

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 4A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Urochloa mutica</i>	H	FACW	8		
2 <i>Phyla nodiflora</i>	H	FAC	9		
3 <i>Salix spp.</i>	S	OBL	10		
4 <i>Cynodon dactylon</i>	H	FACU	11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>12</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Immokalee sand</u>	Drainage Class: _____																
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle Yes No																
Profile Description:																	
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.												
0-6	A	10YR 3/1			Fine sand												
6-12	E1	10YR 6/1			Fine sand												
12-18	E2	10YR 8/1			Fine sand												
Hydric Soil Indicators: <table style="width: 100%;"> <tr> <td>☐ Histosol</td> <td>☐ Reducing Conditions</td> <td>☐ High Organic Content in Surface Layer in Sandy Soils</td> </tr> <tr> <td>☐ Histic Epipedon</td> <td>☒ Gleyed or Low-Chroma Colors</td> <td>☐ Listed on National Hydric Soils List</td> </tr> <tr> <td>☐ Sulfidic Odor</td> <td>☐ Concretions</td> <td>☒ Listed on Local Hydric Soils List</td> </tr> <tr> <td>☐ Aquic Moisture Regime</td> <td>☐ Organic Streaking in Sandy Soils</td> <td>☐ Other (explain in remarks)</td> </tr> </table>						☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils	☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List	☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List	☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils															
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List															
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List															
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)															
Remarks: _____																	

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes	☐ No	Is this Sampling Point Within a Wetland?	☒ Yes	☐ No
Wetland Hydrology Present?	☒ Yes	☐ No			
Hydric Soils Present?	☒ Yes	☐ No			
Remarks: <u>The wetland is a ditch on McIntosh property.</u>					

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Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 4B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? <i>(if needed, explain on reverse)</i> ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Geranium spp.</u>	H		8		
2 <u>Urochloa mutica</u>	H	FACW	9		
3			10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>12</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Placid and Myakka Fine Sands, Depressional</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 2/1			Sand
6-20	E	10YR 8/2			Sand
20-24	Bh1	N 2/0			Sand
24-32	Bh2	5YR 2/2	10YR 2/2	Common/ coarse	Sand
32-36	Bh3	5 YR 2/2			Sand
36-56	C/B	7.5YR 4/4	5 YR 2/2	Common/ medium	Sand
56-85	C	10YR 4/2			Sand
Hydric Soil Indicators:					
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils			
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List			
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List			
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)			
Remarks: <u>Hydric Soils</u>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>The wetland is a ditch on McIntosh property.</u>		

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Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 6A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Eupatorium capillifolium</i>	H	FAC	8 <i>Scirpus cyperinus</i>	H	OBL
2 <i>Schinus terebinthifolius</i>	S	FAC	9 <i>Baccharis spp.</i>	S	FAC
3 <i>Salix spp.</i>	S	OBL	10 <i>Andropogon spp.</i>	H	FACW
4 <i>Ludwigia peruviana</i>	H	OBL	11 <i>Sporobolus indicus</i>	H	FACU+
5 <i>Osmunda regalis</i> L. var. <i>spectabilis</i>	H	OBL	12 _____		
6 <i>Thelypteris</i> spp	S	FACW	13 _____		
7 <i>Carex spp.</i>	H	FACW	14 _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 91

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Immokalee sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 3/1			Fine sand
6-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 8/1			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>The wetland is a wetland scrub on McIntosh property.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
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Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 8A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Hydrocotyle spp.</i>	H	OBL	8		
2 <i>Schinus terebinthifolius</i>	S	FAC	9		
3 <i>Salix spp.</i>	S	OBL	10		
4 <i>Ludwigia peruviana</i>	H	OBL	11		
5 <i>Typha sp.</i>	H	OBL	12		
6 <i>Myrica spp.</i>	S	FAC	13		
7 <i>Carex spp.</i>	H	FACW	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>48</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Water</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes	☐ No	Is this Sampling Point Within a Wetland?	☒ Yes	☐ No
Wetland Hydrology Present?	☒ Yes	☐ No			
Hydric Soils Present?	☒ Yes	☐ No			
Remarks: <u>The wetland is a 5-10 acre reservoir on McIntosh property.</u>					

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Lake Agnes to McIntosh Powerplant T-line</u>	Date: <u>February 2007</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>Arrants</u>	State: <u>Florida</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>FLUCFCS 641</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: <u>Wetland 8B</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Ludwigia peruviana</i>	S	OBL	8		
2 <i>Cyperus surinamensis</i>	H	FACW	9		
3 <i>Baccharis halmifolia</i>	S	FAC	10		
4 <i>Acer rubrum</i>	S	FAC	11		
5 <i>Rubus spp.</i>	H		12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 80

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☒ Aerial Photographs ☐ Other ☐ No recorded data available Field Observations: Depth of Surface Water: _____ (In.) Depth to Free Water in Pit: _____ (In.) Depth to Saturated Soil: <u>0-12</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☒ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☒ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: Old mining site.	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0-5% slopes</u>	Drainage Class: mod rapid to slow <i>Circle</i>																
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Yes No																
Profile Description:																	
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.												
0-6	A				Dk. Brwn concretions												
Hydric Soil Indicators: <table style="width: 100%;"> <tr> <td>☐ Histosol</td> <td>☒ Reducing Conditions</td> <td>☐ High Organic Content in Surface Layer in Sandy Soils</td> </tr> <tr> <td>☐ Histic Epipedon</td> <td>☒ Gleyed or Low-Chroma Colors</td> <td>☐ Listed on National Hydric Soils List</td> </tr> <tr> <td>☐ Sulfidic Odor</td> <td>☒ Concretions</td> <td>☐ Listed on Local Hydric Soils List</td> </tr> <tr> <td>☐ Aquic Moisture Regime</td> <td>☐ Organic Streaking in Sandy Soils</td> <td>☐ Other (explain in remarks)</td> </tr> </table>						☐ Histosol	☒ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils	☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List	☐ Sulfidic Odor	☒ Concretions	☐ Listed on Local Hydric Soils List	☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)
☐ Histosol	☒ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils															
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List															
☐ Sulfidic Odor	☒ Concretions	☐ Listed on Local Hydric Soils List															
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)															
Remarks: _____																	

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: _____	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>Lake Agnes to McIntosh Powerplant T-line</u>	Date: <u>February 2007</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>Arrants</u>	State: <u>Florida</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>FLUCFCS 641 / 534</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? <i>(if needed, explain on reverse)</i> ☐ Yes ☒ No	Plot ID: <u>Wetland 9A/11A</u>

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Ludwigia peruviana</i>	S	OBL	8 <i>Typha spp.</i>	H	OBL
2 <i>Cyperus surinamensis</i>	H	FACW	9 <i>Andropogon glomeratus</i>	H	OBL
3 <i>Baccharis halmifolia</i>	S	FAC	10 _____		
4 <i>Acer rubrum</i>	S	FAC	11 _____		
5 <i>Juncus effusus</i>	H	FACW	12 _____		
6 <i>Panicum hemitomon</i>	H	FACW	13 _____		
7 <i>Carex albolutescens</i>	H	FACW	14 _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☒ Aerial Photographs ☐ Other ☐ No recorded data available Field Observations: Depth of Surface Water: <u>0-48</u> (In.) Depth to Free Water in Pit: _____ (In.) Depth to Saturated Soil: <u>0-12</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☒ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☒ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: <u>Old mining site.</u>	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0-5% slopes / water</u>	Drainage Class: <u>mod rapid to slow</u> Circle				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A				Dk. Brwn concretions
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☒ Aquic Moisture Regime ☒ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☒ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: _____	

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Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 12A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Ludwigia peruviana</i>	H	OBL	8 <i>Andropogon spp.</i>	H	FACW
2 <i>Eupatorium capillifolium</i>	H	FAC	9 <i>Woodwardia virginica</i>	H	FACW
3 <i>Salix spp.</i>	S	OBL	10 <i>Itea virginica</i>	S	OBL
4 <i>Baccharis spp.</i>	S	OBL	11		
5 <i>Ricinus communis</i>	S	FACU	12		
6 <i>Sambucus canadensis</i>	H	FAC	13		
7 <i>Rubus argutus</i>	S	FAC	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 90

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Smyrna and Myakka Fine Sands</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 2/1			Sand
6-20	E	10YR 8/2			Sand
20-24	Bh1	N 2/0			Sand
24-32	Bh2	5YR 2/2	10YR 2/2	Common/ coarse	Sand
32-36	Bh3	5 YR 2/2			Sand
36-56	C/B	7.5YR 4/4	5 YR 2/2	Common/ medium	Sand
56-85	C	10YR 4/2			Sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: <u>Soils very organic.</u>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>The wetland is a small freshwater marsh.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 13C</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Ludwigia peruviana</u>	H	OBL	8		
2 <u>Eupatorium capillifolium</u>	H	FAC	9		
3			10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Smyrna and Myakka Fine Sands</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 2/1			Sand
6-20	E	10YR 8/2			Sand
20-24	Bh1	N 2/0			Sand
24-32	Bh2	5YR 2/2	10YR 2/2	Common/ coarse	Sand
32-36	Bh3	5 YR 2/2			Sand
36-56	C/B	7.5YR 4/4	5 YR 2/2	Common/ medium	Sand
56-85	C	10YR 4/2			Sand
Hydric Soil Indicators:					
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils			
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List			
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List			
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)			
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>The wetland is a small freshwater marsh.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 14A/14B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Acer spp.</i>	T	FACW	8 <i>Eleocharis sp.</i>	H	OBL
2 <i>Hydrocotyle spp.</i>	H	OBL	9 <i>Myrica spp.</i>	S	FAC
3 <i>Woodwardia virginica</i>	H	FACW	10 <i>Typha sp.</i>	H	OBL
4 <i>Cephalanthus occidentalis</i>	S	OBL	11 <i>Baccharis spp.</i>	S	FAC
5 <i>Ludwigia arculata</i>	H	OBL	12 <i>Salix spp.</i>	S	OBL
6 <i>Polygonum spp.</i>	H	OBL	13 <i>Thelypteris spp.</i>	S	FACW
7 <i>Eupatorium capillifolium</i>	H	FAC	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)	
Field Observations: Depth of Surface Water: <u>48</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>The wetland is a small pond/ reservoir.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	
Community ID: <u>Wetland 16A/18A</u>	
Transect ID: _____	
Plot ID: _____	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Eleocharis sp.</i>	H	OBL
2 <i>Spartina spp.</i>	H	FACW	9 <i>Persea palustris</i>	T	OBL
3 <i>Woodwardia virginica</i>	H	FACW	10 <i>Juncus repens</i>	H	OBL
4 <i>Ludwigia peruviana</i>	H	OBL	11 <i>Pteridium spp.</i>	H	FACU
5 <i>Andropogon spp.</i>	H	FACW	12 <i>Vitis rotundifolia</i>	H	FAC
6 <i>Salix spp.</i>	S	OBL	13 <i>Rubus argutus</i>	S	FAC
7 <i>Lyonia mariana</i>	S	FACW	14 <i>Carex albolutescens</i>	H	FAC+

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 93

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Hontoon Muck</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	Oe	5YR 3/2	10YR 7/3		Mucky Peat
5-14	Oa1	10YR 6/2	10YR 5/3		Sapric
14-60	Oa2	5YR 2/2	10YR 3/2		Sapric
60-65	Oa3	N 2/	10YR 4/2		Sapric
Hydric Soil Indicators:					
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils			
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List			
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List			
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)			
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes	☐ No	Is this Sampling Point Within a Wetland?	☒ Yes	☐ No
Wetland Hydrology Present?	☒ Yes	☐ No			
Hydric Soils Present?	☒ Yes	☐ No			
Remarks: <u>Dry freshwater marsh and pond with mucky soils.</u>					

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 19A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Eupatorium capillifolium</i>	H	FAC	8		
2 <i>Carex spp.</i>	H	FACW	9		
3 <i>Sambucus canadensis</i>	H	FAC	10		
4 <i>Rubus argutus</i>	S	FAC	11		
5 <i>Phytolacca americana</i>	S	FACW	12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Smyrna and Myakka Fine Sands</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 2/1			Sand
6-20	E	10YR 8/2			Sand
20-24	Bh1	N 2/0			Sand
24-32	Bh2	5YR 2/2	10YR 2/2	Common/ coarse	Sand
32-36	Bh3	5 YR 2/2			Sand
36-56	C/B	7.5YR 4/4	5 YR 2/2	Common/ medium	Sand
56-85	C	10YR 4/2			Sand

Hydric Soil Indicators:		
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)

Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>Very dry, small freshwater marsh.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 22A/B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Eupatorium capillifolium</i>	H	FAC	8		
2 <i>Panicum hemitomon</i>	H	OBL	9		
3 <i>Amphicarpum muhlenbergianum</i>	H	FACW	10		
4 <i>Ludwigia peruviana</i>	H	OBL	11		
5 <i>Spartina spp.</i>	H	FACW	12		
6 <i>Cephalanthus occidentalis</i>	S	OBL	13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Samsula Muck</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-9	Oa1	5YR 2/1	10YR 3/2	Moderate	Muck
9-36	Oa2	5YR 2/2	10YR 3/2	Common	Sapric material
36-46	Cg1	10YR 4/2	10YR 3/1	Common/ coarse	Sand
46-55	Cg2	10YR 6/1	10YR 5/3	Common/ medium	Sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>Small freshwater marsh located south of the ROW between poles 22 and 23.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 23A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Eupatorium capillifolium</i>	H	FAC	8 <i>Ludwigia peruviana</i>	H	OBL
2 <i>Baccharis spp</i>	S	OBL	9 <i>Carex spp.</i>	H	FACW
3 <i>Panicum hemitomon</i>	H	OBL	10 <i>Cyperus spp.</i>	H	OBL
4 <i>Alternanthera philoxeroides</i>	H	OBL	11		
5 <i>Hydrocotyle sp.</i>	H	OBL	12		
6 <i>Polygonum spp.</i>	H	OBL	13		
7 <i>Andropogon spp.</i>	H	FACW	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>48</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Water</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☐ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>A retention pond (between 5 and 10 acres) located on the the east side of the ROW.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	
Community ID: <u>Wetland 23B</u>	
Transect ID: _____	
Plot ID: _____	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Eupatorium capillifolium</i>	H	FAC	8 <i>Ludwigia peruviana</i>	H	OBL
2 <i>Baccharis spp</i>	S	OBL	9 <i>Andropogon spp.</i>	H	FACW
3 <i>Sagittaria lancifolia</i>	H	OBL	10 <i>Fuirena spp.</i>	H	OBL
4 <i>Alternanthera philoxeroides</i>	H	OBL	11 <i>Polypremum procumbens</i>	H	FAC
5 <i>Setaria spp.</i>	H	FAC	12 <i>Ludwigia arcuata</i>	H	OBL
6 <i>Hydrocotyle sp.</i>	H	OBL	13 <i>Carex albolutescens</i>	H	FAC+
7 <i>Ludwigia leptocarpa</i>	H	OBL	14 <i>Panicum repens</i>	H	FACW

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>48</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Neilhurst Sand, 1 to 5 Percent Slopes</u>	Drainage Class: _____																
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> <u>Circle</u> No																
Profile Description:																	
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.												
0-3	A	10YR 6/1			Fine sand												
3-80	C	5YR 4/3			Fine sand												
Hydric Soil Indicators: <table style="width: 100%;"><tr><td>☐ Histosol</td><td>☐ Reducing Conditions</td><td>☐ High Organic Content in Surface Layer in Sandy Soils</td></tr><tr><td>☐ Histic Epipedon</td><td>☒ Gleyed or Low-Chroma Colors</td><td>☐ Listed on National Hydric Soils List</td></tr><tr><td>☐ Sulfidic Odor</td><td>☐ Concretions</td><td>☒ Listed on Local Hydric Soils List</td></tr><tr><td>☐ Aquic Moisture Regime</td><td>☐ Organic Streaking in Sandy Soils</td><td>☐ Other (explain in remarks)</td></tr></table>						☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils	☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List	☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List	☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils															
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List															
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List															
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)															
Remarks: _____																	

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>A retention pond (less than 5 acres) located on the the west side of the ROW.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 26A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Ludwigia arcuata</i>	H	OBL	8		
2 <i>Taxodium spp.</i>	T	OBL	9		
3 <i>Panicum hemitomon</i>	H	OBL	10		
4 <i>Salix spp.</i>	S	OBL	11		
5 <i>Phyla nodiflora</i>	H	FAC	12		
6 <i>Eichhornia crassipes</i>	H	OBL	13		
7 <i>Lemna spp.</i>	H	OBL	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: Many invasive species present.

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>48</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>A retention pond (less than 5 acres) located on the golf course.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u> Applicant/Owner: <u>OUC</u> Investigator: <u>M. Arrants, S. Rizzo</u>	Date: <u>01/11/08</u> County: <u>Polk</u> State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Community ID: <u>Wetland 27A</u> Transect ID: _____ Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Ludwigia peruviana</i>	H	OBL	8		
2 <i>Schinus terebinthifolius</i>	S	FAC	9		
3 <i>Baccharis spp</i>	S	OBL	10		
4 <i>Salix spp.</i>	S	OBL	11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: Many invasive species present.

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>12</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u> Taxonomy (Subgroup): _____	Drainage Class: _____ Field Observations Confirm Mapped Type? <u>Yes</u> Circle No																																				
Profile Description: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Depth (inches)</th> <th style="width: 15%;">Horizon</th> <th style="width: 20%;">Matrix Color (Munsell Moist)</th> <th style="width: 20%;">Mottle Colors (Munsell Moist)</th> <th style="width: 20%;">Mottle Abundance/Size/Contrast</th> <th style="width: 10%;">Texture, Concretions, Structure, etc.</th> </tr> </thead> <tbody> <tr><td>0-7</td><td>A</td><td>10YR 3/1</td><td></td><td></td><td>Fine sand</td></tr> <tr><td>7-13</td><td>E1</td><td>10YR 6/2</td><td></td><td></td><td>Fine sand</td></tr> <tr><td>13-16</td><td>B</td><td>10YR 3/3</td><td></td><td></td><td>Fine sand</td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.	0-7	A	10YR 3/1			Fine sand	7-13	E1	10YR 6/2			Fine sand	13-16	B	10YR 3/3			Fine sand												
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7-13	E1	10YR 6/2			Fine sand																																
13-16	B	10YR 3/3			Fine sand																																
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)																																					
Remarks: _____																																					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No Wetland Hydrology Present? ☒ Yes ☐ No Hydric Soils Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Remarks: <u>A ditch system running along I-4 north of the ROW.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 27B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Eleocharis sp.</i>	H	OBL
2 <i>Sambucus canadensis</i>	H	FAC	9 <i>Baccharis spp</i>	S	OBL
3 <i>Myrica spp</i>	S	FAC	10 <i>Salix spp.</i>	S	OBL
4 <i>Solidago spp</i>	H	FACW	11 <i>Scoparia dulcis</i>	H	FAC
5 <i>Ludwigia peruviana</i>	H	OBL	12 <i>Setaria sp.</i>	H	FAC
6 <i>Rubus argutus</i>	S	FAC	13 <i>Rhynchospora sp.</i>	H	FACW
7 <i>Schinus terebinthifolius</i>	S	FAC	14 <i>Acer rubrum</i>	T	FACW

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: Many invasive species present.

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>A freshwater marsh that starts east of structure 27 south of the ROW and runs east along ROW.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/11/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 29A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Eleocharis sp.</i>	H	OBL
2 <i>Sambucus canadensis</i>	H	FAC	9 <i>Baccharis spp</i>	S	OBL
3 <i>Sporobolus indicus</i>	H	FACU+	10 <i>Salix spp.</i>	S	OBL
4 <i>Solidago canadensis</i>	H	FACU+	11 <i>Scoparia dulcis</i>	H	FAC
5 <i>Ludwigia peruviana</i>	H	OBL	12 <i>Carex spp.</i>	H	FACW
6 <i>Rubus argutus</i>	S	FAC	13 <i>Hydrocotyle sp.</i>	H	FACW
7 <i>Eupatorium capillifolium</i>	H	FAC	14 <i>Acer rubrum</i>	T	FACW

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 86

Remarks: Many invasive species present.

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Dry freshwater marsh that starts along retention pond located between poles 29 and 30; the wetland runs east along the southern side of ROW.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 33A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Eleocharis sp.</i>	H	OBL
2 <i>Polygonum spp.</i>	H	OBL	9 <i>Brachiaria mutica</i>	H	FACW
3 <i>Alternanthera philoxeroides</i>	H	OBL	10		
4 <i>Galium tinctorium</i>	H	FACW	11		
5 <i>Ludwigia peruviana</i>	H	OBL	12		
6 <i>Rubus argutus</i>	S	FAC	13		
7 <i>Eupatorium capillifolium</i>	H	FAC	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)	
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Neilhurst Sand, 1 to 5 Percent Slopes</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> ☐ No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-3	A	10YR 6/1			Fine sand
3-80	C	5YR 4/3			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Small, dry, wet prairie along southern side of ROW.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	
Community ID: <u>Wetland 33B</u>	
Transect ID: _____	
Plot ID: _____	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Salix spp.</i>	S	OBL
2 <i>Polygonum spp.</i>	H	OBL	9		
3 <i>Alternanthera philoxeroides</i>	H	OBL	10		
4 <i>Galium tinctorium</i>	H	FACW	11		
5 <i>Ludwigia arculata</i>	H	OBL	12		
6 <i>Hydrocotyle sp.</i>	H	OBL	13		
7 <i>Eupatorium capillifolium</i>	H	FAC	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Neilhurst Sand, 1 to 5 Percent Slopes</u>	Drainage Class: _____																
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> <u>No</u>																
Profile Description:																	
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.												
0-3	A	10YR 6/1			Fine sand												
3-80	C	5YR 4/3			Fine sand												
Hydric Soil Indicators: <table style="width: 100%;"><tr><td>☐ Histosol</td><td>☐ Reducing Conditions</td><td>☐ High Organic Content in Surface Layer in Sandy Soils</td></tr><tr><td>☐ Histic Epipedon</td><td>☒ Gleyed or Low-Chroma Colors</td><td>☐ Listed on National Hydric Soils List</td></tr><tr><td>☐ Sulfidic Odor</td><td>☐ Concretions</td><td>☒ Listed on Local Hydric Soils List</td></tr><tr><td>☐ Aquic Moisture Regime</td><td>☐ Organic Streaking in Sandy Soils</td><td>☐ Other (explain in remarks)</td></tr></table>						☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils	☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List	☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List	☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils															
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List															
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List															
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)															
Remarks: <u>Soils are disturbed by feral hogs.</u>																	

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: _____		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 34A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Ludwigia peruviana</i>	H	OBL	8 <i>Polygonum spp.</i>	H	OBL
2 <i>Juncus effusus</i>	H	OBL	9 <i>Galium tinctorium</i>	H	FACW
3 <i>Salix spp.</i>	S	OBL	10 <i>Andropogon glomeratus</i>	H	FACW
4 <i>Cyperus sp.</i>	H	FACW	11 <i>Eleocharis spp.</i>	H	OBL
5 <i>Carex spp.</i>	H	FACW	12 <i>Baccharis spp.</i>	S	OBL
6 <i>Hydrocotyle sp.</i>	H	FACW	13 _____		
7 <i>Alternanthera philoxeroides</i>	H	OBL	14 _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators:					
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime		☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils		☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)	
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Wet prairie that is west of pole 35 and west of SR 33.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 34B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? <i>(if needed, explain on reverse)</i> ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Ludwigia peruviana</i>	H	OBL	8 <i>Polygonum spp.</i>	H	OBL
2 <i>Juncus effusus</i>	H	OBL	9 <i>Galium tinctorium</i>	H	FACW
3 <i>Salix spp.</i>	S	OBL	10 <i>Andropogon glomeratus</i>	H	FACW
4 <i>Cyperus sp.</i>	H	FACW	11 <i>Eleocharis spp.</i>	H	OBL
5 <i>Carex spp.</i>	H	FACW	12 _____		
6 <i>Hydrocotyle sp.</i>	H	FACW	13 _____		
7 <i>Alternanthera philoxeroides</i>	H	OBL	14 _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Freshwater marsh west of pole 35 and west of SR 33. Highly disturbed. Appears isolated.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 34C</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Juncus effusus</u>	H	OBL	8		
2 <u>Polygonum spp.</u>	H	OBL	9		
3 <u>Solidago spp.</u>	H	FACW	10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Remarks: _____

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand

Hydric Soil Indicators:		
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)

Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes ☐ No	Is this Sampling Point Within a Wetland?	☒ Yes ☐ No
Wetland Hydrology Present?	☒ Yes ☐ No		
Hydric Soils Present?	☒ Yes ☐ No		

Remarks: Small isolated wet prairie under ROW.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 35A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Ludwigia peruviana</i>	H	OBL	8		
2 <i>Schinus terebinthifolius</i>	S	FAC	9		
3 <i>Salix spp.</i>	S	OBL	10		
4 <i>Thelypteris spp</i>	S	FACW	11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators:					
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils			
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List			
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List			
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)			
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Ditch wetland west of pole 35 and east of SR 33. Highly disturbed. Appears isolated.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 35B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Myrica spp.</i>	S	FAC
2 <i>Ludwigia peruviana</i>	S	OBL	9 <i>Viola lanceolata</i>	H	OBL
3 <i>Scoparia dulcis</i>	H	FAC	10 <i>Eleocharis sp.</i>	H	OBL
4 <i>Salix caroliniana</i>	S	OBL	11 <i>Cyperus spp.</i>	H	FACW
5 <i>Baccharis sp.</i>	S	FAC	12 <i>Taxodium spp.</i>	T	OBL
6 <i>Ilex cassine</i>	T	OBL	13 <i>Schinus terebinthifolius</i>	S	FAC
7 <i>Acer rubrum</i>	T	FACW	14 <i>Xyris spp.</i>	H	OBL

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators:					
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils			
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List			
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List			
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)			
Remarks: <u>Soils are disturbed by feral hogs.</u>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Wetland begins as a ditch by state road 33 and runs along north side of ROW where it turns into a freshwater marsh.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 35C</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Sambucus canadensis</i>	H	FAC
2 <i>Ludwigia peruviana</i>	S	OBL	9 <i>Woodwardia virginica</i>	H	FACW
3 <i>Scoparia dulcis</i>	H	FAC	10 <i>Imperata cylindrica</i>	H	---
4 <i>Salix caroliniana</i>	S	OBL	11 <i>Eupatorium capillifolium</i>	H	FAC
5 <i>Baccharis spp.</i>	S	FAC	12 <i>Typha sp.</i>	H	OBL
6 <i>Quercus nigra</i>	T	FACW	13		
7 <i>Acer rubrum</i>	T	FACW	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Wetland begins by State road 33 and runs along ROW.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 35D</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Sambucus canadensis</i>	H	FAC
2 <i>Ludwigia peruviana</i>	S	OBL	9 <i>Woodwardia virginica</i>	H	FACW
3 <i>Scoparia dulcis</i>	H	FAC	10 <i>Imperata cylindrica</i>	H	---
4 <i>Salix caroliniana</i>	S	OBL	11 <i>Eupatorium capillifolium</i>	H	FAC
5 <i>Baccharis spp.</i>	S	FAC	12 <i>Typha sp.</i>	H	OBL
6 <i>Quercus nigra</i>	T	FACW	13		
7 <i>Acer rubrum</i>	T	FACW	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand

Hydric Soil Indicators:		
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)

Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes ☐ No	Is this Sampling Point Within a Wetland?	☒ Yes ☐ No
Wetland Hydrology Present?	☒ Yes ☐ No		
Hydric Soils Present?	☒ Yes ☐ No		
Remarks: <u>Wetland begins as ditch along private road and ties into ROW as a freshwater marsh.</u>			

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 36A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8		
2 <i>Acer rubrum</i>	T	FACW	9		
3 <i>Juncus marginatus</i>	H	FACW	10		
4 <i>Eleocharis sp.</i>	H	OBL	11		
5 <i>Solidago canadensis</i>	H	FACU+	12		
6 <i>Carex albolutescens</i>	H	FAC+	13		
7 <i>Viola lanceolata</i>	H	OBL	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 86

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators:					
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils			
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List			
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List			
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)			
Remarks: <u>Soils marginal to poor</u>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Depressional wetland in swale.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 36B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Juncus effusus</u>	H	OBL	8		
2 <u>Ludwigia peruviana</u>	S	OBL	9		
3 <u>Carex albolutescens</u>	H	FAC+	10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand

Hydric Soil Indicators:		
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)

Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes ☐ No	Is this Sampling Point Within a Wetland?	☒ Yes ☐ No
Wetland Hydrology Present?	☒ Yes ☐ No		
Hydric Soils Present?	☒ Yes ☐ No		
Remarks: <u>Depression along edge of pad in ROW swale.</u>			

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 36C</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Viola lanceolata</i>	H	OBL	8 <i>Andropogon glomeratus</i>	H	FAC
2 <i>Setaria sp.</i>	H	FAC	9 <i>Juncus effusus</i>	H	OBL
3 <i>Sporobolus indicus</i>	H	FACU+	10		
4 <i>Centella asiatica</i>	H	FACW	11		
5 <i>Carex albolutescens</i>	H	FAC+	12		
6 <i>Scoparia dulcis</i>	H	FAC	13		
7 <i>Rubus argutus</i>	H	FAC	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 89

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators:					
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils			
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List			
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List			
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)			
Remarks: <u>Soils disturbed.</u>					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Depression along access road.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 37A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Taxodium ascendans</u>	T	OBL	8		
2 <u>Myrica cerifera</u>	H	FAC	9		
3 <u>Ludwigia peruviana</u>	H	OBL	10		
4 <u>Juncus effusus</u>	H	OBL	11		
5 <u>Eupatorium capillifolium</u>	H	FAC	12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Lynne sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 4/1			Fine sand
6-13	E1	10YR 6/2			Fine sand
13-18	E2	10YR 7/2			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Cypress swamp and freshwater marsh wetland on south side of bermed road in ROW.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 37B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Cyperus sp.</u>	H	FACW	8		
2 <u>Typha sp.</u>	H	OBL	9		
3			10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: <u>No apparent hydrologic connection to Wetland 37A, and no culvert connection from I-4.</u>	

SOILS

Map Unit Name (Series and Phase): <u>Lynne sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 4/1			Fine sand
6-13	E1	10YR 6/2			Fine sand
13-18	E2	10YR 7/2			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Freshwater marsh wetland on north side of bermed road in ROW. Highly disturbed with tire ruts and fill spots. The boundaries of this wetland are questionable due to disturbance.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 37C</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Woodwardia virginica</i>	H	FACW	8		
2 <i>Carex albolutescens</i>	H	FAC+	9		
3 <i>Amphicarpum muhlenbergianum</i>	H	FACW	10		
4 <i>Acer rubrum</i>	T	FACW	11		
5 <i>Andropogon glomeratus</i>	H	FACW	12		
6 <i>Rubus argutus</i>	H	FAC	13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand

Hydric Soil Indicators:		
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)

Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	☒ Yes ☐ No	Is this Sampling Point Within a Wetland?	☒ Yes ☐ No
Wetland Hydrology Present?	☒ Yes ☐ No		
Hydric Soils Present?	☒ Yes ☐ No		
Remarks: <u>Wet prairie that transitions into red maple depressional wetland upon exiting ROW.</u>			

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>01/10/08</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 37D</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Woodwardia virginica</i>	H	FACW	8		
2 <i>Juncus effusus</i>	H	OBL	9		
3 <i>Acer rubrum</i>	T	FACW	10		
4 <i>Juncus marginatus</i>	H	FACW	11		
5 <i>Solidago canadensis</i>	H	FACU+	12		
6 <i>Andropogon glomeratus</i>	H	FACW	13		
7 <i>Eleocharis sp.</i>	H	OBL	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 86

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators:					
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime		☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils		☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)	
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>Marginal swale caused by construction of pad.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 39A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Acer rubrum</i>	T	FACW	8		
2 <i>Taxodium ascendans</i>	T	OBL	9		
3 <i>Juncus effusus</i>	H	OBL	10		
4 <i>Eleocharis sp.</i>	H	OBL	11		
5 <i>Hydrocotyle sp.</i>	H	FACW	12		
6 <i>Eupatorium capillifolium</i>	H	FAC	13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Eaton mucky fine sand, depressional</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 4/1			Loamy sand
6-18	E	10YR 6/1			Loamy sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Wetland consists of waterway at east side and floodplain cypress and hardwood swamp adjacent to the west of the waterway; freshwater marsh fringe on the south side of the bermed ROW road.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 40A/B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8 <i>Acer rubrum</i>	T	FACW
2 <i>Hydrocotyle sp.</i>	H	OBL	9 <i>Taxodium ascendans</i>	T	OBL
3 <i>Commelina sp.</i>	H	FACW	10 <i>Juncus effusus</i>	H	OBL
4			11 <i>Eleocharis sp.</i>	H	OBL
5			12 <i>Hydrocotyle sp.</i>	H	FACW
6			13 <i>Eupatorium capillifolium</i>	H	FAC
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	Remarks: <u>Connects to waterway at east side of the wetland. Connects hydrologically to Wetland 40B by concrete pipe from underneath I-4.</u>

SOILS

Map Unit Name (Series and Phase): <u>Eaton mucky fine sand, depressional</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 4/1			Loamy sand
6-18	E	10YR 6/1			Loamy sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Un-named creek and associated freshwater marsh/forested floodplain</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 43A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Eupatorium capillifolium</i>	H	FAC	8		
2 <i>Juncus effusus</i>	H	OBL	9		
3 <i>Rhynchospora sp.</i>	H	FACW	10		
4 <i>Symphotrichum carolinianum</i>	H	OBL	11		
5 <i>Solanum viarum</i>	H	UPL	12		
6 <i>Polygonum hydropiperoides</i>	H	OBL	13		
7 <i>Taxodium ascendans</i>	T	OBL	14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 86

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>2</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Eaton mucky fine sand, depressional</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 4/1			Loamy sand
6-18	E	10YR 6/1			Loamy sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Cypress wetland fringed by freshwater marsh.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 43B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Panicum repens</i>	H	FACW	8		
2 <i>Pontederia cordata</i>	H	OBL	9		
3 <i>Ludwigia peruviana</i>	S	OBL	10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)	
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>4</u> (In.)	
Remarks: <u>Standing water at south portion, south of pole 44.</u>	

SOILS

Map Unit Name (Series and Phase): <u>Eaton mucky fine sand, depressional</u>	Drainage Class: _____																
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>																
Profile Description:																	
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.												
0-6	A	10YR 4/1			Loamy sand												
6-18	E	10YR 6/1			Loamy sand												
Hydric Soil Indicators: <table style="width: 100%;"> <tr> <td>☐ Histosol</td> <td>☐ Reducing Conditions</td> <td>☐ High Organic Content in Surface Layer in Sandy Soils</td> </tr> <tr> <td>☐ Histic Epipedon</td> <td>☒ Gleyed or Low-Chroma Colors</td> <td>☐ Listed on National Hydric Soils List</td> </tr> <tr> <td>☐ Sulfidic Odor</td> <td>☐ Concretions</td> <td>☒ Listed on Local Hydric Soils List</td> </tr> <tr> <td>☐ Aquic Moisture Regime</td> <td>☐ Organic Streaking in Sandy Soils</td> <td>☐ Other (explain in remarks)</td> </tr> </table>						☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils	☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List	☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List	☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils															
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List															
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List															
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)															
Remarks: _____																	

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Freshwater marsh wetland with cypress fringe.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/10/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 44A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Juncus effusus</i>	H	OBL	8		
2 <i>Pontederia cordata</i>	H	OBL	9		
3 <i>Panicum repens</i>	H	FACW	10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>12</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: <u>Hydrologically connected by concrete pipe to Wetland 44B on south side of bermed road.</u>	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>Ditch with freshwater marsh fringe on north side of bermed road in transmission line ROW.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/11/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 44B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? <i>(if needed, explain on reverse)</i> ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Rubus argutus</i>	S	FAC	8		
2 <i>Panicum repens</i>	H	FACW	9		
3 <i>Juncus effusus</i>	H	OBL	10		
4 <i>Taxodium distichum</i>	T	OBL	11		
5 <i>Ludwigia peruviana</i>	S	OBL	12		
6 <i>Baccharis halimifolia</i>	S	FAC	13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)	
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>10</u> (In.) Depth to Saturated Soil: <u>6</u> (In.)	
Remarks: <u>Connected to Wetland 44A by concrete pipe. Does not connect to 45A within ROW, but may connect beyond ROW.</u>	

SOILS

Map Unit Name (Series and Phase): <u>Eaton mucky fine sand, depressional</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> <i>Circle</i> No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 4/1			Loamy sand
6-18	E	10YR 6/1			Loamy sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Freshwater marsh wetland with cypress fringe.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/10/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 45A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Schinus terebinthifolius</u>	<u>S</u>	<u>FAC</u>	8 _____		
2 _____			9 _____		
3 _____			10 _____		
4 _____			11 _____		
5 _____			12 _____		
6 _____			13 _____		
7 _____			14 _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>None</u> (In.) Depth to Saturated Soil: <u>10</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand

Hydric Soil Indicators:		
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List
☐ Sulfidic Odor	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)

Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Culverted ditch that connects to cypress wetland to south.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/10/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 47A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Juncus effusus</u>	H	OBL	8		
2 <u>Panicum repens</u>	H	FACW	9		
3			10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>None</u> (In.) Depth to Saturated Soil: <u>10</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>Depressional wetland that appears to be a seep from the adjacent retention pond to the south.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/10/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 48A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Juncus effusus</u>	H	OBL	8		
2 <u>Polygonum hydropiperoides</u>	H	FAC	9		
3 <u>Scoparia dulcis</u>	H	FAC	10		
4 <u>Setaria spp.</u>	H	FAC	11		
5 <u>Phyla nodiflora</u>	H	FAC	12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>10</u> (In.) Depth to Saturated Soil: <u>6</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Lynne sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 4/1			Fine sand
6-13	E1	10YR 6/2			Fine sand
13-18	E2	10YR 7/2			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>Ditch adjacent to transmission line ROW and I-4.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/10/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 48B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Juncus effusus</u>	H	OBL	8		
2 <u>Polygonum hydropiperoides</u>	H	FAC	9		
3			10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>10</u> (In.) Depth to Saturated Soil: <u>6</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)

Remarks: Hydrologically connected to Wetland 48A by a concrete pipe.

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand

Hydric Soil Indicators:	☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime	☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils
		☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)

Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Hydric Soils Present? ☒ Yes ☐ No
Is this Sampling Point Within a Wetland? ☒ Yes ☐ No		
Remarks: <u>Freshwater marsh; continues to the south; may have some upland inclusions.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/10/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 48C</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Juncus effusus</u>	H	OBL	8		
2 <u>Sesbania sp.</u>	S	FAC	9		
3 <u>Paspalum notatum</u>	H	UPL	10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 66

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>10</u> (In.) Depth to Saturated Soil: <u>6</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand
Hydric Soil Indicators:					
☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime		☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils		☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)	
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Isolated depressions adjacent to Wetland 48B.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/10/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 49A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? <i>(if needed, explain on reverse)</i> ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Juncus effusus</u>	H	OBL	8		
2 <u>Sesbania sp.</u>	S	FAC	9		
3			10		
4			11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>10</u> (In.) Depth to Saturated Soil: <u>6</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)

Remarks: Hydrologically connected to Wetland 48A by concrete pipe.

SOILS

Map Unit Name (Series and Phase): <u>Arents, 0 to 5 percent slopes</u>	Drainage Class: _____
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> <i>Circle</i> No

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/ Size/Contrast	Texture, Concretions, Structure, etc.
0-7	A	10YR 3/1			Fine sand
7-13	E1	10YR 6/2			Fine sand
13-16	B	10YR 3/3			Fine sand

Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime	☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils	☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☐ Listed on Local Hydric Soils List ☐ Other (explain in remarks)
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Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		

Remarks: Channelized ditch with a freshwater marsh fringe.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/7/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 54A</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Panicum repens</i>	H	OBL	8		
2 <i>Phyla nodiflora</i>	H	FAC	9		
3 <i>Xyris sp.</i>	H	OBL	10		
4 <i>Cyperus spp.</i>	H	OBL	11		
5 <i>Bidens sp.</i>	H	OBL	12		
6 <i>Hydrocotyle spp.</i>	H	OBL	13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>4</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: <u>Connected to Wetland 54C through culvert.</u>	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-5	A	10YR 3/1			Fine sand
5-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 7/1			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Ditch along south side of SR 470 on-ramp.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/7/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	
Community ID: <u>Wetland 54B</u>	
Transect ID: _____	
Plot ID: _____	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Juncus effusus</u>	H	OBL	8		
2 <u>Panicum repens</u>	H	FACW	9		
3 <u>Ludwigia peruviana</u>	S	OBL	10		
4 <u>Typha sp.</u>	H	OBL	11		
5			12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>10</u> (In.) Depth to Saturated Soil: <u>6</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Pomona fine sand</u>	Drainage Class: _____																
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle No																
Profile Description:																	
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.												
0-5	A	10YR 3/1			Fine sand												
5-12	E1	10YR 6/1			Fine sand												
12-18	E2	10YR 7/1			Fine sand												
Hydric Soil Indicators: <table style="width: 100%;"><tr><td>☐ Histosol</td><td>☐ Reducing Conditions</td><td>☐ High Organic Content in Surface Layer in Sandy Soils</td></tr><tr><td>☐ Histic Epipedon</td><td>☒ Gleyed or Low-Chroma Colors</td><td>☐ Listed on National Hydric Soils List</td></tr><tr><td>☐ Sulfidic Odor</td><td>☐ Concretions</td><td>☒ Listed on Local Hydric Soils List</td></tr><tr><td>☐ Aquic Moisture Regime</td><td>☐ Organic Streaking in Sandy Soils</td><td>☐ Other (explain in remarks)</td></tr></table>						☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils	☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List	☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List	☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils															
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List															
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List															
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)															
Remarks: _____																	

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>Roadside swale/detention area on west side of bermed access road between I-4 and SR 470 on-ramp.</u>		

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/7/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 54C</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Polygonum hydropiperoides</i>	H	OBL	8		
2 <i>Symphytotrichum subulatum</i>	H	OBL	9		
3 <i>Setaria parviflora</i>	H	FAC	10		
4 <i>Phyla nodiflora</i>	H	FAC	11		
5 <i>Cyperus flavescent</i>	H	FACW	12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>6</u> (In.) Depth to Saturated Soil: <u>4</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☒ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Immokalee sand</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle Yes No				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-6	A	10YR 3/1			Fine sand
6-12	E1	10YR 6/1			Fine sand
12-18	E2	10YR 8/1			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Wetland Hydrology Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Hydric Soils Present? ☒ Yes ☐ No		
Remarks: <u>Ditch with culverts along the on-ramp to SR 470. Culvert runs underneath on-ramp to 470 and wetland continues to northeast.</u>		

ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/5/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	
Community ID: <u>Wetland 60A</u>	
Transect ID: _____	
Plot ID: _____	

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <u>Ludwigia peruviana</u>	H	OBL	8 _____		
2 <u>Eupatorium capillifolium</u>	H	FAC	9 _____		
3 <u>Urena lobata</u>	H	UPL	10 _____		
4 _____			11 _____		
5 _____			12 _____		
6 _____			13 _____		
7 _____			14 _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☒ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Field Observations: Depth of Surface Water: <u>12</u> (In.) Depth to Free Water in Pit: <u>At surface</u> (In.) Depth to Saturated Soil: <u>At surface</u> (In.)	
Remarks: _____	

SOILS

Map Unit Name (Series and Phase): <u>Basinger mucky fine sand, depressional</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-2	A	10YR 2/2			Fine sand
2-18	E	10YR 5/1			Fine sand
Hydric Soil Indicators:					
☐ Histosol	☐ Reducing Conditions	☐ High Organic Content in Surface Layer in Sandy Soils			
☐ Histic Epipedon	☒ Gleyed or Low-Chroma Colors	☐ Listed on National Hydric Soils List			
☐ Sulfidic Odor	☐ Concretions	☒ Listed on Local Hydric Soils List			
☐ Aquic Moisture Regime	☐ Organic Streaking in Sandy Soils	☐ Other (explain in remarks)			
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Deeply incised ditch wetland with standing water; disturbed.</u>	

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/7/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 60B</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Phyla nodiflora</i>	H	FAC	8		
2 <i>Gelsemium sp.</i>	H	FAC	9		
3 <i>Croton sp.</i>	H	FACW	10		
4 <i>Setaria geniculata</i>	H	FAC	11		
5 <i>Eupatorium capillifolium</i>	H	FAC	12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 inches ☒ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands
Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>None</u> (In.) Depth to Saturated Soil: <u>10</u> (In.)	Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)

Remarks: Hydrology marginal due to drought, but according to OUC, water ponds in the area for several months at a time. Water marks on guywire.

SOILS

Map Unit Name (Series and Phase): <u>Basinger mucky fine sand, depressional</u>	Drainage Class: _____
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle Yes No

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-2	A	10YR 2/2			Fine sand
2-18	E	10YR 5/1			Fine sand

Hydric Soil Indicators:	☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime	☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils	☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)
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Remarks: _____

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	

Remarks: Marginal wetland adjacent to berm road in ROW; herbaceous.

DATA FORM
ROUTINE WETLAND DETERMINATION
(1987 COE Wetlands Delineation Manual)

Project Site: <u>063-7654.0130 McIntosh Plant – Lake Agnes Substation</u>	Date: <u>12/7/07</u>
Applicant/Owner: <u>OUC</u>	County: <u>Polk</u>
Investigator: <u>M. Arrants, S. Rizzo</u>	State: <u>FL</u>
Do Normal Circumstances exist on the site? ☒ Yes ☐ No	Community ID: <u>Wetland 60C</u>
Is the site significantly disturbed (Atypical Situation)? ☒ Yes ☐ No	Transect ID: _____
Is Area a Potential Problem Area? (if needed, explain on reverse) ☐ Yes ☒ No	Plot ID: _____

VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 <i>Phyla nodiflora</i>	H	FAC	8		
2 <i>Gelsemium sp.</i>	H	FAC	9		
3 <i>Croton sp.</i>	H	FACW	10		
4 <i>Setaria geniculata</i>	H	FAC	11		
5 <i>Eupatorium capillifolium</i>	H	FAC	12		
6			13		
7			14		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100

Remarks: _____

HYDROLOGY

☐ Recorded Data (describe in Remarks) ☐ Stream, Lake, or Tide Gauge ☐ Aerial Photographs ☐ Other ☒ No recorded data available Field Observations: Depth of Surface Water: <u>None</u> (In.) Depth to Free Water in Pit: <u>None</u> (In.) Depth to Saturated Soil: <u>10</u> (In.)	Wetland Hydrology Indicators: Primary Indicators: ☐ Inundated ☐ Saturated in Upper 12 inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns in Wetlands Secondary Indicators (2 or more required): ☐ Oxidized Root Channels in Upper 12" ☐ Water-Stained Leaves ☐ Local Soil Survey Data ☐ FAC-Neutral Test ☐ Other (explain in remarks)
Remarks: <u>Hydrology marginal due to drought conditions.</u>	

SOILS

Map Unit Name (Series and Phase): <u>Basinger mucky fine sand, depressional</u>	Drainage Class: _____				
Taxonomy (Subgroup): _____	Field Observations Confirm Mapped Type? <u>Yes</u> Circle <u>No</u>				
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Size/Contrast	Texture, Concretions, Structure, etc.
0-2	A	10YR 2/2			Fine sand
2-18	E	10YR 5/1			Fine sand
Hydric Soil Indicators: ☐ Histosol ☐ Histic Epipedon ☐ Sulfidic Odor ☐ Aquic Moisture Regime ☐ Reducing Conditions ☒ Gleyed or Low-Chroma Colors ☐ Concretions ☐ Organic Streaking in Sandy Soils ☐ High Organic Content in Surface Layer in Sandy Soils ☐ Listed on National Hydric Soils List ☒ Listed on Local Hydric Soils List ☐ Other (explain in remarks)					
Remarks: _____					

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No	Is this Sampling Point Within a Wetland? ☒ Yes ☐ No
Wetland Hydrology Present? ☒ Yes ☐ No	
Hydric Soils Present? ☒ Yes ☐ No	
Remarks: <u>Marginal wetland on south side of berm road in ROW, southwest of pole 60. Red maple fringe.</u>	

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: McIntosh to Lake Agnes Substation, Structures 1 - 14

State: FL County/parish/borough: Polk City: Combee Settlement

Center coordinates of site (lat/long in degree decimal format): Lat. 28.081459° **N**, Long. -81.523900° **W**.

Universal Transverse Mercator:

Name of nearest waterbody: Lake Parker

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

Name of watershed or Hydrologic Unit Code (HUC): Saddle Creek

☐ 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: 4/30/08

☒ Field Determination. Date(s): 5/2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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 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** "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: 11.38 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: 1.35 acres of isolated wetlands.

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: **Pick List**

Drainage area: **Pick List**

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: _____.

Identify flow route to TNW⁵: _____.

Tributary stream order, if known: _____.

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

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.

(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
☐ 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
☐ 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: .

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.

(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. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

- Wetland size: acres
- Wetland type. Explain: .
- Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

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

All wetland(s) being considered in the cumulative analysis: **Pick List**

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: Wetlands 8A, 9A/11A, and 12A are located within the Saddle Creek watershed, and connect through culverts to wetlands adjacent to Lake Parker. These wetlands provide the capacity to reduce pollutant/nutrient loads to the Lake, as well as provide habitat and life cycle support functions for fish and wildlife that are present in the Lake..

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-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: .

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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **11.38** 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.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: .

⁸See Footnote # 3.

⁹To 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.**

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: **Wetlands 4A, 4B, 6A, 8B, 13C, and 14A/14B are isolated systems that do not connect directly or through culverts to any RPW or TNW.**
☐ 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: 1.35 acres.

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: completed for Lake Marion as part of Kissimmee River project.
☒ U.S. Geological Survey Hydrologic Atlas: .
☐ 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: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Google Earth aerial photography, date unknown.
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): 1:150,000 USGS topographic map, Florida Atlas & Gazetteer, 2003.

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: McIntosh to Lake Agnes Substation, Structures 15 - 55

State: FL

County/parish/borough: Polk

City: Gibsonia

Center coordinates of site (lat/long in degree decimal format): Lat. 28.137648° **N**, Long. -81.903072° **W**.

Universal Transverse Mercator:

Name of nearest waterbody: Lake Deeson

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

Name of watershed or Hydrologic Unit Code (HUC): Orange Hammock Drain

☐ 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: 4/29/08

☒ Field Determination. Date(s): 5/2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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 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** "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: 19.86 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: 28.97 acres of isolated wetlands occur within the review area.

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: **Pick List**

Drainage area: **Pick List**

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: _____.

Identify flow route to TNW⁵: _____.

Tributary stream order, if known: _____.

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

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.

(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	☐ 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	
☐ 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: .

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.

(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. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

- Wetland size: acres
- Wetland type. Explain: .
- Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

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

All wetland(s) being considered in the cumulative analysis: **Pick List**

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: Wetlands 27A, 35A, 35B, 35C, 37A, 40A/B, 43A, 43B, 44A, 44B, and 45A are located within the Orange Hammock Drainage watershed, and connect to wetlands that drain to Saddle Creek. These wetlands provide the capacity to reduce downstream pollutant/nutrient loads, as well as provide habitat and life cycle support functions for fish and wildlife and nutrient transport for downstream systems.

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-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: .

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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **19.86** 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.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: .

⁸See Footnote # 3.

⁹To 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.**

☐ 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: **Wetlands 16A/18A, 19A, 22A/B, 23A, 23B, 26A, 27B, 29A, 33A, 33B, 34A, 34B, 34C, 35D, 36A, 36B, 36C, 37B, 37D, 39A, 39, 46B, 46C, 47A, 48A, 48B, 48C, 49A, 49B, 54A, 54B, and 54C do not connect directly or indirectly to any RPW or TNW, and do not provide a significant nexus with any TNW.**

☐ 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: 28.97acres.

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: completed for Lake Marion as part of Kissimmee River project.

☒ U.S. Geological Survey Hydrologic Atlas: .

☐ 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: .

☐ State/Local wetland inventory map(s): .

☐ FEMA/FIRM maps: .

☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Google Earth, 2011.

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): 1:150,000 USGS topographic map, Florida Atlas & Gazetteer, 2003.

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: McIntosh to Lake Agnes Substation, Structures 56 - 62

State: FL

County/parish/borough: Polk

City: Polk City

Center coordinates of site (lat/long in degree decimal format): Lat. 28.155580° **N**, Long. -81.826242° **W**.

Universal Transverse Mercator:

Name of nearest waterbody: Lake Agnes

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

Name of watershed or Hydrologic Unit Code (HUC): Lake Agnes Outlet

☐ 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: 4/29/08

☒ Field Determination. Date(s): 5/2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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 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** "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: 0.68 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: **0.68 acres of isolated wetlands occur in the vicinity of Structure 60, no connection to RPW or TNW.**

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: **Pick List**

Drainage area: **Pick List**

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: _____.

Identify flow route to TNW⁵: _____.

Tributary stream order, if known: _____.

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

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.

(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	☐ 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	
☐ 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: .

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.

(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. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

- Wetland size: acres
- Wetland type. Explain: .
- Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

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

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- ☐ TNWs: linear feet width (ft), Or, acres.
- ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- ☐ Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-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: .

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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **1.20** 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.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: .

⁸See Footnote # 3.

⁹To 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: **Wetlands 60A, 60B, and 60C are located within the Lake Agnes Outlet watershed, and are isolated. Therefore, a significant nexus does not exist between wetlands within the review area and any TNW.**
☐ 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: 0.68 acres.

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: completed for Lake Marion as part of Kissimmee River project.
☒ U.S. Geological Survey Hydrologic Atlas: .
☐ 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: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): Google Earth aerial photography, date unknown.
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): 1:150,000 USGS topographic map, Florida Atlas & Gazetteer, 2003.

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

