PMLevyCOLPEm Resource

From:	Hambrick, Gordon A SAJ [Gordon.A.Hambrick@usace.army.mil]
Sent:	Friday, February 03, 2012 11:42 AM
То:	Bruner, Douglas
Cc:	LevyCOL Resource
Subject:	RE: wetland impacts in the FEIS (UNCLASSIFIED)
Attachments:	FDEP JD LNP 10-07-2011.pdf; Exhibit A.pdf

Classification: UNCLASSIFIED Caveats: NONE

Attached is a copy of the FDEP's Notice of Agency Action with Final Report attached. Issued on October 7, 2011. It was sent to our Jax office, and I didn't get it until last month. Only for the 5,378-acre site, as defined by FDEP on page 3 and map (Exhibit A) on page 4 of the final report. The scan of the Notice and final report is in B&W due to file size. I separately scanned Exhibit A in color so you can see. My recollection is that Paul Snead said during one of our meetings/teleconferences sometime in the last several months, that only the facility site, as shown in the final report, would have a formal jurisdictional declaration from FDEP, and there would not be one for transmission lines. If you need more information in regard to FEDP's actions, you'll need to contact Paul or FDEP. Don

Gordon A. (Don) Hambrick, III Senior Project Manager Panama City Permits Section US Army Corps of Engineers Jacksonville District 1002 West 23rd Street, Suite 350 Panama City, Florida 32401

Office: 850-763-0717, ext. 25 Fax: 850-872-0231

-----Original Message-----From: Bruner, Douglas <u>[mailto:Douglas.Bruner@nrc.gov]</u> Sent: Wednesday, February 01, 2012 5:26 PM To: Hambrick, Gordon A SAJ Cc: LevyCOL Resource Subject: FW: wetland impacts in the FEIS

Don, answer Peyton's question (see below).

From: Doub, Peyton Sent: Wednesday, February 01, 2012 4:17 PM To: Bruner, Douglas Subject: FW: wetland impacts in the FEIS Doug: Do you know if FDEP has concurred yet with PEF's wetland delineations?

-Peyton

From: Aston, Lara M [mailto:lara.aston@pnnl.gov]
Sent: Wednesday, February 01, 2012 4:17 PM
To: Doub, Peyton
Subject: Re: wetland impacts in the FEIS

I have not heard whether or not FDEP has approved the delineations.would Don H. from the Corps know the answer to that question?

- L

From: "Doub, Peyton" <<u>Peyton.Doub@nrc.gov</u>>
Date: Wed, 1 Feb 2012 12:59:24 -0800
To: Lara Aston <<u>lara.aston@pnnl.gov</u>>
Subject: RE: wetland impacts in the FEIS

Lara:

Do you know whether FDEP ever approved the Levy wetland delineations? Our FEIS says that FDEP approval is still needed. I just wanted to check. Thanks.

-Peyton

From: Aston, Lara M [mailto:lara.aston@pnnl.gov]
Sent: Wednesday, February 01, 2012 12:19 PM
To: Doub, Peyton
Subject: wetland impacts in the FEIS

Peyton,

I'm sorry it's taken me so long to get back to you about the tables that we received a couple of weeks ago. I went ahead and calculated the totals from their tables and the numbers were

the same as what you and I had in Chapter 4 (in the wetland impacts table). If you have any questions, please don't hesitate to call or email me.

Hope all is well with you.

-Lara

Lara M. Aston Research Scientist Coastal Ecosystem Research

Pacific Northwest National Laboratory Marine Science Laboratory 1529 West Sequim Bay Road Sequim, WA 98382 USA Tel: 360-681-4557 Fax: 360-681-4559 lara.aston@pnl.gov WWW.pnl.gov

Classification: UNCLASSIFIED Caveats: NONE

Hearing Identifier:	Levy_County_COL_Public
Email Number:	982

Mail Envelope Properties (1FB790893E639745BAAAB98FB538B84318B87A)

Subject: Sent Date:	RE: wetland impacts in the FEIS (UNCLASSIFIED) 2/3/2012 11:41:49 AM
Received Date:	2/3/2012 11:42:48 AM
From:	Hambrick, Gordon A SAJ

Created By: Gordon.A.Hambrick@usace.army.mil

Recipients:

"LevyCOL Resource" <LevyCOL.Resource@nrc.gov> Tracking Status: None "Bruner, Douglas" <Douglas.Bruner@nrc.gov> Tracking Status: None

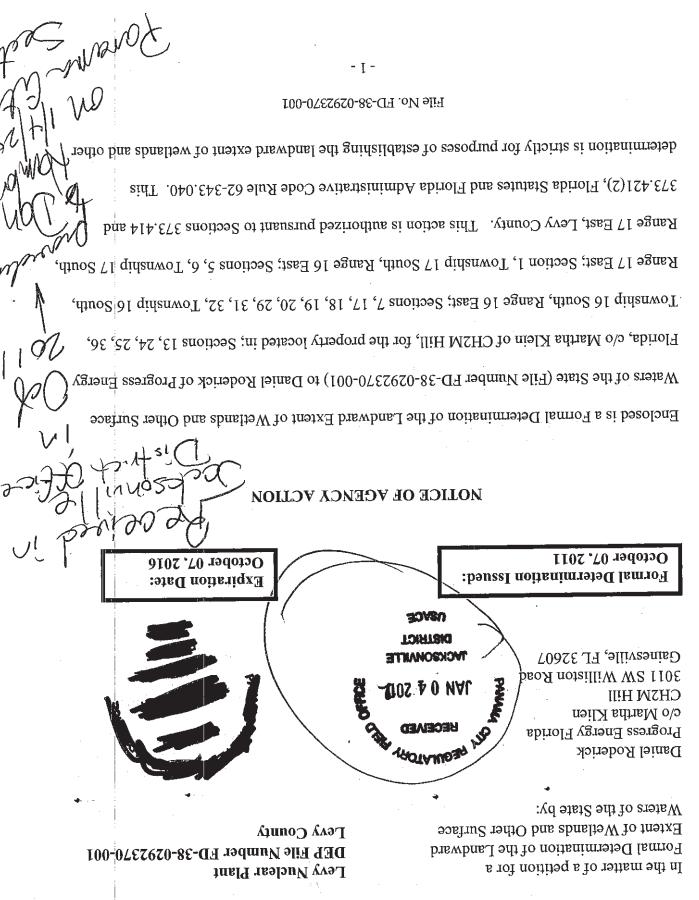
Post Office: EIS-MB04CPC.eis.ds.usace.army.mil

Files MESSAGE FDEP JD LNP 10-07-2011.pdf Exhibit A.pdf	Size 3234 502695	2716485	Date & Time 2/3/2012 11:42:48 AM
Options Priority:	Standard		

Priority:	Standard
Return Notification:	No
Reply Requested:	No
Sensitivity:	Normal
Expiration Date:	
Recipients Received:	

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION



surface waters of the State and does not relieve you from the responsibility of obtaining a federal permit from the U.S. Army Corps of Engineers, where applicable, and any permits that may be required from your Water Management District or local government.

Any party to this Order has the right to seek judicial review of the application pursuant to Section 120.68, Florida Stanties by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of appellation sedure with the Clerk of the Department in the of Office of General Florida 32399 2000 and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida

OF ENVIRONMENTAL PROTECTION STATE OF FLORIDA DEPARTMENT

Eric Hickman, Fuvironmental Administrator Eric Hickman, Environmental Administrator Wetland Evaluation and Delineation Section Office of Submerged Lands and Environmental Resources Division of Water Resource Management Scoo Blair Stone Road, MS 2500 (850) 245-8496 (850) 245-8496

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF AGENCY ACTION and all copies were mailed before the

close of business on October $\overline{7}$, 2011 to the persons listed below.

EITING VND VCKNOMFEDGEWENL

FILED, on this date, pursuant to 120.52(9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

11/2/01 ______Date____ Clerk

Copies furnished to: w/ enclosures

Jim Maher, FDEP, NE District, Jacksonville, Florida 32207 Clark Hull; SWFWMD; 2379 Broad St.; Brooksville, FL 34604-6899 Beverlee Lawrence; USACOE; Atlantic Permits Branch Office; 701 San Marco Blvd. Room 372

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METLANDS AND OTHER SURFACE WATERS OF THE STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

VPPLICATION NUMBER FD-38-0292370-001

Levy Nuclear Plant

Daniel Roderick of Progress Energy Florida, 299 First Avenue North, *St.* Petersburg, Florida 33701, has filed an application (FD-38-0292370-001) pursuant to Sections 373.414 and 373.421(2), Florida Statutes, and Rule 62-343.040, Florida Administrative Code for a Formal Determination of the Landward Extent acre property located in; Sections 13, 24, 25, 36, Township 16 South, Range 16 East; Sections 7, 17, 18, 19, 20, 29, 31, 32, Township 16 South, Range 17 East; Section 1, Township 17 South, Range 16 East; Sections 5, 6, Township 17 South, Range 17 East, Levy County. The application was received on March 05, 2008. The Department, via a letter dated August 08, 2011 advised the applicant that the application was complete pending receipt of five copies of maps delineating the applicant that the application was complete pending receipt of five copies of maps delineating the wetlands and other surface waters of the State as determined by the Department on May 03, 2011.

Upon review of information submitted by the applicant and a detailed site evaluation performed by the Department's staff (report enclosed), the landward extent of wetlands and other surface waters of the State subject to the Department's environmental resource permitting procedures at the property has been determined. The Formal Determination of the Landward Extent of Wetlands and Other Surface Waters of the State subject to the Department's environmental resource permitting procedures at the property has been determined. The Formal Determination of the Landward Extent of Wetlands and Other Surface Waters of the State subject to the Department's environmental resource permitting procedures at the property has been of the State subject to the Department's environmental resource permitting procedures at the property has been determined. The Formal Determination of the Landward Extent of Wetlands and Other Surface Waters of the State subject to the Department's environmental resource permitting procedures at the property has been of the state subject to the Department's environmental resource permitting procedures at the property has been of the state subject to the Poindaries (Netre State is shown on Attachment A of the final report. The bold black line delineates the boundaries of the state inspected. The red hatched areas on Attachment A delineate the wetlands and other surface surface is unspected.

File No. FD-38-0292370-001

- 7 -

waters. The applicant elected to have the formal determination line surveyed, and has provided the Department with five copies of the survey properly certified in accordance with Chapter 472, Florida Statutes.

Notice of the Agency's intent to grant a Formal Determination of the Landward Extent of Wetlands and Other Surface Waters of the State for the Levy Nuclear Plant (FD-38-0292370-001) was published on September 01, 2011 in the Levy County Journal daily newspaper in Levy County, Florida. No petition for hearing has been filed concerning this matter.

The Formal Determination of the Landward Extent of Wetlands and Other Surface Waters of the State is binding for a period of five (5) years from the date of this determination provided physical conditions on the property do not change so as to alter wetland boundaries during this time. The Department may revoke this formal determination if it finds that the applicant has submitted inaccurate information in the application.

ENVIROUMENTAL PROTECTION STATE OF FLORIDA DEPARTMENT OF

Eric Hickman, Environmental Administrator mm

Eric Hickman, Environmental Administrator Wetland Evaluation and Delineation Section Office of Submerged Lands and Environmental Resources Division of Water Resource Management Tallahassee, Florida 32399-2400 (850) 245-8496 (850) 245-8496

EINAL REPORT

For

ED-38-0535310-001 FEAX NUCLEAR PLANT



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EOBMAL DETERMINATION OF THE LAUDWARD EXTENT OF WETLANDS AND

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Water Resource Management

Office of Submerged Lands and Environmental Resources

Wetland Evaluation and Delineation Section

Ргерагеd by

John Humphreys, Ecologist

Wetland Evaluation and Delineation Section Florida Department of Environmental Protection 2600 Blairstone Road, MS 2500 Tallahassee, Florida 32399 (850) 245-8487

FD-38-0292370-001

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FINAL REPORT

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	S	Project Area Description
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EXHIBILZ

Exhibit A: Location of Levy Nuclear Plant Project Area

Exhibit B: Soils Map for Levy Nuclear Plant Project Area

Exhibit C: Hydrological Features for Levy Nuclear Plant Project Area

TABLES

Vetland Definition45	:č sldsT
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Formal Determination of the Landward Extent of Waters of the State Formal Determination of the Landward Extent of Waters of the State

Formal Determination

The Department of Environmental Protection's Wetland Evaluation and Delineation Section conducted multiple field inspections of the Levy Nuclear Plant project area between March 25, 2008 and May 03, 2011.

Wetland Evaluation and Delineation Section (WEDS) staff members assisting with field inspections included Eric Hickman, Maynard Sweeley, Charles Bidwell, Jay Kamke, Matthew WEDS staff, Martha Klein, Gabriel Dupree, Darren Bishop, Tony Davanzo, and Hugo Thouverez of CH2MHILL Incorporated assisted with field inspections as representatives of the petitioner.

The landward extent of waters of the State subject to the wetland resources jurisdiction of the Florida Department of Environmental Protection (FDEP) for the Levy Nuclear Plant project is delineated on the aerial photocopy and certified survey appended as Attachment A. The bold black line demarcates the boundary of the area inspected. The red hatched area represents the resources jurisdiction of the FDEP in accordance with Rule 62-340, Florida Administrative Code (Table 2). The remaining portions of the area inspected are not wetlands or other surface waters of the State subject to the wetland of the State within the wetland resources jurisdiction of the BDEP. The wetlands or other surface waters of the State within the wetland resources jurisdiction of the BDEP. The wetlands or other surface waters of the State within the wetland resources jurisdiction of the BDEP. The wetlands or other surface waters of the State within the wetland resources jurisdiction of the BDEP. The wetlands or other surface waters of the State within the wetland resources jurisdiction of the BDEP. The wetlands or other surface waters inspected are not wetlands or other surface waters of the State within the wetland resources jurisdiction of the FDEP. The wetlands or other surface waters of the State within the wetland resources jurisdiction of the PDEP. The wetlands or other surface waters inspected are not wetlands or other surface waters inspected are not wetlands or other surface waters of the State within the wetland resources jurisdiction of the FDEP. The wetlands or other surface waters inspected area inspected area inspected area of the PDEP.

Site Location

The Levy Nuclear Plant project area occupies approximately 5,378 acres and is located in Sections 13, 24, 25, 36, Township 16 South, Range 16 East, Sections 7, 17, 18, 19, 20, 29, 31, 32, Township 16 South, Range 17 East, Levy County (Exhibit A). Sections 5, 6, Township 17 South, Range 17 East, Levy County (Exhibit A). - 4 -ED-38-0535370-001

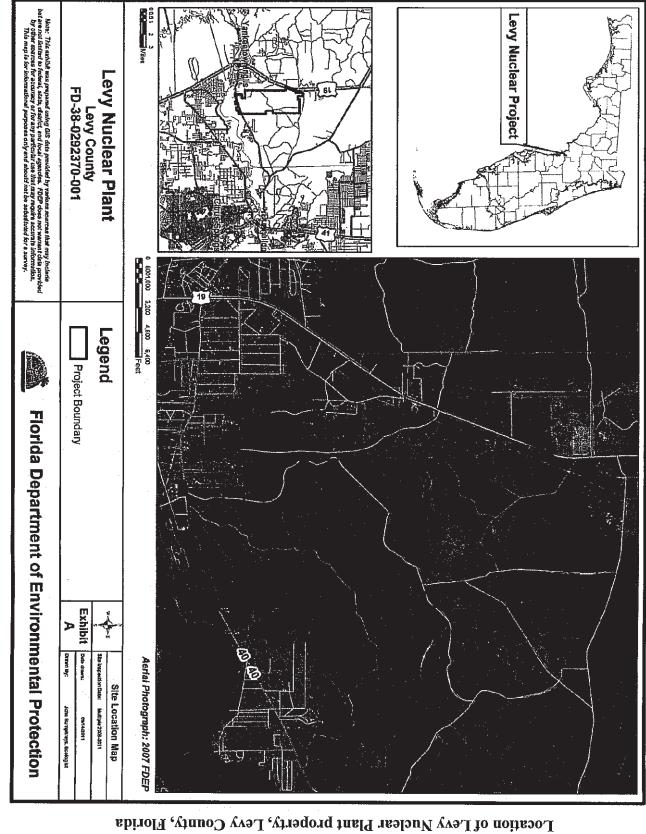


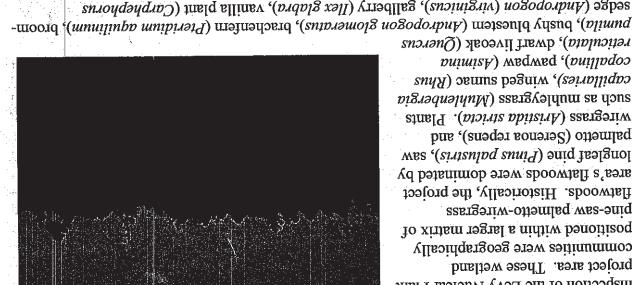
Exhibit A ocation of Levy Nuclear Plant property, Levy County, Flori

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Project Area Description

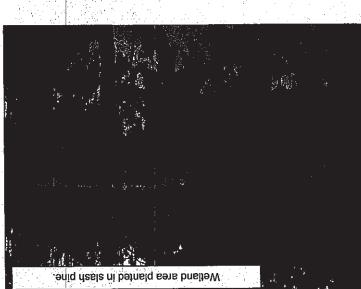
associations of Levy County. Province and both the Smyrna-Placid-Samsula and Otela-Candler-Tavares general soil The Levy Nuclear Plant project area is located within the Gulf Coastal Lowlands Physiographic

copallina), wedwed ,(anillagos capillaries), winged sumac (Rhus such as muhieygrass (Muhienbergia wiregrass (Aristida stricta). Plants palmetto (Serenoa repens), and longleaf pine (Pinus palusiris), saw area's flatwoods were dominated by flatwoods. Historically, the project pine-saw palmetto-wiregrass positioned within a larger matrix of communities were geographically project area. These wetland inspection of the Levy Nuclear Plant were identified during field Several wetland community types



Recently clear-cut area.

The second second second fact, only a few relic longleaf were noted during site inspection. vast majority of longlest pine flatwoods were harvested and replaced by other pine species. In However, like most of the State of Florida, and the Southeastern United States as a whole, the blackroot (Pterocaulon virgatum) would have served as subordinate species within these areas. odoratissimus), orange milkwort (Polygala lutea), yellow-eye grass (Xyris caroliniana) and sedge (Andropogon (virginicus), gallberry (Ilex glabra), vanilla plant (Carphephorus pumila), bushy bluestem (Andropogon glomeratus), brachenfern (Pteridium aquilinum), broom-

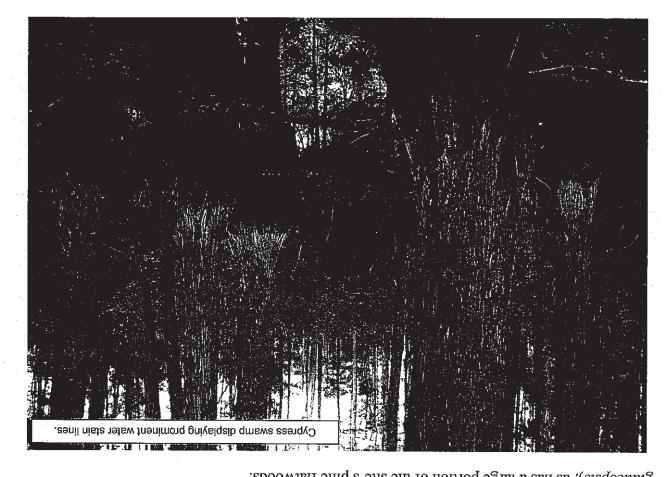


dominated the area. original longleaf pine flatwoods that character more similar to that of the with bedding. These areas retained a more intrusive disturbance associated prepared and planted without the were bedded, some areas were Although most of the site's uplands with slash pine (Pinus elliottii). chopping and then bedded and planted mechanically prepared by roller project area, the site was first portions of the Levy Nuclear Plant pine from upland and shallow wetland Following past removal of longleaf

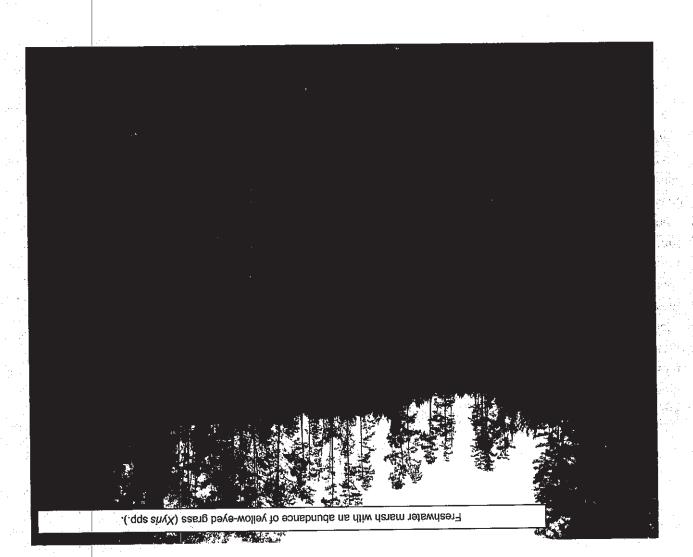
- <u>G</u> -FD-38-0292370-001

Past mechanical disturbance, compounded by fire exclusion, consequently eliminated most of the site's long-lived perennial grasses such as wiregrass and muhleygrass. These grasses are highly sensitive to mechanical disturbance and had undergone adaptation as to seldom produce seed without seasonal fires; as a result, these groundcover species were the most adversely affected by although their relative abundance has been altered. The net result has been a greater abundance of early successional species such as gallberry, bushy bluestem, and broom-sedge in both the of early successional species such as gallberry, bushy bluestem, and broom-sedge in both the site's uplands and shallow wetlands.

Wetlands occupied a large portion of the project area. Because most were not associated with well-defined streams, many of these irregularly shaped, canopied communities would best be bedded and planted with slash pine. Historically, edge areas were wet prairies or, when proximal to greater topographical relief, scepage slopes. In their natural condition, wet prairies and ecotonal sceps would have been dominated by graminoids such as wiregrass, muhleygrass, petiolata, R. alifunis, R. virginica), Lobelia (Lobelia spp.), and white nutsedge (Scleria beddentations, R. alifunis, R. virginica), Lobelia spp.), water-primtose (Ludwigia spp.), bog buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). Observational evidence buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). Observational evidence huttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). Observational evidence buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). And white nutsedge (Scleria buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). And white nutsedge (Scleria buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). And white nutsedge (Scleria buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). And white nutsedge (Scleria buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). And white nutsedge (Scleria buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). And white nutsedge (Scleria buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). And white nutsedge (Scleria buttons (Eriocaulon spp.) and pink sundew (Drosera capillaris). And white nutsedge (Scleria Blaucopsus), as has a large portion of the site's pine flatwoods.



Deeper canopied wetlands were typically dominated by pond cypress (Taxodium ascendens), alsah pine (Pinus elliottii), swamp tupelo (Wyssa biflora), dahoon holly (Ilex cassine), and sometimes red maple (Acer rubrum). The subcanopy was composed primarily of smaller trees of Typical to the hummock restricted groundcover were shrubs such as wax myrtle (Myvica highbush blueberry (Vaccinium corymbosum). Herbaceous species such as sawgrass (Cladium bugleweed (Lycopus rubellus), sedge (Carex glaucescens), artowhead (Sagittaria lacifolia), maidencane (Panicum hemitomon), blackberry (Rubus argunus), and marsh thoroughwort (Eupatorium leptophyllum) were common to both hummocks and the frequently inundated substrate between hummocks. Evidence of past and recent selective harvest, such as cut cypress substrate between hummocks. Evidence of past and recent selective harvest, such as cut cypress substrate between hummocks. Evidence of past and recent selective harvest, such as cut cypress substrate between hummocks. Evidence of past and recent selective harvest, such as cut cypress substrate between hummocks. Evidence of past and recent selective harvest, such as cut cypress substrate between hummocks.



During inspection of the project area, numerous soil profiles were examined in effort to identify the presence of hydric soil indicators.

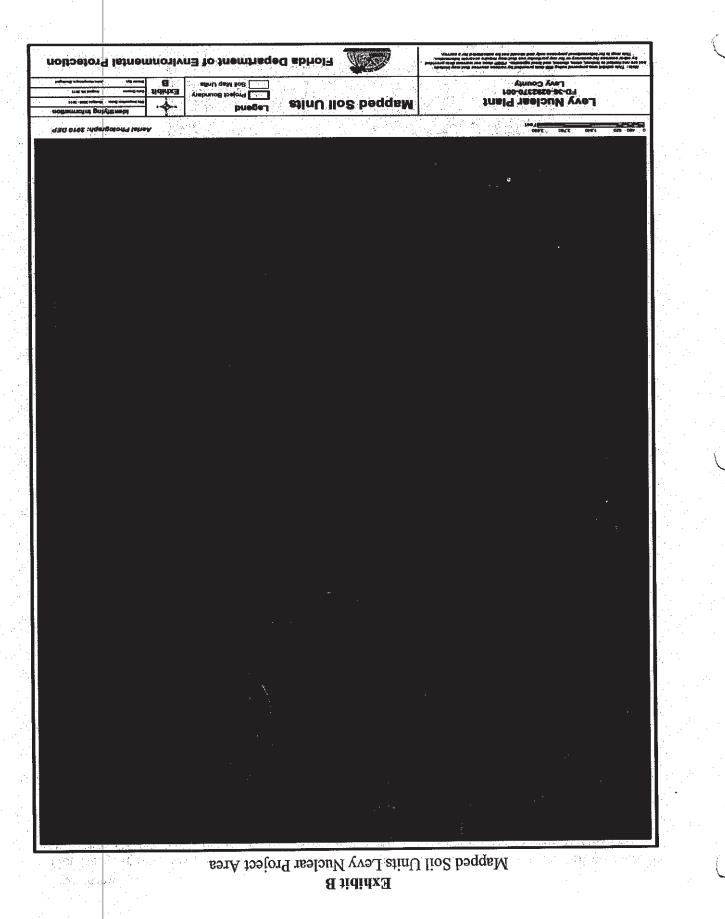
Beyond the physical sampling of soils, a soil survey of Levy County (1996) produced by the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) was utilized as a reference for the project area's soil mapping units.

The NRCS soil survey delineated thirteen map units within the project area's boundaries; these soil units are listed with their hydric status in **Table 1**, and they are graphically depicted in **Exhibit B** below.

Texture	Drainage	Hydric	9mɛŊ tinU	Ιοάπγοι
bnsz ənit	Moderately well drained	oN	Tavares fine sand, 1 to 5 percent slopes	2
bnez ənif	Poorly drained	oN	bnes anit enrym2	8
fine sand	Poorly drained	oN	Pomona fine sand	6
шпск	Very poorly drained	SəY	Placid and Samsula soils, depressional	ττ
bnes enit	Poorly drained	səY	Wekiva fine sand	13
yonu	Very poorly drained	səY	Chobee-Gator complex, frequently flooded	9T
bnes enit	Poorly drained	oN	Adamsville fine sand, 0 to 5 percent slopes	٢L
bnsz ənif	Poorly drained	oN	bnes anit sludousW	3 1
pues	Somewhat poorly drained	oN	bnes ofloZ	53
bnez anit	Very poorly drained	29Y	Placid and Popash soils, depressional	57
bnez enit	Somewhat poorly drained	oN	Cassia-Pomello complex	34
pues	Poorly drained	ON	риез ездеКМ	38
pues	Moderately well drained	oN	Arents, 0 to 5 percent slopes	74

Table 1 NRCS Soil Map Units on Site

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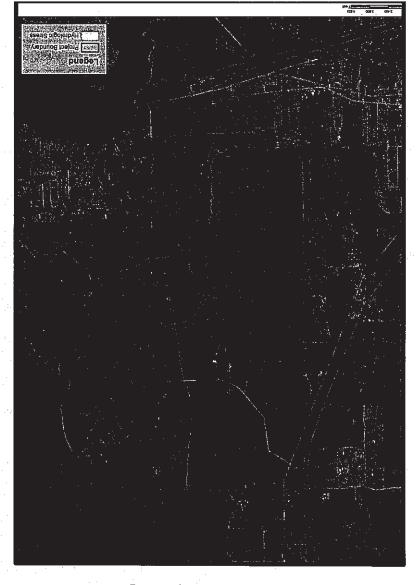


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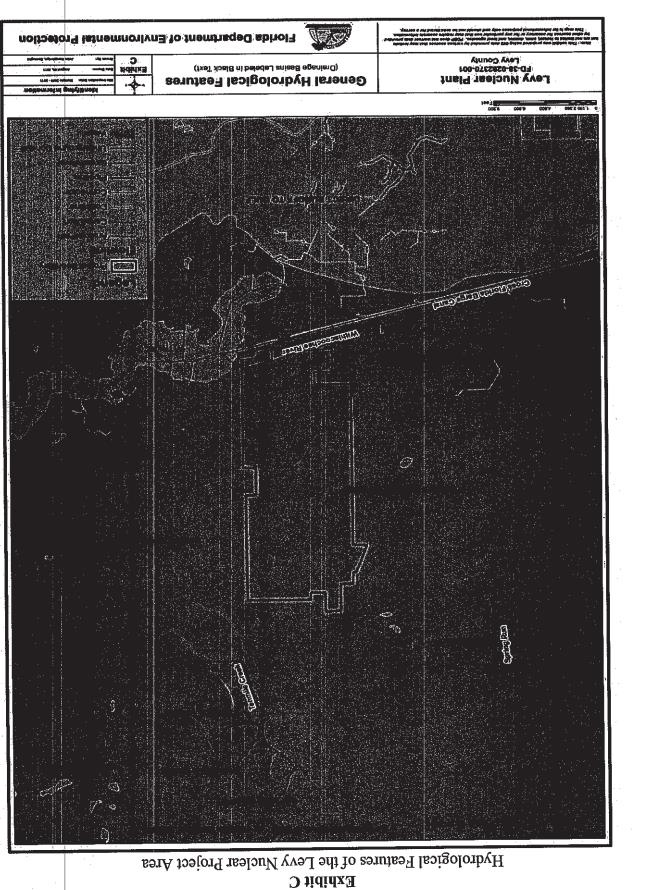
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Generally, hydrological conveyance from the site was south and west to the Gulf of Mexico via direct runoff; however, the southern portion of the site is located within the Withlacoochee Drainage Basin (Exhibit C).

The wetland vegetative communities in the southernmost portion of the Levy Nuclear Plant project area, an area from approximately one-half mile north of Highway 40, southward to the Cross Florida barge Canal, exhibited evidence of hydrological stress (see figure below). The eanopy strata in this area displayed wetland plant species in poor qualitative condition. The subcanopy and groundcover layers showed evidence of increased migration by upland plant species.



Location of Observed Hydrologic Stress



FD-38-0292370-001

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Wetland Boundary Delineation

1011 landward extent of wetlands and other surface waters. demarcates the surveyed boundary of the area inspected; the red hatched area represents the photocopy appended as Attachment A (Map Pocket). The bold black line shown on the aerial of Environmental Protection for the Levy Nuclear Plant project area is delineated on the aerial and other surface waters subject to the wetlands resources jurisdiction of the Florida Department photographic interpretation and onsite ground reconnaissance. The landward extent of wetlands The landward extent of wetlands and other surface waters of the State was established through

 $A \in \{1, 2\}$ Florida Statutes. Department with five copies of the survey properly certified in accordance with Chapter 472, The applicant elected to have the formal determination line surveyed, and has provided the

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[Point Description Data Begins on Next Page]

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Point Description Data

Plant Community: Pine Flatwoods (cleared) SITE 1A --Flag no. TCW 001-14

		Dru
Rhynchospora fascicularis var. fascicularis	fascicled beaksedge	FACW
σιεί το	sonthern bayberry	FAC
rachnanthes caroliana	redroot	FAC
Ilex Elabra	gallberry	UPL
$muilofits$ is musirəq χH	roundpod St. Johnswort	FACW
Gratiola ramosa	branched hedgehyssop	FACW
un	marsh thoroughwort	OBL
Centella asiatica	coinwort	FACW
Baccharis halimifolia	eastern false-villow	FAC
sisqosuats var. glomeratus var. glaucopsis	purple bluestem	FACW
Scientific Name	<u>Common</u> <u>Name</u>	Indicator status
CROUND COVER		
Pinus elliottii var. elliottii	slash pine (planted)	UPL
Scientific Name	<u>Common Name</u>	<u>Indicator</u> status
SUBCANOPY	4	
əuou		
Scientific Name	<u>Common Name</u>	Indicator status
CVNODX		

saw palmetto

ysnının diym

sand blackberry

ΠЪΓ

FAC

FACW

Soil Profile Description*

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Sכlevia triglomerata

sniloli9nus suduA

	stable depth: None	Observed water
10XK 9/4	8-15	ε
10XK 7/1	8-4	7
10AB 8/1	7- 0	I
Description	Depth	noziroH

* All depths are in inches and all colors were determined on moist soil.

Wetland: No Jurisdiction

oN :DinbyH

Comments: Soils non-hydric, upland plant species > 20%, no evidence of hydrology

Plant Community: Wet Prairie SITE 1B -- Flag no. TCW 001-14

CANOPY

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<u>amsN antific Name</u>	

SUB

GBC

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ουίαια τι το		chainfern	MORT HAR
νισία ίαπεεοίατα ssp. νιττατα	2000 - P.	bog white violet	OBF
psojnisif ogpijos		marsh goldenrod	EVGM
Sagittaria graminea var. gr	้ ออนเพ	grassy arrowhead	OBI
sninging argund		sawtooth blackberry	EAC
sinphoiosof prodeodora	מגי לספכוכחוסגו		EVCM
κνλυςγο2δοκα εμιοιμι		Elliott's beaksedge	EVCM
mulubigin musinaA	9 - 1	musing qot-bar	EVCM
🕖 γηλιίσα σεκίξεκα	the second	southern bayberry	EVC
siznabanaa canadensiz		Canada toadflax	THO WE WE WE
unil&hotoj muiropoula	1. 51	marsh thoroughwort	OBI
iiniwblad muign $\sqrt{2}$		Baldwin's coyote-this	
sustangig sustant	1 11 ¹ 2	sugarcane plumegrass	
Eleocharis sp.		spikerush	OBR
Centella asiatica		tiownios	FACW
wn snipidwedd uolodoi ar	sisdo2nv18	mərsənld əlqruq	MOVE EVCM
นทาวตาว วอวัง		red maple	ÉVCM
<u>Scientific Name</u>		<u>Common</u> <u>Name</u>	Indicator status
OUND COVER		7	
ि सिंही जें० र संपत्			
Pinus elliottii var. elliottii	* -	slash pine	* CECTAN
<u>Scientific Name</u>		Common <u>Name</u>	Indicator status
SCANOPY	· · ·		開催の新聞の話がたいため
			A CONTRACTOR OF A CONTRACTOR A
auoN			NA MAR & DANKARA

Common Vame

Sold State Street Street P

Indicator status

高額現 意味的新鲜品品 化化化合金化

S7765A

Soil Profile Description

Obternation within	President and the second se	• • •	opserved	r table depth: Not	Observed water
	2 ⁴ - 1		10XK 7/1	8-13+	3
<u>(</u>]	2.0		10XK 7/1	4-8	7
14 A A A A A A A A A A A A A A A A A A A	2 .	(Mucky Mineral)	10XK 7/1	₽-0	I
Howers	1 * ¹ 4		Description	Depth	nozinoH

* All depths are in inches and all colors were determined on moist soil.

MORE AS THE A CAN 重动运营性自动。

Highert Ler

Wetland: Yes noisibsinut

Hydric: Yes

FD-38-0292370-001

SITE 2 --Flag no. TCW-002-13 Plant Community: Cypress Dome

CANOPY

	*	SUBCANOPY
OBL	pond cypress	snsbnszva muiboxaT
ΩbΓ	əniq dasıla	Pinus elliottii var. elliottii
FACW	sted maple	шплqпл ләәү
Indicator status	<u>Common</u> <u>Name</u>	Scientific Name

pond cypress

əniq dəslə

Yed qmews

sonthern bayberry

<u>Common</u> <u>Name</u>

OBF

 $\Omega \mathbf{b} \Gamma$

OBL

FAC

Indicator status

GROUND COVER

suəpuəəsv unipoxvL

ersea palustris

 \mathcal{W} \mathcal{M} \mathcal{M}

Scientific Name

iiiioille .var. ellioille suniq

FACW	chainfern	Μοοσωαναιά νίνεια
əniv	laurel greenbrier	silotirua kaning
FACW	fascicled beaksedge	Kyhuchospora fascicularis
OBL	clustered beakrush	αμιαροια εεδμαγαμα
OBL	ansanehism	nomotimed musined
	ludwigia; water-primrose	.ds vi8iwpnJ
FAC	redroot	ταςμυαιμες εανομαυα
	usur.	ds snoung
FACW	myrtleleaf St. Johnswort	тилортуун тилэглэдүн
FACW	coinwort	Centella asiatica
FACW	clustered sedge	Super Slaucescens
FACW	purple bluestem	sisqozung var. glomeratus var. glaucopsis
Indicator status	<u>Common Name</u>	<u>Scientific Name</u>

Soil Profile Description*

səY :əribyH

рэллэзд	able depth: Not o	Observed water t
10AB 8/1	8-52+	ε
10KK 7/1 sand	4-8	7
10YR 2/1 Dark Surface	9-0	Ţ
Description	Depth	noziroH

* All depths are in inches and all colors were determined on moist soil.

Jurisdiction Wetland: Yes., passes the A-test

Comments: Hydrologic indicators observed: algal mats

FD-38-0292370-001

	Opseined water table depth: Not observed
a an	Soil Profile Description*
	n Hinner (* EVCART) Filipper (* EVCART)
deerberry saw palmetto UPL UPL	muənimotz muiniəəpy
saw pajmetto	suədə. $rousis S^M$
western brackenfern	unuijinbo unipitat
	γγλιίοα εσκίζεκα
fetterbush Pavberry	pino (La la
Eallberry UPL	τις και τη
plue huckleberry	Gaylucia frondosa var. nana
Common Name	Scientific Name
CIGOMUD CEVAED	EKOUND COVER
slash pine (planted),	Pinus elliottii var. elliottii
Common Name	Sile Scientific Mame
	SUBCANOPY
slash pine (planted)	Pinus elliottii var. elliottii
Common Name	Suit Scientific Name
	CVNOLA
	A CALL AND A
	SITE 3A Flag no. URW-009-38 Plant Community: Pine Flatwoods

PARTY 19 JOH LAD STATE BY REAL Wetland: No, vegetation dominated by upland species Opening to such as the second $e^{i\partial t^{-1}} \in \mathbb{R}$ Jurisdiction

Hydric: No soil pit, soils disturbed by silvicultural treatments

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Carla Antica

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- 91 -FD-38-0292370-001,

Comments: None

Plant Community: Wet prairie (between pine flatwoods and Cypress dome) SITE 3B -- Flag no. URW009-38

VAOPY

tun qidw	ysn.thu qidw	FACW
плэтика ингелистически при при при при при при при при при пр	chainfern	FACW
iomania cinnamea cinnamea	cinnamon fern	FACW
montes conford conford	sonthern bayberry	FAC
Ilex glabra gallberry	gallberry	NPL
<u>Scientific Name</u>	<u>Common Name</u>	<u>Indicator</u> status
CROUND COVER		
Pinus elliottii var. elliottii • slash pin	slash pine (planted)	• OPL
<u>Scientific Name</u>	<u>Common Name</u>	Indicator status
SUBCANOPY		
Pinus elliottii var. elliottii	slash pine (planted)	UPL
	Common Name	Indicator status

FACW

FACW

FAC

ΠbΓ

ΩbΓ

FACW

τλουία [ncida fetterbush Gaylussacia frondosa var. nana pine huckleberry mumotohoib muoinb^q moinsq εμίην δίμεδεπιγ sətinisyym тиіпіээьV eastern poison ivy голісоденато кадісанз Andropogon glomeratus var. glaucopsis mətsəuld əlqruq Sclevia tviglomevata

Soil Profile Description*

Hydric: No soil pit, soils disturbed by silvicultural treatments Observed water table depth: Not observed

Wetland: Yes noitoibairute

:sinoments:

scientific judgment places this site within the wetland boundary. dominance by FACW vegetation, both parties conducting the inspection agree that reasonable topographic break that appears to separate uplands from wetlands. Considering topography and FACW species dominant, >80%. Hydrologic indicator noted (algal mats). This site is below a

Plant Community: Cypress dome SITE 3C -- Flag no. URW-009-38

CANOPY

suəpuəss unipoxpL intoille nov intoille suniA sintsulaq posroa .qambar sp. шплапл ләсү Scientific Name

NIBCANOPY

suəpuəəsp mnipoxp1 sivizulaq pasva¶ 'ds ıvquvpinbi7 Ilex cassine var cassine шплапл ләсү Scientific Name

GROUND COVER

[CONTINUED NEXT PAGE]

	ιιμοι]]] σιλάχ	Elliott's yelloweyed grass	OBI	
	τιο τη	sportleaf yelloweyed grass	OBL	
i i	ποοάναναία νίνβιπία	chainfern	FACW	÷
	ds snytupuoBully	suffonguthus		Ì.,
• 7	ds prodsodord age	peskrush		
•	κηγηςhospora fascicularis ναι. fascicularis	fascicled beaksedge	FACW	
	Quercus laurifolia	laurel oak	FACW	
•	οιλδαια Ιπεα	orange milkwort	FACW	
•	Pinus elliottii var. elliottii	slash pine	ΩЪΓ	
•	Myrica cerifera	sonthern bayberry	FAC	2
• .	τλουία Ιυσίαα	fetterbush	EACW	
•	rachnanthes caroliana	redroot	FAC	
• •	səpioilpg muəirəqyH	bedstraw St. Johnswort	FACW	
•	muilofitzis musireqy	roundpod St. Johnswort	FACW	
•	Ariocaulon decangulare	tenangle pipewort	OBT	
	Centella asiatica	tiownioo	FACW	. •
	suəəsəənvəz xə.və	clustered sedge	FACW	
• • •	Aristida stricta	wiregrass; pineland three-aw	PAG SEAS	5
•	sisdoonblg var suture var. Blaucopsis	purple bluestem	FACW	
•	шплqпл ләэү	red maple	FACW	
	Scientific <u>Name</u>	<u>Common Name</u>	Indicator status	•
~ ~				

pond cypress

dahoon holly

pond cypress

ved qmews

ຒຒຌ຺ຉຉຎຘ

red maple

slash pinence and

Common Name

 $\mathbf{x} \in \{1, 2\}$, $\mathbf{x} \in \{1, 2\}$

Common Name

Yed quiews

mugjəəwe

red maple

OBL

OBF

OBL

Indicator status

OBL

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18

FACW

FACW

Consection of the

FACW

EACW

OBF

Indicator status

FD-38-0292370-001

- 81 -

Jurisdiction Wetland: Yes

Comments: Passes A-test vegetation with Well-defined hydrologic indicators: buttressed trees, hummocks, and stain lines.

[INLENLIONVEEX BEVAR]

				Jurisdiction Wetland: No
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The second secon	fetterbush		nnini 1	
EVGW	bntple bluestem	sisdoonv18 .uvs snit		
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T H ACW.	chainfern		งสะตุเฉ ภาะธิเมา การการการการการการการการการการการการการก	
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	<u>Common Name</u>			<u>Scient</u>
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TEIN (slash pine (planted	<u>iittoil</u>	elliottii var. el	snuid
THO	ked qmews	atristika na se	sintsnipd i	MPersec
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N 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Common Name		amel/ afti	I TONKO
				CANOPY
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3. 67 B. B. 27				

oN :bnslisW

Comments: Dominated by upland vegetation, soils not hydric

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SITE 4B--Flag no. TCW-21-24 Plant Community: Wet Prairie (planted to slash pine)

CANOPY

<u>Scientific Name</u> Vone

<u>Common Name</u>

Indicator status

əuo_N

SUBCANOPY

NPL	əuiq Asslz	Pinus elliottii var. elliottii
FACW	red maple	ч шплqпл ләәұ
Indicator status	<u>Common Name</u>	<u>Scientific Name</u>

CROUND COVER

OBL	tall yelloweyed grass	siqəlytulq ziryX
OBL	Elliott's yelloweyed grass	Xyris elliottii
FACW	chainfern	Μοοάνανάϊα νίνειτα
FACW	highbush blueberry	musodmyros muinissa
FACW	marsh goldenrod	psolutation of the second s
FAC	sawtooth blackberry	sningus argund
FACW	pnucpeq pesksedge	дулисуогрока тіскосеруа <i>ца</i>
FACW	slender beaksedge	κηγητελογα βναείλεητα
FACW	handsome Harry	βμεχία νίνβιπίca
FACW	white-head bogbutton	sdəvuv uotnovouyvor
FAC	redroot	<u>Γ</u> αςμυαυτμες <i>εαιο</i> ματα
UPL	gallberry	ηςx 8 ₁ αρια
OBL	marsh St. John's-wort	\mathfrak{W} mutalized musing \mathfrak{W}
FACW	pranched hedgehyssop	Gratiola ramosa
FAC	Mohr's thoroughwort	i indom muivot p du \overline{J}
OBL	marsh thoroughwort	$un \eta \lambda \eta dot dot dot un $
FACW	tiownioo	Centella asiatica
FACW	purple bluestem	sisqoonalg. vav sutaromolg nogoqovhnh
ΩbΓ	Drummond's maple	усвь ларити улал длатична удав
Indicator status	<u>Common Name</u>	<u>Scientific Name</u>

[CONTINUED NEXT PAGE]

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NORTH A REAL				
OBL	pond cypress		รนอpนอวรช	wninoxn t
FACW	laurel oak			nercus l
OBI	Yed qmews	e e e e e e e e e e e e e e e e e e e		pd passad
OBLIGHT	swamp tupelo	110ra	iq .าธง ธวบุธ	1. Western Rev 1998
EVCM	red maple			ілдпл ләсу
Indicator status	<u>Common</u> <u>Name</u>			Scientific
Vorsunts data tukcu				UBCANOPY
BE BE REAL PROPERTY AND A COLOR				
OBI	pond cypress		รนอpนอวรช	unipoxpL
FACW	laurel oak		vilolirur	of snorond
ΩЪT	aniq dasla	<u>iiii0</u>	οττίι ναν. ε[]i	oilla zuniA
OBL	oləqui qmswa	plora	ατίεα ναν. pi	yás vssá N
E EVCM	red maple			идпл игэү
<u>etators indicator</u>	<u>Common Name</u>		<u>SmrN</u>	<u>∨≀Scientific</u>
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				ydrc: Yes, >4°
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land Static bases Static bases Static bases Static bases Static bases	tiq sidt a	No water observed i e	' dark surfac	
5% coated ₍₁ , 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	and, dark surface, 72 n this pit	10YR 2/1 s No water observed i e	table depth: ' dark surfac	
5% coated	and, dark surface, 72 n this pit	10YR 2/1 s No water observed i e	' dark surfac table depth: 2+12+	bserved water
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5% costed 5% costed 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.7777 7.77777 7.77777 7.77777 7.77777 7.77777 7.777777	and, dark surface, 72 n this pit	10YR 2/2 a 10YR 2/1 10YR 2/1 10YB 2/1 10YB 2/2 10YB 2/2 1	, dark surfac table depth: 2-9 0-2 Depth	3 ⁴ (
5% costed 5% costed 7.17.7.7.7.	and, dark surface, 72 n this pit	10YR 2/2 a 10YR 2/1 10YR 2/1 10YB 2/1 10YB 2/2 10YB 2/2 1	, dark surfac table depth: 2-9 0-2 Depth	bserved water

- 22 -FD-38-0292370-001

[CONLINNED NEXT PAGE]

FACW	tiownios	Centella asiatica
FACW	csmphor-weed	ds $bayen_{d}$
OBL	taperleaf waterhorehound	snjjəqnı sndoəly
əniv	Virginia creeper	Parthenocissus physical phys
FACW	manyflower marshpennywort	אקארסכסנאן $arepsilon$ שאלאסאאן אישראטאאן אשראאן אאמאאן אאראאן אישאאן אישאאן אישאאן אאאאאן אישאאן אישאאן אישא
ΩЪΓ	onivqmən gnidmilə	snəbnasz ainadiM
FACW	stiff marsh bedstraw	Galium tinctorium
OBL	flattened pipewort	mnss argund more straight market market M
OBL	tenangle pipewort	Eviocaulon decangulare
	puttonbush	Cephalanthus, construction of the second sec
$\cap PL$	Drummond's maple	үсөк кпркпи лак дилиталуу
əuiv	coral greenbrier	institut xaliteri
OBL	ssergwas	Cladium jamaicense
OBL	millet beakrush	s vyynchospora miliacea .
FACW	chainfern	Woodwardia virginica
FAC	sawtooth blackberry	sninZnv snqny
ΩЪΓ	eastern poison ivy	supsippo иолригрозіхо T
əuiv	saw greenbrier	xon-pnod xplim2
FAC	sonthern bayberry	γλιεα ε6κif6κα
FACW	fetterbush	pinovi pinovi
Indicator status	Common <u>Name</u>	Scientific Name
		CROUND COVER

herb of grace

dwarf St. Johnswort

OBL

FACW

Soil Profile Description* No soils data taken

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Observed water table depth : Not observed Hydric : NA

Jurisdiction Wetland: Yes

Comments: Passes A-test with hydrologic indicators: lichen lines, large hummocks, buttressed tree trunks

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				1971年1月1日) 1971年1月1日日 1971年1月1日日
				Wetland: No
	A STATE OF A			Jurisdiction
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e i gues	Country con -a	•	anoli depth: None	
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	FACW	blue maidencane	พทนธุเริงอิตกอาปุกพ พท	
	EAC	sonthern bayberry	ijera	ιος τοιμάτικα
	Tan	netted pawpaw	נוכחןמנט	or paimiek.
	N STAN	saw palmetto		<u>Serenoa re</u>
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		gallberry		<mark>πιατίδα χομι</mark> ατία μα
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(snip	<u>Indicator st</u>	Common <u>Name</u>		(1) Y. A. Metta K. C. Martin, Nucl. Phys. 16, 111 (1996).
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Plant Community: Basin swamp (ecotone) SITE 6B--Flag no. W2U2-9

CANOPY

Scientific Name

Common Vame

slash pine (planted)

Common Name

Indicator status

OBL

OBL

 $\Pi \mathbf{b} \mathbf{\Gamma}$ FACW

FAC

FACW

FACW

ΠbΓ

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Indicator status

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FACW FACW

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FAC OBL

Juon

SUBCANOPY

iiii0ill β sunidScientific Name

CROUND COVER

[CONTINUED NEXT PAGE]		
iittoille sirv X	Elliott's yelloweyed grass	
Viola lanceolata	lance-leaf violet	
suədəл роиәлә <u>5</u>	saw palmetto	
Sclevia sp.	ysnınu	
ottoming lader	csbbage palm	
·ds pлodsoyэuлyy	peakrush	
-ds vəyən _l d	csmphor-weed	
-ds vəyən _l d	camphor-weed	
ds silbsydd.	Eroundcherry	
muilotisnə muzinnA	panic grass	
Myrica cerifera	southern bayberry	
.ds pilədo4	lobelia	
Liatris spicata	spiked gayfeather	
wntainsis p f musin d i H	marsh St. John's-wort	
snllyhdor i ta kuha kuha kuha kuha kuha kuha kuha kuh	wetland sunflower	
Gratiola ramosa	branched hedgehyssop	
wnilofioon χ muign χ_{J}	rattlesnake master	
iiniwblad muigny \mathcal{I}	Baldwin's coyote-thistle	
הוסכמחןסע קככמא \mathfrak{R} מומג \mathfrak{F}	tenangle pipewort	
snnysv novsgiv \overline{A}	early whitetop fleabane	
Eleocharis sp.	ysnrədiqa	
Diospyros virginiana	common persimmon	
Coreopsis gladiata	southeastern tickseed	
Cirsium lecontei	Leconte's thistle	
Centella asiatica	tiownios	
Bumelia reclinata	pumelia	
Bevchemia scandens	Alabama supplejack	
Avistida stricta	Wiregrass	
Andropogon glomeratus var. glaucopsis	purple bluestem	
wnn n i g rədnəlhum muqr n əlid m A	blue maidencane	
Aletris obovata	southern colicroot	
<u>Scientific Name</u>	Common Name	

- 52 -FD-38-0292370-001

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		FD-38-029	
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IGOXLOI BOLIES FROM		(CE)	CONTINUED NEXT PA
OBL	flattened pipewort	unssə.	идшоэ иорпрэоглд
OBI	tenangle pipewort	_	lupsəp uojnpsoing
aniv	morningglory	•	ds vəouodı
FACW	rreinfern	ື່ອວາມ	ιβνίν μίδνων μουλαντία νίνει
əniv	laurel greenbrier		Smilax laurifolia
əniv	coral greenbrier		ivotlaw xalimZ
OBL OBL	eastern poison ivy	subsip	n novbnobooixoT
OBI	toyal fern sawgrass		silugar abnume Silugar verter
FACW FACW	fetterbush	030	Lyonia iucida Cladiun jamaicen
FAC	southern bayberry		Μγνίεα εενίζενα
ΠЪΓ	slash pine	111101119 ·	nav iittoillə zuniA
OBL	noonsb		Ilex cassine var. c
<u>Indicator status</u>			Scientific Name
			GROUND COVER
™™™™ B VCM ≥	N	n da ser en s	
<u>Indicator status</u> RAGW		i y se se se se diferencian Nationalista gran se s	uniqni idogo
			SUBCANOPY
Chorb R. Cu.h.			AUONVOHIIS
OBI	pond cypress	suə	puəəsv unipoxvI
<u>nan</u>	slash pine	iittoille .	Pinus elliottii var
<u>Indicator status</u>	<u>Common Name</u>		<u>Scientific Name</u>
anacy (kot)			CVNOPY
		dillews ills	Plant Community: Ba
BRAINIC 15 G			SITE 6C-Flag no. W2
Creat 1		0.011	
		and an	n an
		A-test; bedded and plante	Comments: Passes the
	tin in the second se	•	Wetland: Yes
			Jurisdiction
	lios isiom no panimia	es and all colors were det	T All depuisare in inche
COLUMN HAR DACKAT II			nusti
 A strange of the strang	References and a first second s	X	Hydric: Yes, sandy redo
ASTRACT 1.1		pth: Not observed	Observed water table de
Current strong			•
9/7~ 0/0	and, [redox] at 4.5 10YR 5	-15+ 10 XK2/3 ²	
H/14140		-4 10 XK4/2 s -4 10 XK4/2 s	
Observes want faile	A set of the set of th	-7 10 X01 71- -7 10 XB 3/1 2	
	. •	_	Horizon Dept
No son profile record			· · · · · ·
201 Shull & Design I a	CB The	*U	Soil Profile Description
			· ·

No soil profile recorded Soil Profile Description*

AV : SinbyH Observed water table depth : Not observed

Wetland: Yes Jurisdiction

Comments: Passes the A-test; pristine wetland, little evidence of disturbance

Plant Community: Pine flatwoods SITE 7A --Flag no. W007-8

VANOPY

auoN Scientific Name

SUBCANOPY

Pinus elliottii var. elliottii Scientific Name

CROUND COVER

ририолого саконана $плиош ип<math>nopdn_T$ $munilinpp muibirot^q$ рѕошәәрл әоңзоәпә7 Andropogon glomeratus var. glaucopsis Scientific Name

slash pine (planted) Common <u>Name</u>

məisənld əlqınq

Common Name

Common Name

redroot

FAC Mohr's thoroughwort western brackenfern ΠЪΓ swamp doghoble FACW FACW Indicator status

FAC

 $\Omega \mathbf{b} \Gamma$ Indicator status

Indicator status

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rite de la com				
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UPL	əniq dasala		β [[οττί] ναν. 6	
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OBL	qahoon	əuiss	sine var. cas	Isos xəll
Indicator status	Common Name		ic <u>Name</u>	<u>Scientif</u>
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	•			BILE JBER
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	l disturbed by silvicultural tre			J :\$309mmo
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	i An an	u no no agus nu Príostrathar agus ag	lpland vege	Vetland: Mo J .:sinemia: J
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nu <u>ta s'hymrenn</u> Putasarihordi y.dr. e B.Dinaarguaas Statuario ha eist Statuario ha eist	ere determined on moist soil	utarrecci w stoloo IIs bas are entropeasarty ng are are are aread	re in inches Pland vege	· All depths an Verladiction Wetland∺No U∺bnamets: U
 Manutes arbs a second se	ere determined on moist soil:	Mericani wew. Reference Name of colors w Manual Colors (Manual Colors (Manua	sandy redox re in inches pland veget	Hydric: Yes, F (A) Metlandiction Wetland#No Comments: U
 Applid Juri (A) All Carlo Courtes (A) 	ere determined on moist soll.	th: Not observed and all colors w	r table depe sandy redox re in inches pland vege	Hydric: Yes, F Marie: Yes, F Metland: No Wetland: U
Licitais energina Licitais energina Michaelicitais - Michaelicitais - Michaelici	R 4/2 sand ere determined on moist soil	12.4 State of Clarks 11. Not observed 2. Not observed	Ppland vege sandy redox re in inches vege re in enches	Hydric: Yes, F (A) Metlandiction Wetland#No Comments: U
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 A.V.C. C - O C.O.U.G. A.L. O C.O.U.G. D C.O	R 4/2 sand ere determined on moist soil	7.5 Vot observed th: Not observed and all colors w	4.5 S.7 Sandy redox re in inches Pland vege	کر این کر کر این کر کر این کر کر این کر
Providentia Provi	R 3/1 sand 65% coated R 5/2 sand [redox] 7.5 YR at R 4/2 sand ere determined on moist soil}	t,5 see sor 10Y th: Not observed and all colors w and all colors w	2.2. S. table dept sandy redox re in inches regardy redox	-21) عرب المحالي المحالية المحالي المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالي المحالية المحالي المحالية المحالية المحالي المحالية المحالية المحالية المحالية المحالية المحالية المحالي المحالي المحالية المحالية المحالية المحالية المحالي المحالية المحالية المحالي المحالية المحالي المحالية المحالية المحالي المحالي المحالي المحالي المحالي المحالي المحالي المحالي المحالي الما المحالي الممالي الما الما
Codismi John Com partition of the second function coprass success comparison comparis	c R 3/1 sand 65% coated R 5/2 sand F 4/2 sand ere determined on moist soil:	fiði fiði 1.5 4.5 4.5 1.2.5 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.4 4.5 4.5 1.2.5 4.5 4.5 1.2.5 4.5 4.5	20 2.2.2 2.4.2 2.7 3.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5	OBh Served Wate A Served Wate Joserved Wate Hydric: Yes, All depths an Metland Mon Metland Mon
C Politicum base com calibra fara com calibra fara com carga Sreadon carga Sreadon Sreadon Sreadon S	ption c R 3/1 sand 65% coated R 5/2 sand [redox] 7.5 YR at R 4/2 sand ere determined on moist soil ere determined on moist soil	Descri Total T	20 2.2.2 2.4.2 2.7 3.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5	Honzon Anzon Anzon Honzon Aydric: Yes, Aydric: Yes, Aydric: Yes, Aydric: A Agents an Agents an A
$C_{ij} = \sum_{i=1}^{n} \frac{1}{2} \sum\ldots_{i=1}^{n} \frac{1}{$	ption c R 3/1 sand 65% coated R 5/2 sand R 4/2 sand ere determined on moist soil?	Description Descr	Depth 05 5.7 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7	Horizón Horizón Horizón Arisór Hydric: Yes, All depths a Vetlandiction Wetlandiction
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suəpuəss $mnipoxp_L$

Scientific Name

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Nyssa sylvatica var. biflora Ilex cassine var. cassine

- 82 -FD-38-0292370-001

pond cypress swamp tupelo

Common Name

qahoon

OBL

OBI

OBL

Di<u>sutator status</u>

) Scientific Name Sommon Name **CROUND COVER**

FACW	chainfern	тоодмандія ліквініса
əuiv	laurel greenbrier	silotinus laurifolia
OBL	beənworns əngnotllud	Sagittaria lancifolia
FAC	sawtooth blackberry	sninZıp snqnY
UPL	aniq dasala	Pinus elliottii var. elliottii
OBL	maidencane	nomotimeh muzine q
FAC	 sonthern bayberry 	φλλίκα εσιίδια
FACW	fetterbush	pisul ninovi
OBL	taperleaf waterhorehound	sn]jəqn.1 sndoək7
FACW	swamp doghobble	psowəəbi əoyioənə T
OBL	marsh thoroughwort	unp χu tototog univotodn Ξ
OBL	ssaveras	Sladium jamaicense
OBL	usudind	silatnobicso suhtnalade)
EACW	clustered sedge	suəəsəənng xənnə
Indicator status	Common Name	Scientific Name

Soil Profile Description*

Site inundated approximately 15 inches at time of inspection

AV :pribyH Observed water table depth: NA

* All depths are in inches and all colors were determined on moist soil.

Wetland: Yes Jurisdiction

buttressing, hummocks, cypress knees. Comments: Passes the A-test; in addition to inundation, strong hydrologic indicators:

Plant Community: Basin swamp SITE 7C --Flag no. W007-8

CANOPY

None Scientific Name

Scientific Name SUBCANOPY

* əuoN

CROUND COVER

sigolythia platylepis tall yelloweyed grass OBL νιοία ίαπεεοίατα lance-leaf violet OBL Spartina bakeri sand cordgrass **FACW** Rhynchospora fascicularis fascicled beaksedge FACW nyspu pixəyy mand Marian **FACW** .ds mnnogylod poominems OBL ·ds vəyən_{ld} camphor-weed **FACW** рэтотрппіз phnumeO cinnamon fem FACW Myrica cerifera southern bayberry FAC σριση σιμολη tetterbush FACW snjjəqnı sndos ΛT taperleaf waterhorehound OBL nilotinil nigiwbul southeastern primrosewillow OBL Lindernia grandiflora savannah false pimpernel **WDA**F sdəəup uojnpəouyəp7 white-head bogbutton FACW Lachnanthes caroliana redroot FAC snduppouoBint snoung usur bodbər OBL ·ds snounf ysnı un_{III} un_{III} un_{III} un_{III} dwarf St. Johnswort W⊇A∃ mutalusisel musiraqyH marsh St. John's-wort OBT Gratiola uniflora hedgehyssop FACW Gratiola hispida dossAy pidsiy FAC \mathcal{F} riocaulon decangulare tenangle pipewort OBF Εleocharis vivipara viviparous spikerush OBF Drosera capillaris FACW webnus Aniq qotetidw qmswsbnss Dichromena latifolia OBI Centella asiatica nownios **FACW** sitim ensbia smallfruit beggar-ticks Baccharis halimifolia eastern false-willow FAC sisdoonalg. var sutarong nogodovana mətsənld əlquuq FACW Scientific Name Common Name a sutate totasibni

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- 30 -FD-38-0292370-001

Indicator status

MANN

Construction of the second second

<u>Common Name</u>

Common Name

noitqrseefile Description

	10XK 5/3	J:5-712	ε
sand [redox] 10YR 4/6>2%, 5"-12"	10XK 4/4	5.7-2.4	7
mucky fine sand (mixed by hogs)	10XK 5/2	5.4.5	I
	Description	Depth	nozitoH

Observed water table depth: Soil saturated to surface, filled soil pit in approximately10 minutes Hydric: Inconclusive due to mixing by hogs.

* All depths are in inches and all colors were determined on moist soil.

Jurisdiction Wetland: Yes

Comments: Passes the A-test

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Smart Co Repairing: The State SELTON STATES OF ENGLISHING STATES

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<u>sutats</u> CTAD

> Plant Community: Pine flatwoods SITE 8A -- Flag no. LRW-005-03C

<u>Common Name</u>	es det production de la seconda de la se La seconda de la seconda de
Jurz Millor H	egan taken
AND ALL AND	an in the easy of the
	$f = \int_{-\infty}^{\infty} dx dx dx$
Common Name	a li de li de l

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and the second second second	
tour-leaf vetch	. *
asw palmetto	e filia se
tringed meadowbeauty head meadowbeauty	
American pokeweed	
banic grass	
fetterbush € € € € € € €	to sa de
redroot FAG	$j > t_{i_1,i_2}$
dahoon OBL	$\sim 10^{-10}$
roundpod St. Johnswort and Add Weight	i de la sec
plue huckleberry	···· • • •
Asukeeweed Asuke I EAC	
fireweed the second sec	
Long's sedge	
purple bluestem	sisdoo
blue maidencane	(100)
Common Name Variation Indicator status	1. 19 1. 21
enser lat.	

•.	auoN
	Scientific Name
	SUBCANOPY
	osh
	anoN
	<u>suis Scientific Name</u>
	CANOPY

Scientific Name

GROUND COVER

	EVCA.
	The Letters of the second s
J	Vicia acuitolia
S	suədən pouərəs
y	Rhexia petiolata
7	Ρηγτοίαεεα απενίεαπα
đ	muilofisna muzinb4
J	Γλουία Ιαείda
I	τ.Ταςψυαυτήςς caroliana
р	Ilex cassine var. cassine
I	unilolitzis musireqteH
9	Dubu .non psopuoif piopssnite
Ś	muilofitisoqmoo muitotaque
Ţ	Erechtites hieracitfolia
I	Carex longi
ł	Andropogon glomeratus var. glaucopsis
1	unuviziaquəlihum muqrosinqmh

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	$0 = - \sqrt{2 \pi M_{\rm eff}}$		opserved	table depth: Not	Observed water
			10YR 6/1) san	-12+	5
	eq) i i i i i i i i i i i i i i i i i i i	d (recently mix	10 YR 2/2 san	L-0	I
Filminon	<u>}]</u>] (= () ⁺ ()		Description	Depth	noziroH

* All depths are in inches and all colors were determined on moist soil. Hours Inconclusive the second second

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e autore d'uni-

Wellson: Yes THE READ

Wetland: No, upland species >20% Jurisdiction

*noitqrsed slitor4 lio2

Hydric: Inconclusive due to mixing

preparation for planting pines Comments: Area appears to have been recently mechanically prepared and bedded in

Plant Community: Basin swamp SITE 8B--Flag no.LRW-005-03C

CANOPY

OBL	small-spike false-nettle	Boirbailyo pirsandsol
FACW	red chokeberry	hronia arbuitolia
Indicator status	Common <u>Name</u>	<u>Scientific Name</u>
		CKOUND COVER
OBL	swamp tupelo	Nyssa sylvatica var. biflora
OBL	иооцер	Ilex cassine var. cassine
OBL	Carolina ash	Fraxinus caroliniana
Indicator status	Common Name	Scientific Name
		SUBCANOPY
	se de la companya de	
OBL	pond cypress	suəpuəs $s p$ unipox p_L
0 br	slash pine	ittoillə zuni q
OBL	olaqui qmawa	Nyssa sylvatica var. biflora
OBL	uooyep	Ilex cassine var. cassine
Indicator status	Common Name	Scientific Name
pretoto aotoo pal		

Soil Profile Description*

Woodwardia virginica

muoinigviv munbbivT

M λ nica cevifera

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suəəsəənvə 🛛 🖓 səəvə

Βοεhmeria εγlindrica

Cephalanthus occidentalis

τλουια γησίας

iignol xəvaD

*musodmyvos muinissb*¹

-12+	£
9-4	7
7-0	I
Depth	nozinoH
	9-13+ 4-6 0-4

Hydric: Inconclusive due to disturbance by hogs. Observed water table depth: 7 inches below surface in soil pit after 5 minutes.

* All depths are in inches and all colors were determined on moist soil.

Wetland: Yes nonsibsirut

inspection. Hydrologic indicators: hummocks, looped roots, buttressed trees Comments: Passes the A-test; canopied wetland inundated approximately 2 feet at time of

FD-38-0292370-001

chainfern

fetterbush

ysnquomnq

agbas s'gno.

clustered sedge

highbush blueberry

southern bayberry

swamp doghobble

Virginia marsh St. Johnswort

taperleaf waterhorehound

small-spike false-nettle

EACW

FACW

FACW

FACW

FACW

FACW

OBL

FAC

OBL

OBL

Plant Community: Pine flatwoods. SITE 9A --Flag no. LRW-6-U16

Pinus elliottii var. elliottii

CANOPY

SUBCANOPY

Juon Scientific Name

Common <u>Name</u>

Common Name

(painsh pine (planted)

Indicator:status CASCE?

全线工业中和44年100

)7?G.

K.02.18b

CO Ve

20月9日秋204人

T**U** Indicator status

Scientific Name

		DOA 10500 10	a unden eron	Rydric: Yes
Surdu	tta [\7AY01dtiw xittam	A nhewrold to		Observed water t
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(p	mucky fine sand (mixe	10XK 3/1	3-2-2	2
Same And		Description	6-0 mdog	
		noitairpséd	Depth	nozinoH
	1. e	an an an an Araba	пората	AND A CAR
			*noitaire	Soil Profile Des
a la fili de		Here and the second		
I BURSS ORIC	shortleaf yelloweyed	an a	mioh	AD IO DIAT
TIN	asw palmetto		_	vərd sirtX vərd sirtX
EVGM	handsome Harry		_	ιιλ σιχοίγγ Μ
TIAN STAN STOLEN	yso guinnu	$(x_{i},y_{i}) \in [1,\infty) \to 0$		d snoweng
EVCM	cinnamon fern		<i>ออนเอนเวย</i>	and the state T
EAGW	tetterbush			η υποχί
ALL	gallberry	с. 1910 - Алар (1916)		μαρί <u>8</u> χοίΙ
EAC	dosskų pidsių		_	Eratiola I
EVGW.	tiownios	Article and		o niletne Gentella
M @ Y H	pinestem	sisdoonna sun s	ทาธารสอบอาชี กอ	Bodounur
EACW	blue maidencane	นเทนซาุธิงอ	จนอานทน์ นเทส	เขวานั้นแร
EACW	red maple	• • • • •		Iqni uəəy \Lambda
stratus rotestor status	Common Name	and the second second	4.7	<u>Scientific</u>
BROTH DISCHARTS				GROUND CO
() [2] [2] [2] [2] [2] [2] [2] [2] [2] [2]				

* All depths are in inches and all colors were determined on moist soil.

Wetland: No Jurisdiction Comments: More than 20% upland plants in groundcover

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SITE 9B --Flag no. LRW-6-U16 Plant Community: Basin swamp

CVNOPY

Scientific Name

əuoN

SUBCANOPY

Scientific Name Pinus elliottii

CROUND COVER

FACW	chainfern	ποουμαναία νίκβινου
FACW	μighbush blueberry	тигодтугоо типоэорУ
DPL UPL	saw palmetto	suədəл vouəлəS
FACW	handsome Harry	βγεχία νιτβινικα
FACW	stinking camphorweed	Bhchea foetida
FACW	cinnamon fern	pəmompnniə phnumeO
	swamp tupelo	Nyssa sylvatica var. biflora
FAC	southern bayberry	Μγνίεα εενίfera
FACW	white-head bogbutton	sdəsuv uojnvsouysv7
FAC	redroot	rachnanthes cavoliana
FACW	usur store	รทุธนาชิงธน รทวนทุ
EVC <i>M</i>	fourpetal St. Johnswort	mulateq
EVC EVCM	troundpod St. Johnswort	muilolitzis musir9qyH
	dossky pidsiy	Gratiola hispida
FAC FAC	lennel	muilolilliqua capillida muivotaqua
OBL	ysnquotind	Cephalantha occidentalis
EACW	coinwort	Centella asiatica
FACW	red chokeberry	Aronia arbutifolia
	brip bluestem	Andropogon glomeratus var. glaucopik
FACW	red maple	ипланл лээү
FACW Indicator status	<u>Common</u> <u>Name</u>	Scientific Name
artota rotooibal		OND COAEB

(planted) oniq danted)

Common Name

<u>Common Name</u>

[CONTINUED NEXT PAGE]

 $\Omega \mathbf{b} \Gamma$

Indicator status

Indicator status

· 홍말 : 유민 · 영화				
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OBL	pald ourses		unyzitsip unipoxpL	
			suəpuəəsv mnipoxvL	
OBT OBT / ^{public} M	tupelo	awemsp	nolfid van van van van biflor	
OBI	qahoon		Ilex cassine var. cassine	
OPLE TO THE PARTIE	slash pine		Pinus elliottii var. elliottii	
<u>Indicator status</u>	Common Name		<u>Scientific Name</u>	•
	가 가 가 있는 것이 있는 것이다. 		SUBCANOPY	
OBT	psid cypress		muhaitzib muiboxpT	
OBL I VIE	bouq cypress		suəpuəss $mipoxp_L$	
OPE - 1	aniq dasala		Pinus elliottii var. elliottii	
OBIT IN TANK	oĮədni		Nyssa sylvatica var. biflor	
OBL	uooup			
Indicator status	Common <u>Name</u>		Ilex cassine var. cassine	•
	o mol no muo		Scientific Name	
			CANOPY	
	· ·	and the second second	$1 - \ell_F + \lambda_X$	
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			Plant, Community: Basin swa	
Crack Colomb Contract		910	SITE 9C -Flag no. LRW-6-	
		and the second		
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			A DO	
			1. 均称作为1.	
			Comments: Passes the B-test	
		* · · · · · · · · · · ·	ŐF.	
3 minute cultures		and the state of the second	Wetland: Yes	
		$F_{A} = \{1, \dots, n\}$	Jurisdiction	
		March 1999		
	No objection men	64 ⁰		
T CAMER IN STURY T	os isiom no dənimiə	III COLOLS MELE DEL	* All depths are in inches and a	
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	NOUD	+> o m Suum	1200 0/7: [Vopol] fro t/ totto (***	
	20:94		Hydric: Xes, [redox] .2% begin	
		t Observed	Observed water table depth: No	•
\t>5% [•] 2%-15%	A gV01 [rober] hus		5.9.5	
		10XK 2/2	0-7	
		Description	Houzon Depth	
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CHOLOG			Soil Profile Description*	
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Contraction of the

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FACW	highbush blueberry	msoqm(yoo mninissu)
OBT	Virginia marsh St. Johnswort	muzini g viv munshiga T
UPL	eastern poison ivy	substant norbislation T
əuiv	coral greenbrier	ingilax walteri
əuiv	laurel greenbrier	silotirus xalim2
OBL	lizard's tail	snnuado snananos
OBL	swamp rose	sintenlaq peoA
OBĽ	yamp bay	sintsulpd pseudo d
FACW	cinnamon fern	pəmompnniə phnum20
FAC	sonthern bayberry	φλλιέα εενίζεια
EACW	tetterbush	p ino χT
FAC	uusieberry 🍝	pyonia lizurina var. foliosiflora
OBL	taperleaf waterhorehound	sn η əqnə sn d oə $\lambda \gamma$
OBL	taperleaf waterhorehound	snjjəqnı sndoək γ
FACW	swamp doghobble	psowəəpn əoqtoənə T
OBL	volliw sinigriv	บวุเมเธิมกุม กอบไ
OBT	sawgrass	Cladium jamaicense
OBL	ysnquomnq	silainabi220 suhinalahdaD
EACW	red maple	шплqпл ләәү
ndicator status	Common Name	<u>Scientific Name</u>
		CROUND COVER

məfnisdə

FACW

No soils data collected; inundated to approximate 18" Soil Profile Description*

AV :DrbyH Observed water table depth: NA

Μοοσωαναία νίνειτα

* All depths are in inches and all colors were determined on moist soil.

Wetland: Yes Jurisdiction

Cross-ties were likely removed using mules or oxen, resulting in little soil disturbance. occassionally encountered, suggesting that these logs were hand squared into railroad cross-ties. century as evidenced by occasional cypress stumps. Three to four foot long cypress slabs are alteration of vegetation or hydrology. Selected cypress removal occurred early in the 19^{th} Comments: Passes the A-test; high quality wetland. No evidence of recent disturbance or

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Quantation conservation

修算状態を注意する

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dnisdə	n di Berry Bryana (b. 17	ΜοοσΜαιαία ανεοία
plade		Utricularia sp.
earleaf		στοιίαχ απνιεμίατα
grassy		ognimory birghilgol
១ន្រពាំពា		wixim woodsononky
pomod	្រាល	ounui osodsoyəulyy
oldmoo	<i>D</i> 10	nito9q nonniqr9201A
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945-12F

boud cypress

Common Name

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Mr. 2 Et la part A B BORCH Dr. Branch and A. C. Contribution of the second second 動物的ななない。 Iloweyed grass monthly OBL THO TO DESCR UJƏ. CROTHEOCOVIE nout **AIUG** rsindnssrg f THO HUNG arrowhead 7BO ed beakrush COBLESS OBLESS ysniyeəq p OBL bəəwbismrəm îsəl MOVE **insociscent 180**100 maidencane <u>្រុកប្រាំងល</u> panic grass **FACW** tetterbush taperleaf waterhorehound southeastern primrosewillow FACW shaggy hedgehyssop FAC Mohr's thoroughwort FACW Le Conte's flatsedge HOW THOMAS ysnquomnq coinwort FYCM elustered sedge ∕∕_∵`́0₿Ĩ[™] bandanna of the Everglades Indicator status Common Name

รนอวรอวทบุธี xองบา canna flaccida Scientific Name **GROUND COVER**

[CONTINUED NEXT PAGE]

The

EVCA

1. VC.V

Scientific Name

suppuposo unipoxoL

SUBCANOPY

nomotimad musina antes

υριοη ριυολη

snilodur sudocki

Gratiola pilosa

vijosiuij višimpn7

าเาน่อส สมเการ์ เกม

Centella asiatica

cephalanthus occidentalis

istnossi sursqu'

muilolisns musin M

suppupor unipoxpL Scientific Name **CANOPY** (sparse)

Plant Community: Cypress dome SITE 10A -- Flag no. TCW-30-108

行第20位的和外期中1400年1月11月0日(2011年1月) pond cypress

* All de trus in a care a met al

Indicator status

UB I	÷ ف	sseriuro puou
Indicator status	5 S-3	Common Name
	$\left(\frac{1}{2}+\frac{1}{2}\right)$	ių.
Hell wa	自动进行	

SUPPRIME TRANSMERT

OBT

Soil Profile Description*

10AK 2/1	3-4	£
10YR 2/2, Muck/Mucky texture	2-3	5
Fibric	7-0	I
Description	Depth	noziroH

Hydric: Yes, muck presence Observed water table depth: Not observed

* All depths are in inches and all colors were determined on moist soil.

Wetland: Yes Jurisdiction

flowering profusely. Comments: Passes the A-test and D-test; Recently burned wetland. Panicum hemitomon

Plant Community: Pine flatwoods SITE 10B --Flag no. TCW-30-108

CANOPY

əuoN Scientific Name

Common Vame

Indicator status

SUBCANOPY

I from fire) UPL	slash pine (planted, dead	iittoillə suniA
Indicator status	<u>Common Name</u>	<u>Scientific</u> Name

CROUND COVER

ПЪГ	saw plametto	suədəл vouəлəS
FACW	nsinsM bism	iidzna nashi
FACW	yellow milkwort	iilogur nugelii P
	panicum	$ds unviun_d$
FACW	cinnamon fern	рэтотраніз phumeO
FAC	гопфсии рядрецьд	φλλιεα εσιίδεια
ПЪГ	gallberry	ης εται το το το τη το
FAC	pjne pnckjepetry	Gaylussacia frondosa var. nana
FACW	coinwort	Centella astatica
ПЪГ	netted pawpaw	Asimina reticulata
FACW	purple bluestem	sisdoonals var. glanevatus var. glaucopsis
Indicator status	Common <u>Name</u>	<u>Scientific Name</u>

[CONTINUED NEXT PAGE]

UPL UPL	<u>Common Name</u>	1997 - Standard Standard († 1997) 1997 - Standard Standard († 1997)	<u>e Name</u> liottii var. elliot	<u>Bcientifi</u> Us zuni ^g
Hollow	un de la composition de la composition Préparation de la composition de la comp		•	CANOPY
300 Pro llin Deserty ((247 ₈		lag no. W2-25 we nized : V 2-25	
laceinium en luis rainindia Luis rainingen Luispitaeine	ingeneration and a state of the state of th	an an an Anna Anna An An Anna Anna Anna		OÚT MIPO MAR
service summers of Service service Service services	onuqeoxer	bງຈນຊີ ຂັ່ນອະດາອະ ເມ ສີເ		Jurisdiction Wetland: No
Lychus weide Adr <u>ianan uns</u> Abiwedoù alinn	ermined on moist soil.			
	epletions 10YR 6/1 at 7 if	lot observed ixing.		Observed wate Hydric: Inconc
	andy andy Solucky fine sand, 65 % coai		3-7,5 3-7,5 0-3 Depth	uozuoH
BBONED TO A 10			*noitqiisea	Soil Profile D

water oak

Common Name

Stark S

Alburghens in in instruction Jurisdie lon Weitand No

Observer, water man with Hwdrigt more mixed subserversion

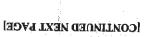
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DNB1U SNIAND

Scientific Name

SUBCANOPY

CBOUND COVER

OBL	tall yelloweyed grass	sidəlyatıq ziny X	
əniv	aupeosque	pilotibnutov zitiV	
NPL	shiny blueberry	sətinizvym тиіпіээьV	
OPL	saw palmetto	suədəл роиәләS	
FAC	sand blackberry	sniloli9nus suduA	
~ · -	peakrush	ds prodsoy2ntyA	
OPL	osmus teolomsh	unuillaqos suhA	
ΠЪΓ	western brackenfern	muniliupp muibiry A	•
FACW	fetterbush	Γλουια Ιησια	
ΩbΓ	gallberry	[[6x 8]αρκα	
FAC	pine puckleberry	Gaylussacia frondosa var. nana	
FAC	Mohr's thoroughwort	iinhom muinotaqu ${\mathfrak A}$	
∩₽Ľ	rosette grass	Dichantherita multiplication D	
UPL	netted pawpaw	Asimina reticulata	
FACW	red maple	шплqпл ләәұ	
Indicator status	<u>Common Name</u>	<u>Scientific Name</u>	
			~

Soil Profile Description*

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e.5-12+ I	. E
I 5.8-0	5
5.5-0	I
oth De	Horizon Del
	e'2-15+ 1 0-9'2 5 5'2-0 6

Observed water table: Not observed Hydric: Inconclusive due to mixing

* All depths are in inches and all colors were determined on moist soil.

Jurisdiction Wetland: No.

Comments: More than 20% upland species in the groundcover

Plant Community: SITE IIB -- Flag no. W2-25A

OBL uooyep missos var saine var cassine WOAE CONTRACT red maple unıqnı üəəy suisis interior status $\underline{Common}\ \underline{Name}$ Scientific Name SUBCANOPY Manager and a start and ()号] pond cypress suəpuəss $mnipox T_{2}$ red maple uniqni iəəy Common Name Scientific Name CANOPY · 1. 中心中。#4.94

GROUND COVER

suəpuəəsp unipox p_L

Salix caroliniana

tetterbush	- vonia lucida
tivitllame	Tawigia microcarpa
redroot	ταςμυαυιμες εαιοιιαυα
ysnı	ds snoung
unsky mi	hypris alata
bedstraw	səpioilag musiyədil
marsh St.	mypericum fasciculation
annaigob	muilofillique antique muivoinque
tenangle j	Friocaulon decangulare
sugarcan	snətup 818 snytup 147
wofftsim	Conoclinium coelestinum
Ilimbuiw	Chloris sp.
nquotinq	Cephalanthus occidentalis
nownioo	Centella astatica
clustered	suassasner 8 xano
inilleme	sitim snabil
st məterə	Baccharis halimilolia
Id əlqınq	sisdoonval son snipsowold uobodospuy
peppervi	parodisis arborea
Common	SCIENTITIC Name

FACW	fetterbush
OBI	wolliwesormirg fundilisms
FAC	redroot
	ysnı
FACW	musky mint
FACW	bedstraw St. Johnswort
OBI	marsh St. John's-wort
FAG	Parente leunelgob
OBL	tenangle pipewort
OBL	sugarcane plumegrass
FAC	mistflower
∩b∏	windmill grass
<u>* VI T</u> RÖ	Usuda
FACW	coinwort
그 않는 것 수 문문했다. 노력이 많이 나라 있다.	clustered sedge
OBLEN	smallfruit beggar-ticks
EVC	eastern false-willow
FACW	purple bluestem
VIŬÇ	peppervine
icator status	Common Name
1 1 Martin OL	

coastal plain willow OBL

pond cypress

OBT 15

「「「「「「「」」」」

OBT

File Contraction

EACW

Indicator status

एक दल्लिय जेन

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FACW	chainfern	musinigriv muneboirT boinigriv muneboirT
OBL OBL	beakrush Poad cypress Virginia marsh St. Johnswort	suspussion unipoxy Taxadionic analogy Taxadionic analogy
OBF	<i>aSpasypaq</i> payounq	Киулсрога серћаlапћа
EACW	rosy camphorweed	D_{100}
UPL	turkey tangle fogfruit slash pine	Phyla nodiflora Phyla nodiflora
EVC OBL	tiurthod algorit we first	Sersea palustris
100	unoineq	Panicum neuronon
OBF FAC	southern bayberry maidencane	Мучіса сечіfеva Рапісина тетіtотоп

*noitqrssealenseseription

of 10YR5/4. E horizon appears generally depleted.		
10YR 10 YR6/1 with striped matrix, 10YR7/1, and Mottles	3-13+	ε
JOKE SVI I I I I I I I I I I I I I I I I I I	5-3	7
Трис	5-0	I
Description	Depth	nozinoH

Observed water table: Not observed Hydric: Yes, depleted matrix beginning in upper 6"

* All depths are in inches and all colors were determined on moist soil.

Jurisdiction Wetland: Yes

Comments: Passes the A-test

Wetland Delineation Tests **LABLE 2**

The following accelent versions of the wetland delineation tests of Section 62: 340.400.

()ueseu(c as greater than that of the upland plants in the appropriate strattun and hydric soils of hydrologic **indicaters are** A Test 162-340 300(2) F.A.C.] A positive welland test requires that the aerial extent of obligate plan species

solision hydrologic indicators are present tacultative wet plant species in the appropriate stratum is greater than 80% of the plants in that stragging my "B Test" [62-540.300(2)(b), F.A.C.] A positive welland test requires that the aerial extent of oblighte and

donations for areas that are not pine flatwoods, improved pastures of drained areas. to Test" [62.340.300(2)(c), F.O.J. A positive welland test requires an affirmative demonstration of specific sol

D Teat? [62:340.300(2)(d), F.A.C.] A positive welland test requires one of more hydrologic militations and hydrol

Note Sec Tables 3 and 4 for a list of the Hydrologic and Hydro Soil Indicators.

Hydrologic Indicators **LABLE 3**

The following is an abbreviated version of the various hydrological indicators purshant to Section character to

Aquatic mosses of hverworts on trees of substrates. NULLER

12. Bresence of vegelated hummocks of mssocks

sucherdebs maid morgolondre vi

13: Water marks

nonneedeb mennes 11 slemments woll yndannels. 01

Levidence di aquatto fauna sour uoran poievora o

sudeb befter brakeni made

are orgony H

Sile.

Resence of autwachs Sumplements





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Hydric Soil Indicators	
an of the hydric soil indicators developed by the U.S.D.A S.C.S. (Now servation Service) for Florida in 1992. A complete explanation of the tained from Florida Soil Conservation Service, (1992). See References	end) services a levinte Vadt se avea
Loamy and Clayev Soils 1. Loamy Gleyed Matrix 2. Depleted Matrix 3. Thick Dark Surface (S. FL only) 4. IrouNarganeses Massess (N. FL. only) 5. Marl (S. FL only) 7. Junit (S. FL only) 7. Junit (S. FL only) 9. Junit (S. FL	 All Soils I. Hydrogen Sulfide 2. Stratified Layers 3. Organic Bodies 5. Muck Presence (S. FL. only) 6. I cm Muck (N. FL. only) 6. I cm Muck (N. FL. only) 7. Sandy Gleyed Matrix 2. Sandy Redox 3. Stripped Matrix 4. Dark Surface

TABLE 5

Wetland Definition pursuant to 62-340.200, F.A.C.

"Wetlands," as defined in subsection 373.019(17), F.S., means those areas that are immdated or saturated by surface water or ground water at a frequency and a duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils. Soils present in wetlands generally are classified as hydrophytic matcrophytes that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are associated as hydrophytic macrophytes that are associated shore. These species, due to morphological, physiological, or reproductive adaptations, have the ability to grow, reproduce or persist in aquatic environments or anaserobic soil conditions. Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps and marshes, hydric scepage slopes, tidal marshes, mangrove and submotic state and other similar areas. Florida wetlands generally include swamps, marshes, beyheads, bogs, cypress domes and substrops and other similar areas. Florida wetlands generally do not include longlest to ralaches, mangrove and swamps and other similar areas. Florida wetlands generally do not include longlest or slash prine flatwoods with an submotic solutiony down parameters.

References:

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Godfrey, R. and J. Wooten. 1979. Aquatic and Wetland Plants of Southeastern United States: Dicotyledons. University of Georgia Press. Athens, Georgia.

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Tobe, J., et al. 1998. Florida Wetland Plants, an Identification Manual. University of Florida. Gainesville, Florida? •

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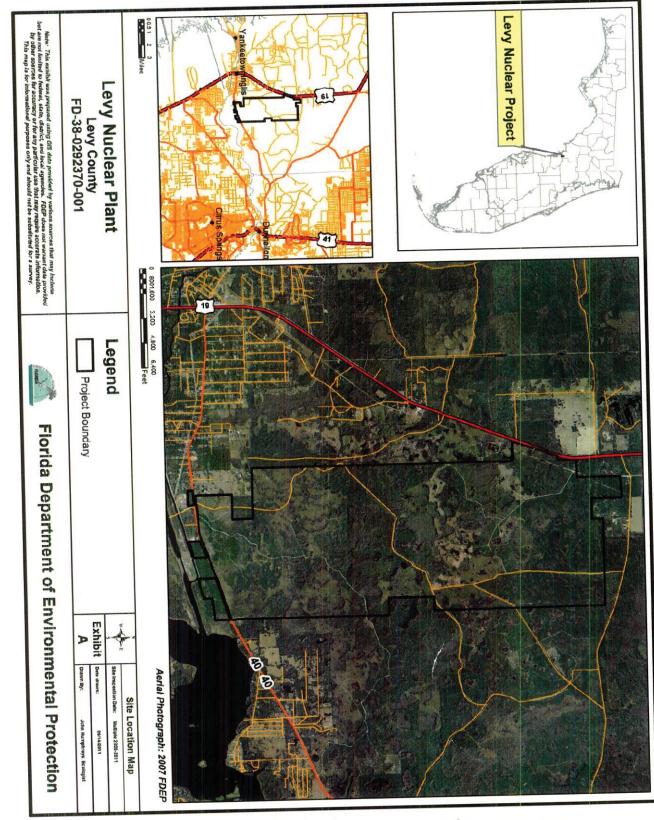


Exhibit A Location of Levy Nuclear Plant property, Levy County, Florida