

Woods Ferry

(Suwannee County)

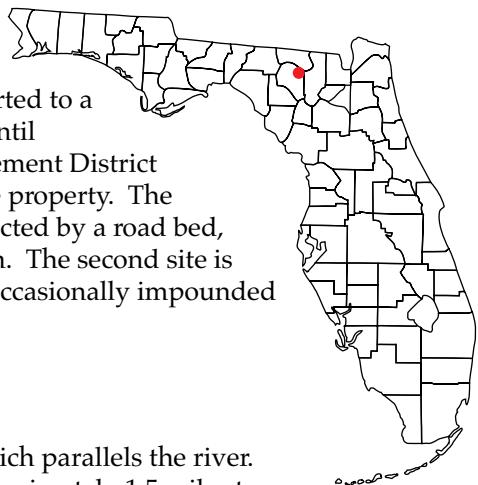
SWAMP CUTOVER/FLATWOODS AND STREAM SEEPAGE SLOPE



Stream seepage slope

LOCATION

The Woods Ferry property is located adjacent to the Suwannee River approximately five miles northeast of Live Oak. The property historically consisted of long slopes of upland pine forest dominated by nearly pure stands of *Pinus palustris* (longleaf pine) intersected by several small streams running north to the Suwannee River floodplain. The area was converted to a pine plantation and has been managed as such until purchased by the Suwannee River Water Management District (SRWMD). Two reference sites are located on the property. The surficial flow through the first site has been restricted by a road bed, although the date of the road activity is unknown. The second site is located on a slope adjacent to a stream which is occasionally impounded by beavers.



ACCESS

The property may be reached from C.R. 136A which parallels the river. From I-10 take the U.S.129 exit and go north approximately 1.5 miles to S.R. 136A. Turn east on S.R.136A and travel approximately 5.5 miles to 57th road. Turn

on to 57th road and continue straight to the entrance of the Woods Ferry tract. The reference sites are not easy to locate without assistance. Individuals desiring to visit the sites should first contact either the DEP/Wetlands Evaluation and Delineation Section or the Suwannee River Water Management District.

COMMUNITY CHARACTERIZATION - SWAMP/CUTOVER FLATWOODS

The floodplain of the Suwannee River does not extend to this site, although the discharge from this wetland may flow into the Suwannee floodplain. The canopy of the wetland is dominated by *Nyssa sylvatica* var. *biflora* (swamp tupelo), *Acer rubrum* (red maple), and *Quercus laurifolia* (swamp laurel oak). The flatwoods surrounding the wetland were heavily impacted by silviculture operations.

DELINEATION PROCEDURE - SWAMP/CUTOVER FLATWOODS

The wetland is a mixed hardwood swamp and is identifiable by direct reference to the wetland definition. The wetland delineation begins at the edge of the swamp tupelo dominated portion of the swamp and extends landward following hydric soil indicators and a dominance of listed vegetation in the canopy (subsections 62-340.300(2)(a) and (b), F.A.C.). The vegetative community changes during the landward progression from swamp tupelo canopy to swamp laurel oak canopy to slash pine canopy. At the point where slash pine are encountered, the canopy is sparse. When the uppermost strata constitutes less than 10% cover, one of the remaining strata and not the upper most strata, is used for the evaluation of vegetative dominance. In this situation, the ground cover is the appropriate stratum to use. The ground cover under the slash pine is dominated by *Lyonia lucida* (fetterbush), *Cyrilla racemiflora* (titi), and *Andropogon glomeratus* (broomsedge). The groundcover includes several facultative species as conspicuous elements, which do not enter into the evaluation of vegetative dominance. Using the provisions of subsection 62-340.300(2)(b), F.A.C., the point where hydric soil indicators are no longer present is established as the wetland boundary.

Vegetation Immediately Waterward of Wetland Boundary.

Canopy

Pinus elliottii UPLAND slash pine

Ground cover

**	<i>Andropogon glomeratus</i>	FACW	broomsedge
	<i>Aronia arbutifolia</i>	FACW	red chokeberry
	<i>Boehmeria cylindrica</i>	OBL	bog hemp
**	<i>Cyrilla racemiflora</i>	FAC	titi
	<i>Eupatorium perfoliatum</i>	FACW	boneset
	<i>Euthamia</i> sp.	FAC	flat-topped goldenrod

<i>Ilex glabra</i>	UPLAND	gallberry
<i>Osmunda cinnamomea</i>	FACW	cinnamon fern
<i>Panicum dichotomum</i>	FACW	panic grass
<i>Persea palustris</i>	OBL	swamp bay
<i>Pluchea</i> sp.	FACW	marsh fleabane
<i>Rhexia nuttallii</i>	FACW	meadow beauty
<i>Serenoa repens</i>	UPL	saw palmetto
<i>Smilax glabra</i>	VINE	glaucous cat-briar
<i>Solidago fistulosa</i>	FACW	marsh goldenrod

Vegetation Immediately Landward of the Wetland Boundary.

Canopy

<i>Pinus elliottii</i>	UPLAND	slash pine
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Ground cover

<i>Andropogon glomeratus</i>	FACW	broomsedge
<i>Cyrilla racemiflora</i>	FAC	titi
** <i>Ilex glabra</i>	UPLAND	gallberry
<i>Panicum dichotomum</i>	FACW	panic grass
<i>Pinus elliottii</i>	UPLAND	slash pine
** <i>Serenoa repens</i>	UPLAND	saw palmetto

** Designates species which are overwhelmingly dominant.

COMMUNITY CHARACTERIZATION - STREAM SEEPAGE SLOPE

This site consists of a small blackwater stream, the associated floodplain, and the contributing hydric seepage slope. The stream is a surface water body pursuant to section 62-340.600, F.A.C. flowing through a floodplain swamp, a wetland identifiable by direct use of the wetland definition. Within the swamp forest, which is dominated by *Nyssa ogeche* (Ogeechee tupelo), *Taxodium distichum* (bald cypress), *Acer rubrum* (red maple), *Nyssa sylvatica* var. *biflora* (swamp tupelo), *Fraxinus caroliniana* (popash), and *Betula nigra* (river birch), numerous hydrologic indicators are present. These consist of obvious water marks, rafted debris, adventitious roots, buttresses and hummocks. Above the floodplain swamp is a hydric seepage slope forest dominated by a canopy of *Quercus laurifolia* (swamp laurel oak), *Liquidambar styraciflua* (sweetgum), and *Pinus elliottii* (slash pine) with a cinnamon fern dominated ground cover. Hydric seepage slopes are wetlands which seldom experience deep or sustained inundation, but which provide a long term discharge of near surface ground water to other vegetative communities, usually other wetland communities.

DELINEATION PROCEDURE - STREAM SEEPAGE SLOPE

The delineation of the wetland boundary begins at the edge of the floodplain swamp, which is identifiable as a wetland directly from the definition. Since the hydrologic indicators are so pronounced, attempting to establish the wetland boundary using subsection 62-340.300(2)(d), F.A.C., is an appropriate place to start. While an examination of the hydrologic indicators does not produce a consistent elevation, this is not unexpected for the small streams of the area, which are subject to frequent, short term, flooding events. Additionally, this stream has a history of periodic impoundment by beavers which also contributes to the variation in hydrologic indicators (reasonable scientific judgement). By comparing the use of hydrologic indicators with vegetative dominance (subsections 62-340.300(2)(a) and (b), F.A.C.), it is apparent that the vegetative dominance and the highest level of sustained inundation, as reflected by the hydrologic indicators observed, are very close in elevation. Because beavers may have influenced the expression of the hydrologic indicators, it is a reasonable scientific judgement to use the vegetative dominance and not the hydrologic indicators to establish the wetland boundary, although in this case the differences between the two approaches would be slight. Further support for this decision is: 1. the degree of slope, and 2. the nature of the vegetative dominance, which is more typical of sustained saturation and perhaps additionally only brief periods of shallow inundation. The deeper inundation evidenced by the most elevated of the hydrologic indicators is best attributed to the occasional alteration of stream characteristics caused by the beavers. Vegetative dominance on the slope is established using subsection 62-340.300(2)(b), F.A.C. Hydric soil indicators, however, do not extend to the limits of vegetative dominance, thus the wetland boundary is located where vegetation is no longer supported by the presence of hydric soils. As an additional note, SRWMD staff indicated that the ten-year flood elevation occurs above the wetland boundary in an area of dense saw palmetto.

Vegetation Immediately Waterward of the Wetland Boundary, Not Including the Stream Channel Floodplain Swamp

Canopy

<i>Acer rubrum</i>	FACW	red maple
<i>Cyrilla racemiflora</i>	FAC	titi
<i>Liquidambar styraciflua</i>	FACW	sweetgum
<i>Nyssa sylvatica var. biflora</i>	OBL	swamp tupelo
<i>Pinus elliotii</i>	UPLAND	slash pine
<i>Quercus laurifolia</i>	FACW	swamp laurel oak

Subcanopy

<i>Acer rubrum</i>	FACW	red maple
<i>Cyrilla racemiflora</i>	FAC	titi
<i>Myrica cerifera</i>	FAC	wax myrtle
<i>Cyrilla racemiflora</i>	FAC	titi

Ground cover

<i>Clethra alnifolia</i>	FACW	sweet pepperbush
<i>Cyrilla racemiflora</i>	FAC	titi
<i>Ilex glabra</i>	UPLAND	gallberry
<i>Myrica cerifera</i>	FAC	wax myrtle
** <i>Osmunda cinnamomea</i>	FACW	cinnamon fern
<i>Osmunda regalis</i>	OBL	royal fern
<i>Persea palustris</i>	OBL	swamp bay
<i>Serenoa repens</i>	UPLAND	saw palmetto
<i>Smilax glabra</i>	VINE	glaucous cat-briar
<i>Vaccinium corymbosum</i>	FACW	high bush blueberry

Vegetation Immediately Landward of the Wetland Boundary.

Canopy

<i>Pinus elliotii</i>	UPLAND	slash pine
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Ground cover

<i>Clethra alnifolia</i>	FACW	sweet pepperbush
** <i>Osmunda cinnamomea</i>	FACW	cinnamon fern
** <i>Serenoa repens</i>	UPLAND	saw palmetto

** Designates species which are overwhelmingly dominant.

SOIL DESCRIPTIONS

Swamp/Cutover Flatwoods

USDA-NRCS Soil Survey of Suwannee County - Sheet 15

The wetland is associated with a pond in the below mentioned upland soil.

The upland soil is mapped as Leon fine sand, 0 to 2 percent slope (mapping unit #LfA)

LfA - Leon fine sand, 0 to 2 percent slope is composed of:

80% - Leon soil	non-hydric component
10% - Leon soil	hydric inclusion
10% - Pomello soil	non-hydric inclusion

Soil Profile Descriptions

Point 1. Landward Edge of Swamp (water table - 7 inch depth)

<u>Horizon</u>	<u>Depth (in)</u>	
Oe	1-0	dark reddish brown (5YR 2.5/2) peat and root mat
Oa	0-1	dark reddish brown (5YR 2.5/2) muck
A	1-5	black (N 2/0) fine sand
E	5-15	light brownish gray (10YR 6/2) fine sand

Hydric: Yes

Hydric soil field indicators: Accumulation of muck and/ or depth of dark topsoil

Point 2. Immediately Waterward of Wetland Boundary Line

<u>Horizon</u>	<u>Depth (in)</u>	
Oe	1-0	dark reddish brown (5YR 2.5/2) peat and root mat
A1	0-8	black (N 2/0) fine sand with approximately 20% of the sand grains uncoated with organics

Hydric: Yes

Hydric soil field indicators: depth of dark topsoil

Point 3. Immediately Landward of Wetland Boundary Line

<u>Horizon</u>	<u>Depth (in)</u>	
Oe	1-0	dark reddish brown (5YR 2.5/2) root mat
A1	0-2	black (N 2/0) fine sand
A2	2-8	black (N 2/0) with a salt and pepper appearance

Hydric: No

Hydric soil field indicators: none

Stream Seepage Slope

USDA-NRCS Soil Survey of Suwannee County - Sheet 6

The wetland soil is mapped as Alluvial land (mapping unit #A1)

A1 - Alluvial land is composed of:

90% - Alluvial land	hydric component
10% - Plummer soil	non-hydric inclusion

The upland soil is mapped as Leon fine sand, 0 to 2 percent slope (mapping unit #LfA)

LfA - Leon fine sand, 0 to 2 percent slope is composed of:

80% - Leon soil	non-hydric component
10% - Leon soil	hydric inclusion
10% - Pomello soil	non-hydric inclusion

Soils were verified in the field, but the descriptions for the soils are missing.

