total Cover				

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

SOIL

Sampling Point: DP37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Organic Bodies (A6) **(LRR P, T, U)**
- ☐ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ☐ Muck Presence (A8) **(LRR U)**
- ☐ 1 cm Muck (A9) **(LRR P, T)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Coast Prairie Redox (A16) **(MLRA 150A)**
- ☐ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) **(LRR P, S, T, U)**

- ☐ Polyvalue Below Surface (S8) (**LRR S, T, U**)
- ☐ Thin Dark Surface (S9) (**LRR S, T, U**)
- ☐ Loamy Mucky Mineral (F1) (**LRR O**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Marl (F10) (**LRR U**)
- ☐ Depleted Ochric (F11) (**MLRA 151**)
- ☐ Iron-Manganese Masses (F12) (**LRR O, P, T**)
- ☐ Umbric Surface (F13) (**LRR P, T, U**)
- ☐ Delta Ochric (F17) (**MLRA 151**)
- ☐ Reduced Vertic (F18) (**MLRA 150A, 150B**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149A**)
- ☐ Anomalous Bright Loamy Soils (F20) (**MLRA 149A**)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (**LRR O**)
- ☐ 2 cm Muck (A10) (**LRR S**)
- ☐ Reduced Vertic (F18) (**outside MLRA 150A,B**)
- ☐ Piedmont Floodplain Soils (F19) (**LRR P, S, T**)
- ☐ Anomalous Bright Loamy Soils (F20)
(**MLRA 153B**)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12) (**LRR T, U**)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Hydric soil indicators not present.

Stream Feature Datasheet

Feature No.: P-1	Map No.: 3f, 4a	Feature ID.: 02per01N	Type: Perennial
Date Surveyed: 4/27/2011 & 4/28/2011	County: McDuffie & Warren	Watershed: Brier	
8-Digit HUC¹: 03060108		12-Digit HUC: 030601080102	
Acreage: 0.25		Length: 170 linear feet	
Substrate: Sand and Silt	Width²: >40 linear feet	Depth³: 1-2 feet	
Comments: Brier Creek			



¹ HUC – U.S. Geological Survey Hydrologic Unit Code

² Width was measured in linear feet from Ordinary High-water Mark (OHWM) to OHWM.

³ Depth was measured in feet from the OHWM to thalweg.

NCDWQ Stream Identification Data Collected Within the Corridor for the Proposed Thomson-Vogtle 500 kV Transmission Line.

Date: 4/27/11

Project Site: Thomson-Vogtle

Feature No.: P-1 (Brier Creek)

Evaluator: MEN & MWW

County: McDuffie and Warren, GA

Feature ID: 02per01N (Brier Creek)

Parameter	Scoring Category	Numerical Score
A. Geomorphology		
1. Continuity of bed and bank	Strong	3
2. Sinuosity of channel along thalweg	Moderate	2
3. In-channel structure: ex. riffle/pool sequence	Strong	3
4. Particle size of stream substrate	Strong	3
5. Active/relict floodplain	Strong	3
6. Depositional bars or benches	Strong	3
7. Recent alluvial deposits	Strong	3
8. Headcuts	Absent	0
9. Grade control	Absent	0
10. Natural valley or drainage way	Strong	1.5
11. 2 nd order channel on USGS or NRCS map? (Yes =3/No=0)	Yes	3
B. Hydrology		
12. Presence of Baseflow	Strong	3
13. Iron oxidizing bacteria	Absent	0
14. Leaf litter	Absent	1.5
15. Sediment on plants or debris	Absent	0
16. Organic debris lines or piles	Strong	1.5
17. Soil-based evidence of high water table? (Yes =3/No=0)	Yes	3
C. Biology		
18. Fibrous roots in streambed	Absent	3
19. Rooted upland plants in streambed	Absent	3
20. Macroinvertebrates	Strong	3
21. Aquatic mollusks	Strong	3
22. Fish	Strong	1.5
23. Crayfish	Strong	1.5
24. Amphibians	Strong	1.5
25. Algae	Absent	0
26. Wetland plants in streambed (FACW=0.75; OBL=1.5; Other=0)	Other	0
Total Points:		50
Stream Type:		Perennial

Wetland Feature Datasheet

Feature No.: W-19	Map No.: 3f, 4a	Feature ID.: 02wet012AN	Type: Forested
Date Surveyed: 4/28/2011 & 3/07/2012	County: Warren	Watershed: Brier	
8-Digit HUC: 03060108		12-Digit HUC: 030601080103	
Total Acreage: 3.28		Forested Acreage: 3.28	
Dominant Vegetation: Liquidambar styraciflua, Liriodendron tulipifera, Carpinus caroliniana, Betula nigra, Athyrium filix-femina, Arundinaria gigantea, Leucothoe axillaris, Smilax rotundifolia, Vitis rotundifolia			
Comments:			

