PROGRESS ENERGY FLORIDA

LEVY NUCLEAR PLANT
AND ASSOCIATED TRANSMISSION LINES

PA08-51B

WETLAND MITIGATION PLAN

April 23, 2010

Executive Summary

Florida Power Corporation, d/b/a Progress Energy Florida, Inc. (PEF), is committed to providing safe, reliable, and affordable energy to its customers. PEF provides electric service to 1.7 million customers and a population of more than 5 million people. The company maintains a diverse mix of power-generating facility resources to ensure affordable, efficient, and reliable service. The Levy Nuclear Plant (LNP) and associated facilities are components in PEF's baseload generation plan. The construction of a nuclear power plant requires federal and state governmental approvals.

At the federal level, the project is in the licensing phase with the Nuclear Regulatory Commission (NRC) to obtain a Combined License (COL) to construct and operate the LNP. It is anticipated a COL will be received in late 2012. In addition, the project is in the permitting phase to obtain a Section 404/10 permit from the U. S. Army Corps of Engineers (USACE). The Section 404/10 permit is anticipated in 3rd Quarter 2011.

On June 2, 2008, PEF submitted a Site Certification Application (SCA) to the Florida Department of Environmental Protection (FDEP) pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Chapter 403, F.S., and Chapter 62-17, Florida Administrative Code (FAC) requesting certification of the LNP, including approximately 200 miles of new transmission lines. The Governor and Cabinet voted unanimously to approve the Administrative Law Judge's Recommended Order to grant full and final certification to PEF for the construction and operation of the LNP and associated facilities. The Final Order on Certification of PEF Levy Nuclear Power Plant Units 1 and 2 was granted on August 11, 2009 (Final Order). The Certification Order for the project approved by the Siting Board contains a set of conditions that the project must abide by during the construction and operation of the plant and associated facilities. These are collectively referred to as the LNP Conditions of Certification (COC). The approval includes authorization of a conceptual mitigation plan submitted in January 2009.

Condition XXIV of LNP COC requires submittal of the project's Wetland Mitigation Plan (plan) by May 24, 2010. This document is intended to comply with the requirements of Condition XXIV.

The LNP site lies in the southern portion of Levy County, just east of U.S. 19, and north of the Cross Florida Barge Canal (CFBC) within the Waccasassa and Withlacoochee watersheds (**Exhibit 1-1**). The LNP site is generally bounded by Goethe State Forest (GSF) on the north and County Road (CR) 40 on the south (**Exhibit 1-1**). In addition to segments within the Waccasassa and Withlacoochee watersheds, the associated linear facilities, including pipelines and transmission lines, are routed through portions of the Upper Coastal, Hillsborough and Tampa Bay watersheds (**Exhibit 1-2**). For purposes of the COC and the 404/10 COE permit, the same watershed boundaries have been agreed upon by the state and federal agencies.

For the purposes of this plan, the LNP site includes the 3,105 acres zoned for the power plant and adjacent lands owned by PEF (approximately 5,200 acres in total). In addition, associated linear facilities corridors, including transmission lines, access roads, pipelines, extending from the power plant portion of the site, are included under the certification. These certified corridors extend beyond the LNP site property owned by PEF.

Reference to the transmission line projects includes all of these watersheds unless stated otherwise, as well as including the transmission line rights of way (ROW) on the LNP property. The transmission line corridors, both on and off of the LNP site, and related facilities are referred to collectively as "transmission."

Generally, the mitigation will be initiated at the same time or before wetland impacts within a project segment occur. Site-specific mitigation schedules are provided in the project-specific sections of the plan.

Due to the size of this project, power plant and transmission project elements will be constructed over many years. As a result of the long duration of the project, there is some likelihood of evolving and

refined mitigation options to offset wetland impacts from the project. Should the mitigation project design change over time, it will continue with the goal that the mitigation will provide the best possible combination of meeting power-production and delivery goals, being in the public interest, meeting state goals for cost accountability to customers, and minimizing environmental wetland impacts. To optimize each of these considerations, flexibility in the composition and schedule of the overall mitigation plan is essential.

In summary, PEF is proposing unavoidable wetland impacts to 721.9 acres of FDEP-jurisdictional wetlands across the five watersheds in the project area. The impacted acreages and UMAM scores of the proposed wetland impacts are summarized in **Table 1-1**.

Table 1-1. Wetland Impacts by UMAM Functional Loss Units and Acres.

Impact Watershed	Herbaceous Units	Herbaceous Acres	Forested Units	Forested Acres	Total Units	Total Acres
Waccasassa Watershed	-55.5	137.9	-126.9	295.7	-182.4	433.6
Withlacoochee Watershed – On-site	-3.2	7.8	-27.9	129.1	-31.1	136.9
Withlacoochee Watershed – Off-site (Transmission impacts)	-9.8	13.8	-9.2	27.2	-19.0	41.0
Hillsborough River Watershed	-15.7	22.4	-0.9	1.1	-16.6	23.5
Upper Coastal Watershed	-4.7	6.9	-28.9	69.9	-33.6	76.8
Tampa Bay Watershed	-6.3	9.4	-0.3	0.7	-6.6	10.1
Total	**-95.2**	**198.2**	**-194.1**	**523.7**	**-289.3**	**721.9**

A watershed-based approach was used as the basis for mitigation site selection. The approach described in this document results in the compensation occurring within the same watersheds as the wetland impacts, so the majority of the wetland impacts and mitigation are in the Withlacoochee and Waccasassa watersheds on and adjacent to the LNP site. The remaining wetland impacts are associated with transmission rights-of-way, and therefore, represent essentially diffused localized wetland impacts, *i.e.*, transmission rights-of-way, spanning several other watersheds with small, isolated permanent wetland impacts. The mitigation for transmission line wetland impacts occurs within the watersheds where they occur as described in detail in this plan.

The mitigation program has been designed to provide an overall increase in ecological function across several thousand acres in regionally significant locations. It focuses on enhancing and restoring ecological functions to large areas of wetland habitat and supporting uplands. It provides landscape-level ecosystem benefits that exceed the value that would accrue if similar mitigation activities were to occur on a piecemeal, localized basis without considering the values that come from improving large blocks of habitat and habitat corridors.

Strategically located and geographically distinct mitigation parcels have been selected to provide mitigation. These parcels include: (1) portions of the Daniels Island Tract in the GSF; (2) portions of the LNP site itself; (3) portions of the Boarshead Ranch; (4) property located on Five Mile Creek in Pasco County; (5) portions of the Homosassa Tract of the Withlacoochee State Forest (WSF); and (6) portions of the PEF transmission line and adjacent wetlands within and adjacent to the geographical bounds of the Pinellas County Brooker Creek Preserve. **Table 1-2** summarizes the mitigation lift that will be available from each parcel.

Table 1-2. Mitigation Summary for the LNP Project

Component	Location	Watershed	Action	Wetland UMAM Lift Units	Upland UMAM Lift Units	Total UMAM Lift Units
1	Daniels Island Tract, GSF	Waccasassa	Re-establishment/ Rehabilitation	61.0		61.0
2	LNP Site	Waccasassa & Withlacoochee (on-site impacts)	Rehabilitation (Enhancement)[1]/ Preservation	180.6	145.0	325.6
3	Boarshead Ranch	Withlacoochee (off-site impacts) & Hillsborough	Re-establishment/Rehabilitation/ Creation/Preservation	52.9		52.9
4	Five Mile Creek	Upper Coastal	Re-establishment/ Rehabilitation/Creation	4.7	0.6	5.3
5	Homosassa Tract, WSF	Upper Coastal	Re-establishment/ Rehabilitation	34.3	1.8	36.1
6	Brooker Creek	Tampa Bay	Re-establishment/ Rehabilitation	9.2		9.2
			Totals	342.7	147.4	490.1

Mitigation on the LNP site is based on reversing past alterations to landscape-sized areas of wetlands and uplands previously used for timber production. The past alterations included changes to wetland drainage, logging of both wetlands and uplands, and conversion of almost all uplands and substantial areas of wetlands to bedded pine plantation. The mitigation will consist of correcting the drainage issues, removing excess pines that will restore natural rates of evapotranspiration and hence improve wetland hydrology, and re-instating natural ecosystem processes such as fire which will re-establish natural groundcover and natural regeneration of trees and shrubs. Through this, natural processes, including landscape support for wildlife, improved water retention in wetlands, improved plant community structure, will be revived.

Offsite, the mitigation plan is based on partnerships with state, local, and private land owners to provide benefits to the wetland and upland resources and to the public.

The Daniels Island Tract, GSF and Homosassa Tract, WSF are owned by Florida Division of Forestry (DOF). These DOF sites have been subjected to drainage and other land management practices that have resulted in degradation of wetlands. DOF is seeking improvements to wetlands and adjacent uplands for which they do not have existing or reasonably foreseeable funding. The Daniels Island Tract of the GSF is adjacent to the LNP site and the mitigation will provide wetland enhancement by correcting changes due to past timber management and alterations to wetland hydrology. Benefits go to the Waccasassa Watershed. The mitigation on the Homosassa Tract, WSF provides similar benefits within the Upper Coastal Watershed and more specifically to the extensive areas of public land that have been acquired to protect the Chassahowitzka Swamp region. The DOF would like these properties restored and enhanced, but they have no current or foreseeable public funding with which to do the work.

Boarshead Ranch sits at an ecologically unique and strategic location where the Hillsborough and Withlacoochee Rivers leave the Green Swamp and where there is a natural diversionary channel that leads from the Withlacoochee River to form the uppermost segment of the Hillsborough River. This property is contiguous to large areas of public ownership in both watersheds and adjacent to the Green Swamp property owned by the Southwest Florida Water Management District (SWFWMD). Boarshead is privately owned and the property owner supports enhancing and managing the property and recording appropriate conservation

[1] From the USACE and EPA's rules on wetland mitigation: 33 CFR § 332.2/ 40 CFR § 230.2 Definitions. Establishment (creation) means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions. Re-establishment means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions. Rehabilitation means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area. Under FDEP's and the water management district's rules "Establishment" equals "Creation" and "Rehabilitation" equals "Enhancement."

easements in order to provide a wetland mitigation area for LNP. Mitigation consists of correcting past drainage alterations and providing enhancements to vegetation after hydrological alterations are complete.

The Five Mile Creek property is owned by Pasco County and its improvement will benefit the Upper Coastal Watershed and both the Anclote and Pithlachascotee Rivers. It is a highly disturbed site on a strategic county corridor intended to connect large areas of public ownership within the county. The specific location is part of a designated corridor that will ultimately connect the SWFWMD-owned Starkey Wilderness Area and Connor Preserve. County officials would like this property restored and enhanced, but they have no current or foreseeable public funding with which to do the restoration and enhancement. Restoration and enhancement consist of re-establishing wetland hydrology to former wetland areas that are currently too deep or too dry to be wetlands due to past mining activities, removing nuisance vegetation, and re-establishing native wetland plant communities.

Mitigation at Brooker Creek will benefit the Tampa Bay Watershed. It addresses the transmission line corridor that crosses through the Pinellas County Brooker Creek Preserve, the largest remaining area of natural land in Pinellas County. Pinellas County officials have expressed a desire that PEF make environmental improvements to the transmission line corridor, which affects wildlife habitat, wetland drainage, and plant community structure. The plan that has been developed includes redesign of portions of the access roadway in the transmission line corridor to place it at-grade and improve the hydrology of wetlands to either side of the transmission line; removal of nuisance species in natural wetlands and wetlands created as a result of past practices; elimination of nuisance species spread to adjacent natural wetlands; and establishment of native marsh vegetation in the wetlands in the transmission corridor. Public funds are not available for making these improvements.

Working with our partners at DOF, Boarshead Ranch, and Pinellas and Pasco Counties, PEF has developed a plan that will mitigate the wetland impacts within the affected watersheds, meet all state and federal regulations, enhance and restore habitat for several wetland- and upland-dependent threatened and endangered species, and enhance and improve the overall ecological function across thousands of acres in regionally significant locations.

In summary, the mitigation program uses a few strategically located sites to offset the project's wetland impacts. Locations were chosen specifically to improve and expand existing conservation areas and to meet regional watershed conservation goals. These components of the mitigation program address the mitigation requirements for each watershed in an efficient and regionally ecological significant manner. In all cases the plan seeks to restore the vegetative communities, including their hydrologic and fire regimes, to the greatest extent possible.

When the construction of the LNP project is complete and the mitigation is implemented, our customers and the public will benefit from clean and reliable energy and from enhanced and restored wetland habitat across thousands of acres in regionally significant locations.

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SECTION 1

Introduction

Florida Power Corporation, d/b/a PEF Florida, Inc. (PEF), is committed to providing safe, reliable, and affordable energy to its customers. PEF provides electric service to 1.7 million customers and a population of more than 5 million people. The company maintains a diverse mix of power-generating facility resources to ensure affordable, efficient, and reliable service. The Levy Nuclear Plant (LNP) and associated facilities are components in PEF's baseload generation plan. The construction of a nuclear power plant requires governmental approvals from the federal and state governments.

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For the purposes of this plan, the LNP site includes the 3,105 acres zoned for the power plant and certified by the state plus adjacent lands owned by PEF (approximately 5,200 acres in total). In addition, associated linear facilities corridors, including transmission lines, access roads and pipelines, extending from the power plant portion of the site, are included under the certification. These certified corridors extend beyond the LNP site.

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Generally, the mitigation will be initiated at the same time or before a project segment is constructed. Site-specific mitigation schedules are provided in the project-specific sections of the plan.

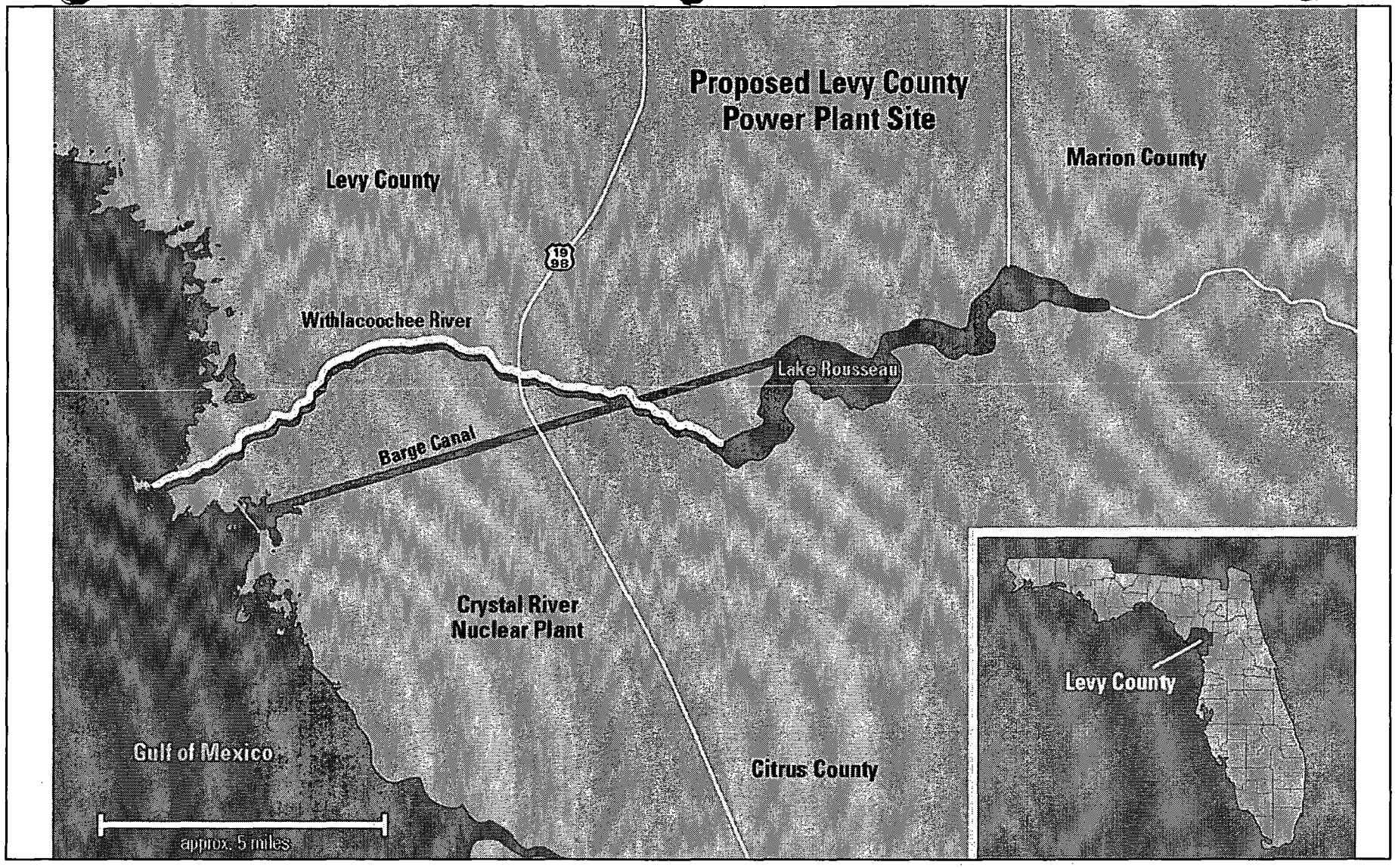

Exhibit 1-1
LNP Site - General Location Map

ENTRIX
3905 Crescent Park Drive
Riverview, FL 33578-3625
ph. (813) 664-4500
fx (813) 664-0440
www.entrix.com

Coordinate System:
NAD 1983 UTM Zone 17N feet

Date: 04/22/2010Rev. Date: xx/xx/xx PM: YYY GIS Analyst: JBR Map Document: lnp_prj_site_a_20100416.mxd Project Number: 5691-020 PDF Document: lnp_prj_site_a_20100422.pdf Plot Size: 8.5 x 11

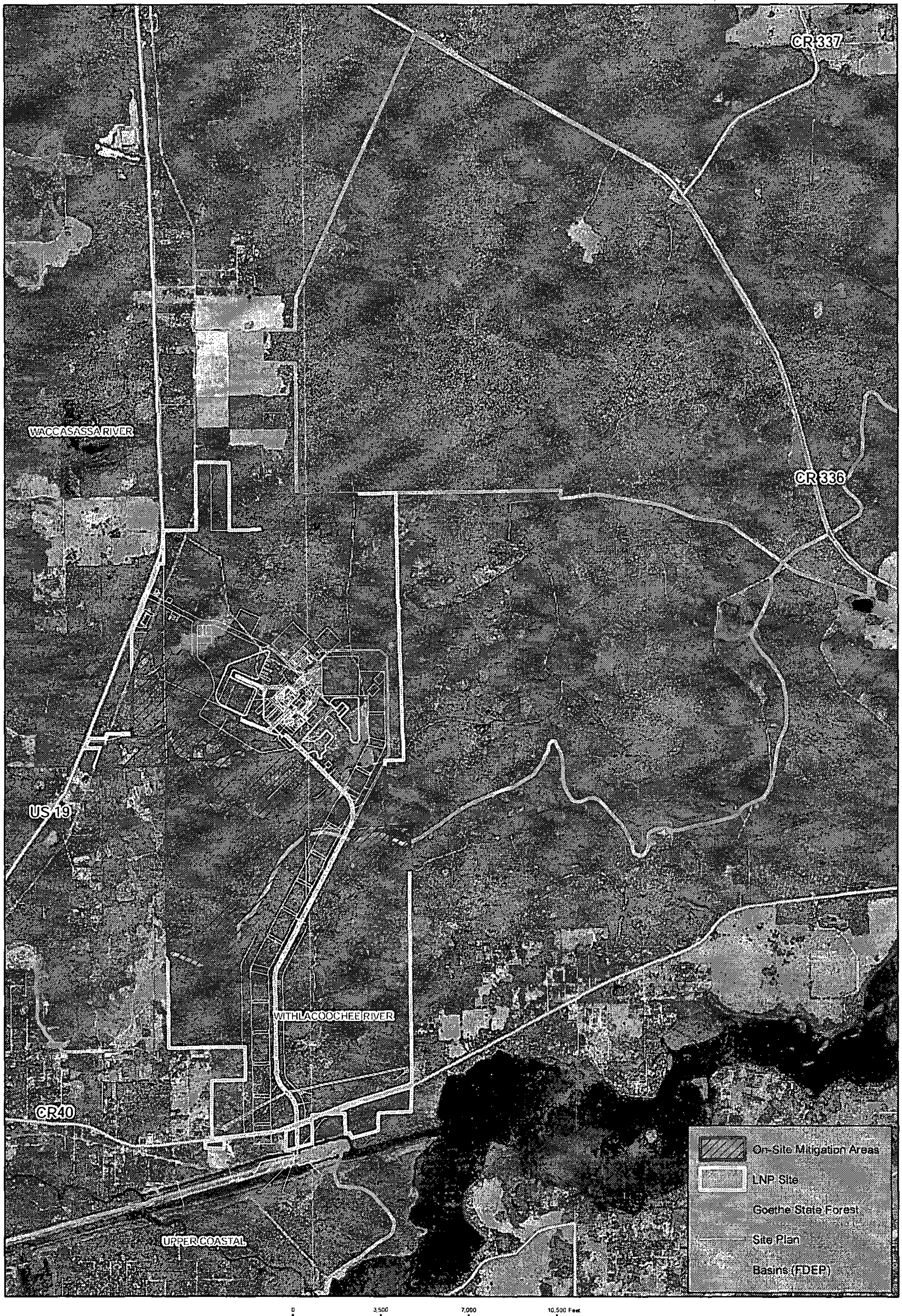

Exhibit 1-2 Project Site

Progress Energy
Levy County, FL

ENTRIX
3905 Crescent Park Drive, Riverview, FL 33578-3625
ph. (813) 664-4500
fx (813) 664-0440
www.entrix.com

Coordinate System
NAD 1983 UTM Zone 17N feet

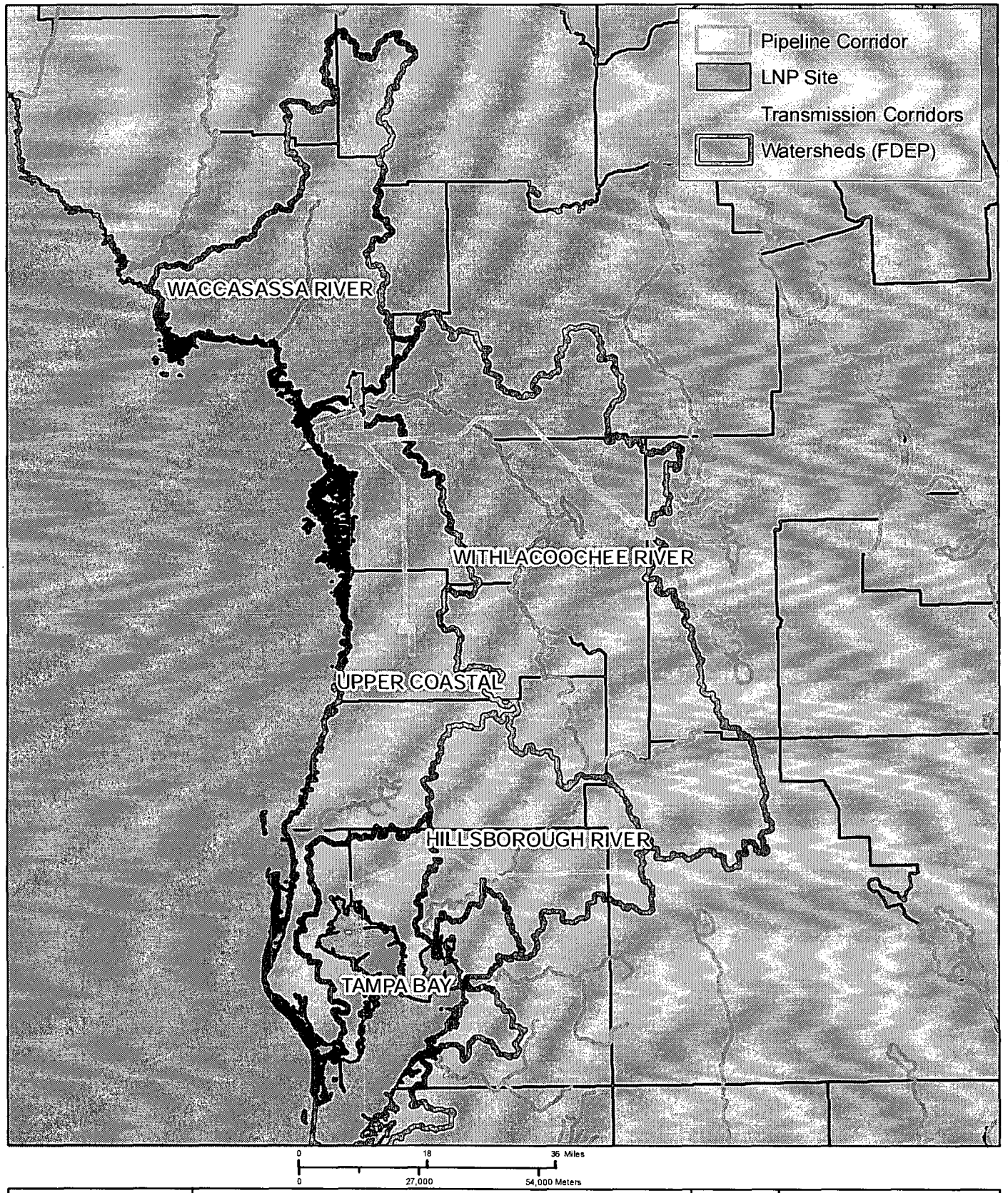

Exhibit 1-3
LNP Site and Corridors

ENTRIX
3905 Crescent Park Drive
Riverview, FL 33578-3625
ph. (813) 664-4500
fx (813) 664-0440
www.entrix.com

Coordinate System:
NAD 1983 Florida State Plane West

Date: 04/05/2010 Rev. Date: 04/07/2010 PM: SRD GIS Analyst: GdA Map Document: LNP_trans_corridor_A_20100416.mxd Project Number: 6591-020 PDF Document: LNP_trans_corridor_A_20100416.pdf Plot Size: 8.5 x 11

Due to the size of this project, power plant and transmission project elements will be constructed over many years. As a result of the long duration of the project, there is some likelihood of evolving mitigation options to offset wetland impacts from the project. Any mitigation project design changes over time will continue with the goal that the mitigation will provide the best possible combination of meeting power-production and delivery goals, being in the public interest, meeting state goals for cost accountability to customers, and minimizing environmental wetland impacts. To accomplish this, some flexibility in the final mitigation program is warranted.

1.1 REQUIREMENTS

This plan provides technical documentation demonstrating compliance with the Florida Department of Environmental Protection (FDEP) Environmental Resource Permit (ERP) rules under the Power Plant Siting Act Site Certification process and a USACE Section 404/10 Individual Permit for the plant and associated transmission projects. The LNP site, project description, and project need are detailed in the Site Certification Application (SCA)(PEF 2008a).

The wetlands described in this mitigation plan are have been delineated pursuant to Chapter 62-340, F.A.C. At the time that this plan is being submitted, the wetland delineations have not been finalized; therefore the impacts and mitigation are based on delineated but not final approved wetland lines. This is also true for the federal wetland delineation.

As part of the certification process a Wetland Mitigation Plan dated January 13, 2009 (BRA 2009) was accepted. This plan proposed that mitigation for wetland impacts would be conducted in a consolidated, Levy County-based mitigation program. The January 2009 Plan outlined several ways this could be accomplished. The Plan presented here is based on consideration of the COC requirements and those of the USACE. It presents a watershed-based approach instead of the January 2009 consolidated approach as a result of subsequent discussions with the USACE. Per the COC:

> *XXIV.A. Wetlands Mitigation Plan*
>
> *By May 24, 2010, the Licensee shall provide to the Department for review and approval, refinements to the updated Wetland Mitigation Plan submitted on January 13, 2009, that fully offset the functional loss, as required by 62-345, F.A.C., all impacts to jurisdictional wetlands remaining after minimization and avoidance to those jurisdictional wetlands has been demonstrated. Mitigation will be in accordance with applicable rules and any "Comprehensive Mitigation Plan" approved by the Department. The submittal deadline may be further extended upon agreement between the Licensee and the Department upon a demonstration that reasonable progress has been made by the Licensee toward preparation of the proposed Plan and that additional time is warranted to complete the proposed Plan within the additional time requested.*

In addition to the State of Florida requirements articulated by the COC, mitigation must also be provided for impacts to wetlands and other surface waters under USACE jurisdiction. The USACE updated its mitigation rules in 2008 and clarified its mitigation preferences and priorities, indicating that a watershed-based approach be used to determine compensation. This plan employs the watershed approach to wetland mitigation. The mitigation plan addresses how project impacts will be mitigated in each of the five affected watersheds.

Finally, PEF made a commitment to Levy County through the land use approval process for the 3,105 acre site to mitigate for wetland impacts within Levy County. This mitigation plan is consistent with all commitments to Levy County.

In addition to the local, state and federal requirements described above, PEF also must consider cost impacts to customers. This plan will minimize wetland impacts to customers by proposing cost-effective approaches to wetland mitigation. Our overriding concern is to ensure that the plan meets all regulatory requirements and results in wetland mitigation that will benefit Florida's public, flora, fauna and ecology, while being as cost-effective as possible.

1.2 CONSIDERATIONS

1.2.1 Wetland Impacts

In order to construct the LNP and transmission projects, a series of permittable wetland impacts will occur. Under the requirements of the COC, the wetland impacts must be eliminated, reduced and mitigated. The USACE process for a Section 404 Individual Permit is similar and requires avoidance, minimization and compensation of wetland impacts. Both sets of rules emphasize avoidance and minimization of wetland impacts, and then mitigation for those wetland impacts that would be unpermittable unless offset. The wetland impacts summarized below are based on a substantial refinement of the overall project. In summary, PEF is proposing unavoidable wetland impacts to 721.9 acres of FDEP-jurisdictional wetlands across the five watersheds in the project area. The impacted acreages and functional loss pursuant to UMAM are summarized in **Table 1-1**.

1.2.2 Direct Wetland Impacts

Three types of wetland impacts will occur: 1) permanent wetland impacts, e.g., filling of a wetland to allow for construction, removing all wetland function; 2) temporary wetland impacts, e.g., disturbance of a wetland adjacent to a construction area or to allow for installation of a buried pipeline; and 3) partial wetland impacts, e.g., clearing of trees from a portion of a forested wetland, but maintaining non-forested wetland functions. The partial wetland impacts due to forested wetland conversion will result from permanent clearing of trees from transmission line ROW and buffers around LNP facilities.

Table 1-1 summarizes the permittable wetland impacts of the project.

Table 1-1. Wetland Impacts Summary (UMAM units and acres).

Impact Area	Herbaceous Units	Herbaceous Acres	Forested Units	Forested Acres	Total Units	Total Acres
Waccasassa Watershed	-55.5	137.9	-126.9	295.7	-182.4	433.6
Withlacoochee Watershed On-site	-3.2	7.8	-27.9	129.1	-31.1	136.9
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Tampa Bay Watershed Loss	-6.3	9.4	-0.3	0.7	-6.6	10.1
Total	**-95.2**	**198.2**	**-194.1**	**523.7**	**-289.3**	**721.9**

1.2.3 Secondary Wetland Impacts

The proposed construction and mitigation plans adhere to ERP secondary buffer requirements and, in most cases, far exceed the 25-foot average and 15-foot minimum requirements. Safety considerations are paramount at a nuclear facility; therefore, buffers, fencing and prevention of unauthorized public access will be an integral part of the construction practices, as will the use of best-management protocols during construction.

1.2.4 Cumulative Wetland Impacts

This plan will provide regionally significant wetland mitigation and, as such, is entitled to preferred consideration under the applicable Basis of Review. The LNP site wetland impacts occur in the Waccasassa and Withlacoochee watersheds, and those wetland impacts will be offset in those watersheds. The unavoidable wetland impacts along the transmission ROW will occur primarily as a result of widening the existing ROW so overall wetland impacts are avoided and minimized. They are numerous, small and disconnected areas whose mitigation in adjacent areas would provide little

ecological benefit and would be exceedingly difficult to manage for the long term. For this reason, the overall mitigation objective is to provide significant regional ecological benefit, and the mitigation plan is tailored to provide watershed improvements by improving or restoring altered habitats, and connecting ecologically significant areas within the watersheds.

1.2.5 Uniform Mitigation Assessment Methodology (UMAM) Analysis

Determination of the amount of wetland mitigation required is addressed through the application of UMAM (contained in 373.414(19), FS; Chapter 62-345, FAC). This method is used by both the State of Florida and USACE. Application of the UMAM process for this project is described in Section 6.6 of this plan. **Table 1-1** provides a summary of UMAM loss units associated with the Project's wetland impacts. The estimated relative functional loss under UMAM is 289.3 units.

UMAM is broken into two parts. Part I describes the area, and identifies the species of wildlife that would likely use the habitat in its ideal condition. It also identifies the types of functions each wetland assessment area would provide to native fish and wildlife. Part II measures how well each assessment area meets the ideal functional conditions. The three parameters that measure wetland function in Part II are: Location and Landscape Support, Water Environment and Community Structure. Each parameter is scored based on the benefits each assessment area would provide to fish and wildlife. Each category is assigned a score ranging from 0 (inadequate conditions to provide wetland functions) to 10 (optimal condition). As further described in Section 6.6, in accordance with the guidelines set forth in Chapter 62-345, FAC, all potential mitigation areas were scored under the "without project" scenario and the "with project" scenario.

UMAM is used for assessing both functional losses due to project wetland impacts and functional gains due to mitigation. In both cases, the "without project" scenario assumes that the current land management and forestry operations will persist. For impact areas, the "with project" scenario assumes that the impacted areas will be filled completely and permanently or permanently cleared, as appropriate. For mitigation areas, the "with project" scenario assumes that the mitigation areas will be improved due to the mitigation activities and associated management, and the resulting "lift," or Relative Functional Gain (RFG), is the difference between the "with project" and "without project" UMAM values as adjusted for time lags and risks.

1.2.6 Criteria Guiding Mitigation Project Selection

A series of regulatory criteria was addressed in the mitigation site selection phase. The criteria for assessing wetland mitigation sites under Florida's ERP rules were utilized. Florida's criteria for permitting mitigation banks were also considered because the mitigation being performed is similar in scale to a mitigation bank. Finally, the mitigation project selection was also guided by the criteria required by the watershed approach in the USACE mitigation rules. Particular criteria receiving emphasis were as follows:

1.2.6.1 Environmental Resource Permitting

For Mitigation according to Southwest Florida Water Management District (SWFWMD) the Environmental Resources Permitting, Information Manual dated December 21, 2009, Basis of Review:

a) *3.3.1.1. In general, mitigation is best accomplished through creation, restoration, enhancement, or preservation of ecological communities similar to those being impacted. However, when the area proposed to be impacted is degraded, compared to its historic condition, mitigation is best accomplished through creation, restoration, enhancement or preservation of the ecological community which was historically present. Mitigation involving other ecological communities is acceptable if wetland impacts are offset and the applicant demonstrates that greater improvement in ecological value will result.*

b) *3.3.1.2. In general, mitigation is best accomplished when located on-site or in close proximity to the area being impacted. Off-site mitigation will only be accepted if adverse wetland impacts are offset and the applicant demonstrates that:*

> *(a) on-site mitigation opportunities are not expected to have comparable long-term viability due to such factors as unsuitable hydrologic conditions or ecologically incompatible existing adjacent land uses or future land uses identified in a local comprehensive plan adopted according to Chapter 163, F.S.; or*
> *(b) off-site mitigation would provide greater improvement in ecological value than on-site mitigation.*

One example of a project that would be expected to meet the criteria of paragraph (a) or (b) above is a linear project which cannot effectively implement on-site mitigation due to right-of-way constraints.

For the LNP wetland impacts, this plan provides on-site mitigation to the greatest extent possible using a restoration-based approach and it offsets the mitigation deficit with restoration on adjacent public lands.

For the linear transmission wetland impacts, the mitigation is consolidated into a few regionally significant locations in the affected watersheds. This consolidation will provide a substantially greater ecological value than that which would result from small, disjointed, on-site mitigation areas. Further, on-site mitigation for transmission line wetland impacts is rarely practical because many of these sites are not owned by PEF, but are held in limited less-than-fee easements.

1.2.6.2 Florida Criteria for Establishing a Mitigation Bank

Based on Chapter 62-342.100 FAC the "Criteria for Establishing a Mitigation Bank" is:,

The proposed mitigation will:

a) *improve ecological conditions of the regional watershed;*
b) *provide viable and sustainable ecological and hydrological functions for the proposed mitigation service area;*
c) *be effectively managed in the long term;*
d) *not destroy areas with high ecological value;*
e) *achieve mitigation success; and*
f) *be adjacent to lands which will not adversely affect the long-term viability of the Mitigation Bank due to unsuitable land uses or conditions.*

For the LNP and transmission wetland impacts, this plan provides mitigation that meets all of these criteria.

1.2.6.3 United States Army Corps of Engineers (USACE) Watershed Approach

Based on USACE 33 CFR Part 332.3, the general compensatory mitigation requirements are

(a) General considerations.

> (1) ... *When evaluating compensatory mitigation options, the district engineer will consider what would be environmentally preferable. In making this determination, the district engineer must assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project.* In many cases, the environmentally preferable compensatory mitigation may be provided through mitigation banks or in-lieu fee programs *because they* usually *involve consolidating compensatory mitigation projects where ecologically appropriate, consolidating resources, providing financial planning and scientific expertise* (which often is not practical for permittee-responsible compensatory

mitigation projects), *reducing temporal losses of functions, and reducing uncertainty over project success. ...*

(2) *...Compensatory mitigation may be performed using the methods of restoration, enhancement, establishment ....*

(3) *Compensatory mitigation projects may be sited on public or private lands. Credits for compensatory mitigation projects on public land must be based solely on aquatic resource functions provided by the compensatory mitigation project, over and above those provided by public programs already planned or in place. ...*

(b) ..... *In general, the required compensatory mitigation should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services*, taking into account such watershed scale features as aquatic habitat diversity, habitat connectivity, relationships to hydrologic sources (including the availability of water rights), trends in land use, ecological benefits, and compatibility with adjacent land uses. ...

(c) ***Watershed approach to compensatory mitigation***

(1) The district engineer must use a watershed approach to establish compensatory mitigation requirements in DA permits to the extent appropriate and practicable. .... Where no such plan is available, the watershed approach should be based on information provided by the project sponsor or available from other sources. The ultimate goal of a watershed approach is to maintain and improve the quality and quantity of aquatic resources within watersheds through strategic selection of compensatory mitigation sites.

(2) Considerations

(i) *A watershed approach to compensatory mitigation considers the importance of landscape position and resource type of compensatory mitigation projects for the sustainability of aquatic resource functions within the watershed.* Such an approach considers how the types and locations of compensatory mitigation projects will provide the desired aquatic resource functions, and *will continue to function over time in a changing landscape*. It also considers the habitat requirements of important species, habitat loss or conversion trends, sources of watershed impairment, and current development trends, as well as the requirements of other regulatory and non-regulatory programs that affect the watershed, such as storm water management or habitat conservation programs. It includes the protection and maintenance of terrestrial resources, such as non-wetland riparian areas and uplands, when those resources contribute to or improve the overall ecological functioning of aquatic resources in the watershed. *Compensatory mitigation requirements determined through the watershed approach should not focus exclusively on specific functions (e.g., water quality or habitat for certain species), but should provide, where practicable, the suite of functions typically provided by the affected aquatic resource.*

(ii) *Locational factors (e.g., hydrology, surrounding land use)* are important to the success of compensatory mitigation for impacted habitat functions and may lead to siting of such mitigation away from the project area. However, consideration should also be given to functions and services (e.g., water quality, flood control, shoreline protection) that will likely need to be addressed at or near the areas impacted by the permitted wetland impacts.

(iii) *A watershed approach may include* on-site compensatory mitigation, off-site compensatory mitigation (including mitigation banks or in-lieu fee programs), or *a combination of on-site and off-site compensatory mitigation.*

(iv) .... *Planning efforts should identify and prioritize aquatic resource restoration, establishment, and enhancement activities, and preservation of existing aquatic resources that are important for maintaining or improving ecological functions of the watershed. ...*

In selecting mitigation sites, PEF closely adhered to the USACE criteria, with un-italicized items above having received special attention. The resulting plan uses a combination of on- and off-site, strategically located, sustainable mitigation sites consistent with the watershed approach.

Using the criteria listed above, more than 24 sites in the Tampa Bay, 25 sites in the Upper Coastal, 25 sites in the Withlacoochee, 19 sites in the Hillsborough, and 11 sites in the Waccasassa watersheds were assessed. Once sites were selected as being potentially suitable for mitigation, they were reviewed to assess whether they could provide sufficient mitigation for the wetland impacts, using a combination of limited field testing and

desktop UMAM analysis. Sites apparently sufficient to provide mitigation for the project were considered further. The selected sites represent the best options to meet agency criteria for sustainable, perpetually managed, and regionally-significant mitigation in each watershed.

1.2.7 Process Used to Develop Plan

Once selected for detailed study, sites were reviewed on a number of levels, specifically:

- Current conditions, including vegetative communities, species presence, soils, topography, hydrology, exotics species presence and habitat quality using UMAM;
- Historic conditions as discerned from remaining natural vegetation (in pine plantations), soil types and historic aerials;
- Alterations to ecological and hydrological processes that caused the current conditions and whether those processes are reversible;
- Mechanisms that could be used to restore the historic, native processes to the site;
- Targeted community types assessed using UMAM to determine Relative Functional Gain (RFG);
- Cost effectiveness;
- Likely effectiveness of short- and long-term management;
- Likelihood of successful attainment of wetland functions; and
- Stewardship of the site over time.

The chosen sites were visited and individually reviewed. The plan reflects the compilation of extensive site-specific data-gathering and analysis, based upon site work and desktop preparation. Once restored, the selected sites will provide great regional ecological significance, will be managed in perpetuity and will be cost-prudent.

1.2.8 Challenges

There were a number of challenges to find suitable mitigation areas for the project. Over 100 potential mitigation sites were assessed for this plan. The southern portion of the LNP site was deemed not suitable for wetland enhancement due to water-table wetland impacts apparently caused by the Cross Florida Barge Canal (CFBC). Large areas within the Hillsborough and Upper Coastal watersheds were deemed unsuitable due to wellfield drawdown wetland impacts. A strong emphasis was placed on co-locating sites with public conservation landholdings, and we explored the adjacent private land holdings and public lands for mitigation opportunities, including lands on public agencies' acquisition lists. Most private land holdings were not large enough to consider. Some private lands also had no potential long-term manager or ability to restore hydrologic or ecologic processes due to location. Most public landholdings had nonexistent or insufficient mitigation opportunities or were already committed for restoration by others (such as the Florida Department of Transportation).

There are only three fully permitted mitigation banks in the affected watersheds: one each in the Upper Coastal; Hillsborough River; and Tampa Bay watersheds. Having closely examined each of the individual mitigation banks in each of the watersheds, we found one bank in the Upper Coastal watershed with less than 2 freshwater herbaceous and less than 12 forested credits; one bank in the Tampa Bay watershed with no freshwater herbaceous credits; and one bank in the Hillsborough watershed with 9 freshwater credits available. These credits would provide a fraction of the credits needed to offset wetland impacts within the subject watersheds. In addition, use of mitigation banks for a fraction of the mitigation needed would dilute the significance of the primary mitigation options, all of which are designed in concert with the federal watershed approach.

Because of PEF's responsibility to its customers to undertake cost-effective mitigation programs, some projects were deemed not suitable due to prohibitive costs. The resulting mix of projects provides regionally-significant, cost effective mitigation in the watersheds where the wetland impacts occur.

1.3 GOALS—WATERSHED

WATERSHED SUMMARY

As described in **Section 1.2**, a watershed-based approach was used as the basis for mitigation-site selection. The wetland impacts associated with the Project are primarily located in the Waccasassa and Withlacoochee watersheds, with minor wetland impacts in the Upper Coastal Watershed. Transmission wetland impacts are located in the Waccasassa, Withlacoochee, Upper Coastal, Hillsborough and Tampa Bay watersheds.

The approach described in this document results in the compensation occurring within the same watersheds as the wetland impacts, so the majority of the wetland impacts and mitigation are in the Withlacoochee and Waccasassa watersheds on and adjacent to the LNP site. The remaining wetland impacts are associated with transmission rights-of-way, and therefore, represent essentially diffused localized wetland impacts, *i.e.*, transmission rights-of-way, spanning several other watersheds with small, isolated permanent wetland impacts. The mitigation for transmission line wetland impacts occurs within the watersheds where they occur, as described in detail in this plan.

This plan addresses several geographically distinct mitigation parcels that provide the potential for development of mitigation units. These parcels include: (1) portions of the Daniels Island Tract in the Goethe State Forest (GSF); (2) portions of the LNP site itself; (3) portions of the Boarshead Ranch; (4) property located on Five Mile Creek in Pasco County; (5) portions of the Homosassa Tracts of the Withlacoochee State Forest (WSF); and (6) land in PEF rights-of-way that is within and surrounded by the Brooker Creek Preserve (**Exhibit 1-4**).

Table 1-2 summarizes the mitigation options that will address the wetland impacts within each watershed.

Table 1-2 Mitigation Summary for the LNP Project

Component	Location	Watershed	Action	Wetland UMAM Lift Units	Upland UMAM Lift Units	Total UMAM Lift Units
1	Daniels Island Tract, GSF	Waccasassa	Re-establishment/ Rehabilitation	61.0		61.0
2	LNP Site	Waccasassa & Withlacoochee (on-site impacts)	Rehabilitation (Enhancement)[2]/ Preservation	180.6	145.0	325.6
3	Boarshead Ranch	Withlacoochee(off-site impacts) & Hillsborough	Re-establishment/Rehabilitation/ Creation/Preservation	52.9		52.9
4	Five Mile Creek	Upper Coastal	Re-establishment/ Rehabilitation/Creation	4.7	0.6	5.3
5	Homosassa Tract, WSF	Upper Coastal	Re-establishment/ Rehabilitation	34.3	1.8	36.1
6	Brooker Creek	Tampa Bay	Re-establishment/ Rehabilitation	9.2		9.2
			Totals	342.7	147.4	490.1

[2] From the USACE and EPA's rules on wetland mitigation: 33 CFR § 332.2/ 40 CFR § 230.2 Definitions. Establishment (creation) means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions. Re-establishment means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions. Rehabilitation means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area. Under FDEP's and the water management district's rules "Establishment" equals "Creation" and "Rehabilitation" equals "Enhancement."

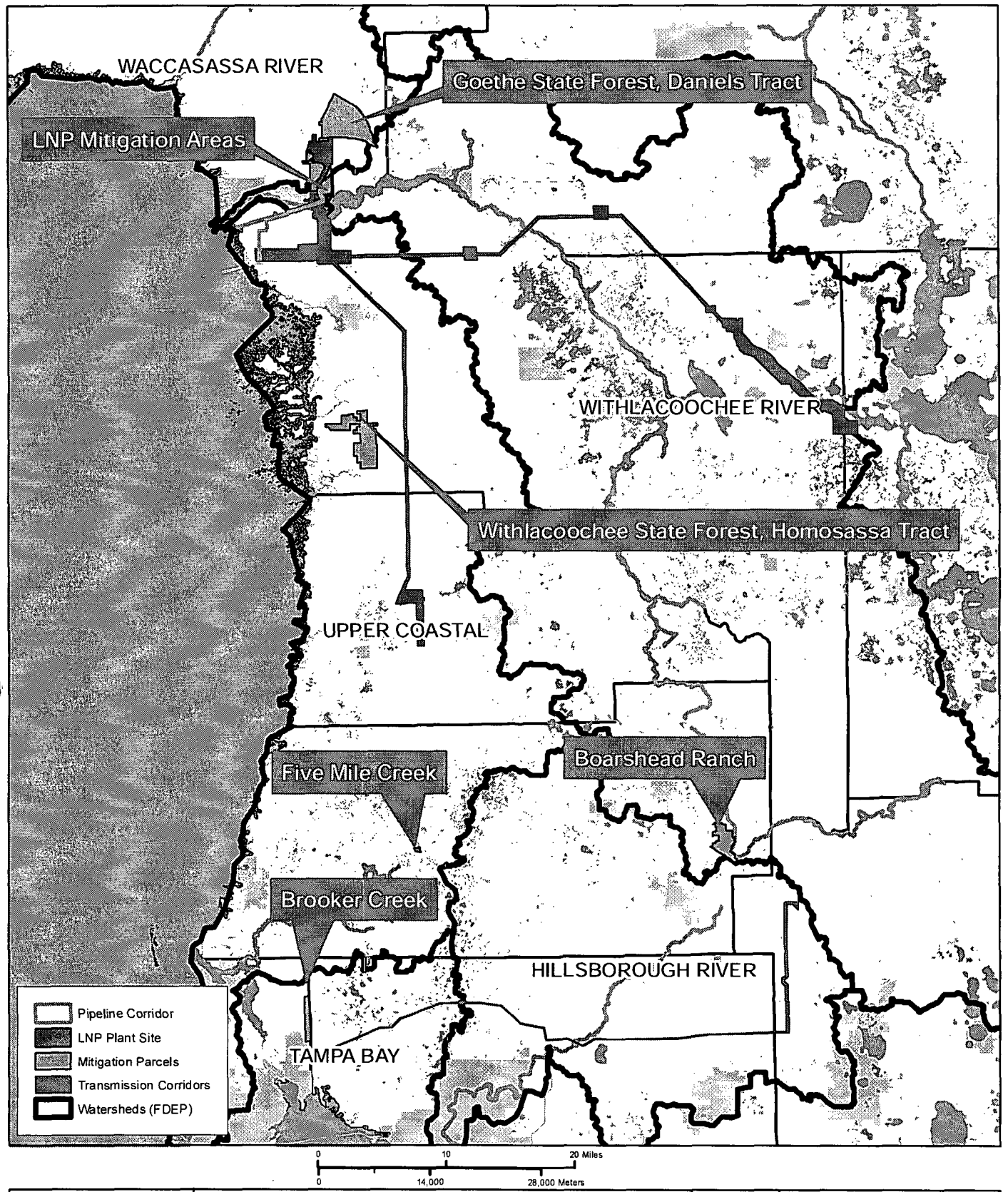

Exhibit 1-4
Mitigation Parcels Relative to Project Site

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Coordinate System:
NAD 1983 Florida State Plane West

Date: 04/05/2010 Rev. Date: 04/07/2010 PM: SRD GIS Analyst: GdA Map Document: LNP_mit_parcels_relative_A_20100416.mxd Project Number: 6691-020 PDF Document: LNP_mit_parcels_relative_A_20100416.pdf Plot Size: 8.5 x 11

The GSF and Homosassa sites are owned by Florida Division of Forestry (DOF). These DOF sites have been subjected to drainage and other land management practices that have resulted in degradation of wetlands. DOF is seeking improvements to wetlands and adjacent uplands for which they do not have existing or reasonably foreseeable funding.

The LNP site is owned by PEF and portions of it will be used as on-site mitigation.

Boarshead Ranch is privately owned. It sits at an ecologically unique and strategic location where the Hillsborough and Withlacoochee rivers diverge, and is adjacent to the SWFWMD-owned Green Swamp property. The property owner supports enhancing and managing the property, placing appropriate conservation easements in place, for use as a wetland mitigation area to offset transmission impacts.

The Five Mile Creek property is owned by Pasco County. It is a highly disturbed site on a strategic county corridor intended to connect large areas of public ownership within the county. Pasco County officials would like this property restored and enhanced, but they have no current or foreseeable public funding.

The property that is the subject of the Brooker Creek site mitigation plan is in PEF rights-of-way, but passes through the Pinellas County Brooker Creek Preserve, which Pinellas County officials would like to protect and enhance. The mitigation will improve the land PEF owns, as well as provide hydrological improvements and elimination of invasive species that threaten county-owned wetlands.

The majority of the proposed wetland impacts on the LNP site will be to hydric pine plantation and wetlands that have been disturbed by forestry and forestry-related activities such as bedding, fire suppression, ditching, and road building and maintenance. Many of the cypress and hardwood wetlands have been recently logged. Developing the disturbed on-site wetlands would primarily affect water quality and quantity, wildlife habitat and flood storage capacity, currently provided by the areas to be impacted. Transmission wetland impacts will affect a variety of herbaceous and forested wetland types and are due to clearing of forested tree canopy for the transmission lines, as well as fill for access roads and structure pads and substation construction.

In summary, the mitigation program uses a few strategically located sites to offset the project's wetland impacts. Their locations were chosen specifically to improve existing conservation areas and to meet regional watershed conservation goals. These components of the mitigation program address the mitigation requirements for each watershed in an efficient and regionally significant manner. Section 6 addresses aspects of the mitigation plan that are common multiple mitigation sites and their associated plans. The details provided in the watershed sections of this plan (Sections 2-5) are specific to the individual mitigation sites.

In all cases the plan seeks to restore the vegetative communities, including their hydrologic and fire regimes, to the greatest extent possible. Overall, the current conditions in all but DOF and Brooker Creek sites are primarily non-native plant communities: pine plantation; pasture; borrow pits; and other disturbed areas. The rehabilitation and restoration will benefit adjacent wetlands and the overall mosaic of uplands and wetlands. Implementation of this plan will restore large expanses of native Florida habitat in strategically placed locations in the landscape.

This mitigation program will provide an overall increase in ecological function provided across several thousand acres in regionally significant locations. The mitigation approach focuses on enhancing and restoring ecological functions to large areas of wetland habitat and supporting uplands. This landscape-level ecosystem benefit substantially augments the value of the local-scale mitigation activities described in the plan. The mitigation will be conducted prior to the majority of the wetland impacts, further ensuring time-efficient replacement of impacted wetland functions and an absence of risk or time lag.

1.4 SUMMARY

The plan is based on state, local, and privately owned land partnerships and offers many benefits to the wetland and upland resources and to the public. Working with our partners at DOF, Boarshead Ranch, and Pinellas and Pasco counties, PEF has developed a plan that will mitigate the wetland impacts within the affected watersheds, meet all state and federal regulations, enhance and restore habitat for several wetland- and upland-dependent threatened and endangered species, and enhance and improve the overall ecological function across thousands of acres in regionally significant locations.

This Wetland Mitigation plan is a comprehensive mitigation approach based on data collection, analysis, and experience. The plan was developed by PEF and our wetland-mitigation consultant ENTRIX, based on a variety of information provided by members of the consulting team, including CH2M Hill and Golder and Associates. This plan is based on site-specific data and analysis gathered from thousands of hours of field work and desktop reviews. This analysis has led to a detailed understanding of the project. The time in the field also has led to an intensive understanding of the restoration and enhancement needs of the mitigation areas. PEF has taken the data and analysis and applied to it the years of mitigation experience of our public land-managing partners, our in-house environmental experts and our wetland-mitigation consultants to develop this mitigation plan.

When the construction of the LNP project is complete and the mitigation is implemented, our customers and the public will benefit from clean and reliable energy and from enhanced and restored wetland habitat across thousands of acres in regionally significant locations.

COMMITMENT TO MITIGATION SUCCESS

PEF is committed to the successful implementation of this wetland mitigation plan. The agencies and the public can be assured that it is PEF's goal to meet and exceed the expectations of the FDEP, USACE and the public by enhancing and creating high-quality wetlands that meet all requirements and will benefit the public and the Florida ecology.

Section 2

Waccasassa and Withlacoochee Watersheds

SECTION 2

Waccasassa and Withlacoochee Watersheds

The Waccasassa and Withlacoochee Watersheds Plan (Waccasassa Plan) has two components: 1) on-site mitigation at the LNP site and 2) wetland enhancement at the adjacent GSF Daniels Island Tract (**Exhibit 2-1-1**). In addition, some of the mitigation activities on the LPN site will occur in the Withlacoochee Watershed and will be credited toward Withlacoochee Watershed wetland impacts.

The mitigation detailed here is designed to be regionally significant and sustainable, focused on the enhancement and restoration of wetland and ecosystem functions across a large landscape area and in association with existing public lands. The great majority of the proposed wetland impacts (by acreage and relative functional loss) are located at or very near the power plant in the Waccasassa and Withlacoochee watersheds. The Waccasassa Plan focuses on sites in close proximity to the wetland impacts; mitigation sites are on-site on the LNP property and nearby on the GSF Daniels Island Tract as described in this chapter. These sites were determined to be the most suitable, cost prudent and ecologically-meaningful of the eleven sites assessed. This plan clearly addresses the FDEP's requirements for assuring long term viability and provision of greater ecological value than would a conventional, fully on-site mitigation proposal.

2.1 IMPACT SUMMARY - WACCASASSA WATERSHED

In the Waccasassa Watershed, construction of the project will result in wetland impacts to 433.6 acres of wetlands. **Table 2-1** depicts the amount of impact proposed to herbaceous and forested wetlands, as well as the type of impact. The on-site wetland impacts are due to construction of the Levy Nuclear Plant (LNP) and related supporting facilities, including transmission. Permanent dredge and fill wetland impacts are from construction of these facilities. The permanent clearing wetland impacts are primarily for the transmission lines and narrow construction buffers that will need to be cleared; both will remain as wetlands, but will remain in a permanent herbaceous state. The UMAM analysis is described in greater detail in **Section 6.6**.

Table 2-1. Waccasassa Watershed Acreage and UMAM Impact Summary.

Area	Herbaceous (including Open Water)		Forested		Total Acres	Total Functional Loss
	Acres	Functional Loss	Acres	Functional Loss		
Permanent Fill	137.9	-55.5	222.9	-124.6	360.8	-180.1
Permanent Clearing	NA	NA	72.8	-2.3	72.8	-2.3
Total Impacts	**137.9**	**-55.5**	**295.7**	**-126.9**	**433.6**	**-182.4**

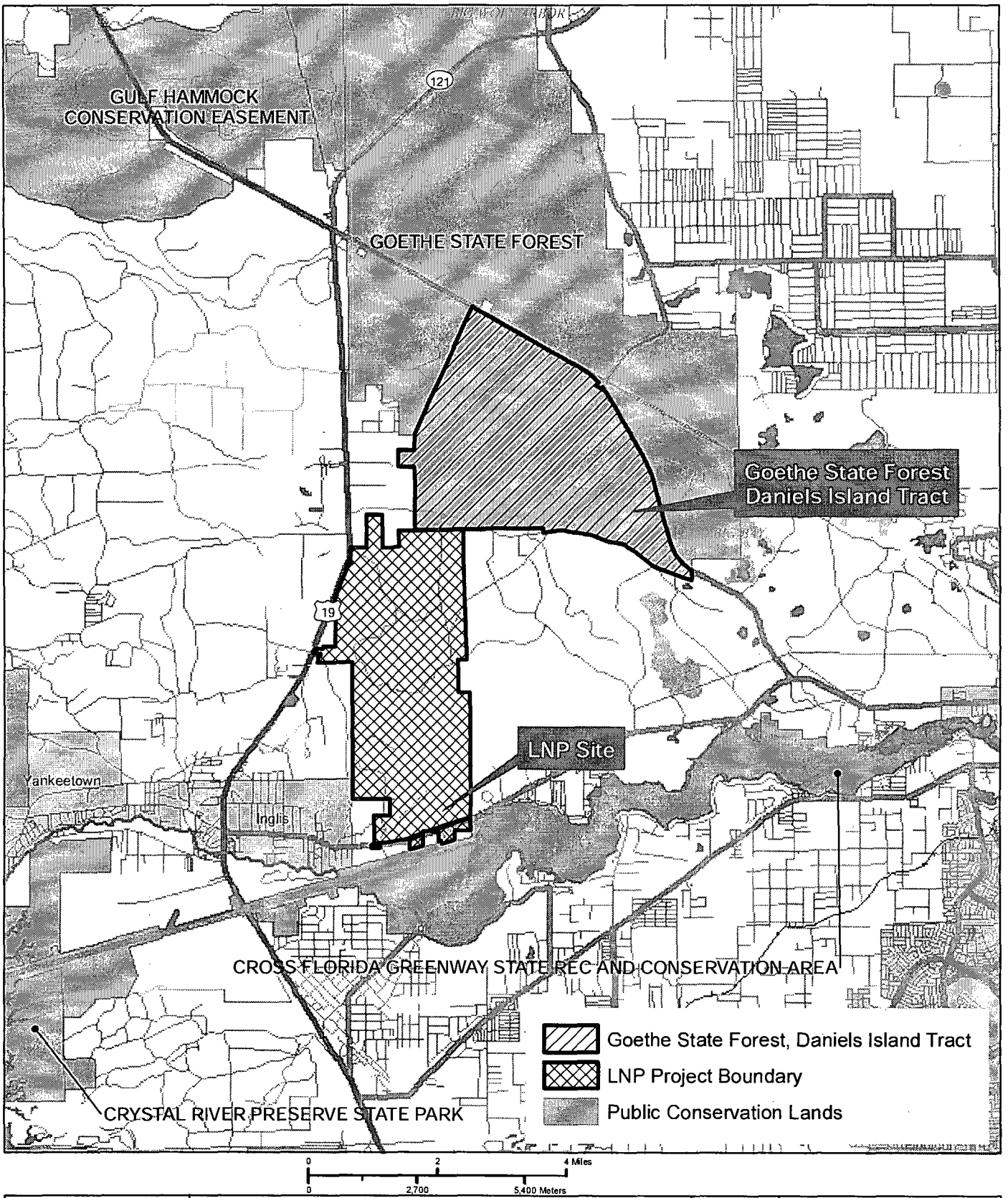

Exhibit 2-1-1
LNP Site and Goethe State Forest
Daniels Island Tract - Location Map

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Coordinate System:
Florida Albers

Date: 03/26/2010 Rev. Date: 03/29/2010 PM: SRD GIS Analyst: GdA Map Document: LNP_GSF_DIT_loc_A_20100326.mxd Project Number: 6691-020 PDF Document: LNP_GSF_DIT_loc_A_20100326.pdf Plot Size: 8.5 x 11

The LNP site will also accommodate as much mitigation in the Withlacoochee Watershed as is feasible. **Table 2-2** lists the on-site wetland impacts to 136.9 wetland acres.

Table 2-2. Withlacoochee Watershed Acreage and UMAM Summary (Only On-site Impacts).

Area	Herbaceous (including Open Water)		Forested		Total Acres	Total Functional Loss
	Acres	Functional Loss	Acres	Functional Loss		
Permanent Fill	7.8	-3.2	40.8	-22.8	48.6	-26.0
Permanent Clearing	NA	NA	88.3	-5.1	88.3	-5.1
Total Impacts	**7.8**	**-3.2**	**129.1**	**-27.9**	**136.9**	**-31.1**

2.2 MITIGATION PROGRAM (SUMMARY)

The mitigation plan was developed to provide full, functional, sustainable and regionally significant mitigation for these wetland impacts, as described below.

2.2.1 Levy Nuclear Plant On-site

The LNP Site is already under PEF ownership. Because of site constraints associated with NRC requirements, portions of the site will remain as an undeveloped buffer; the remainder of the site is potentially available for mitigation. Upon thorough site investigation, four primary mitigation zones were delineated in the west-central (mitigation areas 1 and 2) and east-central (mitigation area 3) and north-central (mitigation area 4) regions of the overall approximately 5,200-acre property. The LNP site can yield significant UMAM lift from preservation, pine plantation clearing, ditch filling, low water crossings construction, culvert installation and adjustment, restoration of a natural fire regime, and selected plantings. The north-central mitigation area connects directly to the GSF Daniels Tract where a series of wetland rehabilitation projects have been designed.

In order to provide the most effective mitigation on the LNP site, both upland and wetland natural communities will be restored. Under Florida law it is clear that uplands can be used as mitigation for wetland impacts. These upland mitigation credits are proposed to be reserved and applicable to additional project impacts, if that need is established by an appropriate regulatory agency, or applied to future impacts within the watershed, if proven unnecessary for this project.

2.2.2 Goethe State Forest

Working closely with the Florida Department of Agriculture's Division of Forestry (DOF), PEF will partner on a series of wetland rehabilitation projects that will benefit the GSF, the habitats on the GSF, and citizens who enjoy the forest. The GSF site is already in state ownership and management so the necessary work will be limited to unfunded wetland rehabilitation projects. A series of wetlands in the Daniels Island Tract of GSF have been identified as being subject to drainage. The GSF site can yield significant UMAM lift from pine thinning, ditch filling, low water crossings construction, and culvert installation and adjustment, and continued application of prescribed fire.

2.2.3 Mitigation Plan Objective

The proposed wetland impacts on the LNP site will be to hydric pine plantation, wetlands that have been disturbed by silviculture and silviculture-related activities such as bedding, fire suppression, ditching, and road building and maintenance, as well as cypress and mixed forested wetlands, most of which have been disturbed by logging activities. The objective of this mitigation plan is to provide sustainable, regionally-significant mitigation for the loss of wetland functions within the Waccasassa Watershed that are associated with the LNP Project. Portions of the LNP site are also in the Withlacoochee Watershed; both impacts and mitigation are proposed on this portion of the LNP Site.

The adjacency of the LNP and GSF sites will result in a synergistic integration of restored, native habitats on the landscape. The mitigation activities will re-establish pre-silvicultural vegetative assemblages and distributions. More specifically they will restore a fire-managed pine flatwoods landscape that has embedded cypress and hardwood basin swamps rimmed by herbaceous wetland ecotones. Specific restoration techniques and limitations associated with each restoration activity are provided in this plan. Short-term activities will focus on reestablishment of the historic wetland community coverage, extent and hydroperiod. After initial hydrologic improvements and mechanical removal of encroaching pine and shrubs, these ecosystems will be restored and managed primarily through the use of prescribed burning.

To ensure that the habitat needs of faunal species were considered as the plan was developed, groups or guilds of species were selected whose geographic distribution included or historically included the LNP site and mitigation areas. These species require a flatwoods landscape, such as in the mitigation area, for their basic life history needs. The species groups included common species, such as the southern leopard frog (*Lithobates sphenocephala*) and prothonotary warbler (*Protonotria citrea*), and uncommon or listed species, such as the swallow-tailed kite (*Elanoides forficatus*) and eastern indigo snake (*Drymarchon couperi*). A detailed description of the species considered in the habitat analysis may be found in **Section 6.6**. Species were selected for which basic life history information was available from the literature or professional knowledge of the species biology, including reproductive biology, foraging ecology, and dispersal/movement characteristics. The selected species guilds reflect their collective habitat requirements at a variety of trophic levels with regard to their likelihood to occupy mitigation area wetlands on the LNP site. Restoration activities are planned to ensure that the habitats that support these species are restored or rehabilitated to provide a highly functional mosaic of integrated habitats.

2.3 MITIGATION SITE DESCRIPTION

This section outlines conditions in the mitigation areas on-site and at GSF. The on-site mitigation areas are located in the north, east and west central portions of the LNP property. The north-central mitigation area is adjacent to the mitigation areas at GSF. The property is located in the southern portion of Levy County, northeast of Inglis, Florida (**Exhibit 2-1-1**). The sites are approximately eight miles east of the Gulf of Mexico and one mile north of the Cross Florida Barge Canal (CFBC), Lake Rousseau and Withlacoochee River. They are bordered by U.S. 19 to the west, C.R. 40 to the south and C.R. 336 to the east and north.

Although there are some areas of the LNP site suitable for mitigation, there are other portions, which are unavailable or unsuitable. These are lands associated with the proposed power generation facilities and lands at the southern end of the property that have significant hydrologic wetland impacts. The hydrologic wetland impacts are apparently due to severe water table drawdown due to the barge canal (Ashby and Kelly 2010). Additionally, the areas of GSF that are integrated into the mitigation plan are those in the southernmost portion of the forest which are adjacent to north-central mitigation area on the LNP site. The areas designated as potential mitigation within GSF are located in the Daniels Island Tract, south of C.R. 336.

2.3.1 Landscape Setting

The LNP and GSF sites are located in the Gulf Coastal Lowlands region of the Atlantic Coastal Plain Physiographic Province, which extends parallel to the Gulf Coast of Florida from Ft. Myers north and west to the Alabama state line. The region in which the mitigation is located is characterized by broad, flat, marine erosional plains. The GSF and northern portions of the LNP site are located in the Waccasassa Watershed and the southern portion of the LNP site is located in the Withlacoochee Watershed (**Exhibit 1-3**).

The local terrain is typified by broad, low flats interspersed with shallow depressions. The adjacency of the sites allows for the creation/maintenance/preservation of large corridors of natural and restored habitats. These habitats would support wildlife movement between GSF to the west and north.

Pine flatwoods are the predominant natural vegetative community type in the region, with many of these systems having been converted from natural longleaf pine (*Pinus palustris*) and slash pine (*P. elliottii*) communities to slash and loblolly pine (*P. taeda*) plantations. The LNP site is an active pine plantation,

while much of the GSF is former pine plantation. The LNP site plantations range in age from 7 to 25 years. About 75 percent of the plantations have trees that are 6-inch diameter at breast height (DBH) and 20-feet in height with the remaining 25 percent is unmerchantable until at least the year 2015. GSF was previously a private land holding managed for pine plantation, but has been in state ownership since the 1990's and its management has shifted to a less dense, uneven-aged stand forestry approach.

2.3.2 Topography and Hydrology

The topographic relief of the mitigation sites grades from 75 ft. NGVD in the easternmost areas of GSF down to 23 ft. NGVD in the southwestern corner of the LNP site (**Exhibit 2-3-2**). There is a small north-south oriented rise in elevation on the GSF site which routes much of the drainage from southern GSF to the north then west via Ten Mile Creek. Ten Mile Creek is classified as an "Outstanding Florida Water" due to its state ownership (FDACS 2007c). Reviewed at a larger scale, the site sits at the base of a ridge of high lands to the east. This project area is gently sloping flat land, with general relief grading from higher lands in the east to lower lands in the north and west. On the LNP site, the portion of the property in the Waccasassa watershed drains either west or north to GSF, and then on to the Gulf of Mexico. Wetlands in the southern portion of the LNP site drain generally south toward the CFBC and Withlacoochee River.

The local geology consists of approximately 10 to 50 feet of undifferentiated sands, silts, and clays atop limestone members of the Eocene Ocala Limestone. Regional aquifer maps indicate that the Surficial Aquifer System (SAS) may be up to 50 feet in thickness at the LNP site, but is lacking basal confinement (Arthur *et al.* 2008). Underlying the SAS is the Upper Floridan Aquifer System (UFAS), which locally consists of the permeable zones of limestone and dolostone of the Ocala Limestone and the Avon Park Formation. Essentially, there is no confining unit between the two aquifer units, and there is no notable hydraulic head difference between water table/potentiometric elevations measured in the SAS and UFAS wells. For all practical purposes, the two aquifer systems are hydraulically connected and appear to react similarly to seasonal aquifer fluctuations. This has had the effect in the southernmost portions of the LNP site of causing a ground and surface water drawdown toward the CFBC water surface. The CFBC water surface is at sea level, while the lowest point on the LNP site is 23 ft. NGVD. A steep decline in the local water table surface occurs between the southern LNP site and CFBC, which is apparently intensified by the lack of a confining layer in the area.

There is some ditching on the GSF site, but little ditching within the LNP site silvicultural areas. However, there are places on the LNP property where high surface waters wash over the road, resulting in some roadways acting as flow conveyances. Tree production and harvesting operations have extensively altered the natural configuration of the vegetation and the land surface by creating a series of elevated beds, separated by shallow furrows. The bedding of planted pine along with the high density of stems per acre contribute to the degradation of natural hydrologic flow into wetlands by altering drainage patterns, increasing evapotranspiration from the site, and decreasing water yield for the wetlands. A water table rise of about five inches is expected after the pines are removed from the site (Amatya and Skaggs 2008). A similar, but lesser water table rise is expected from partial clearing of pine trees at GSF.

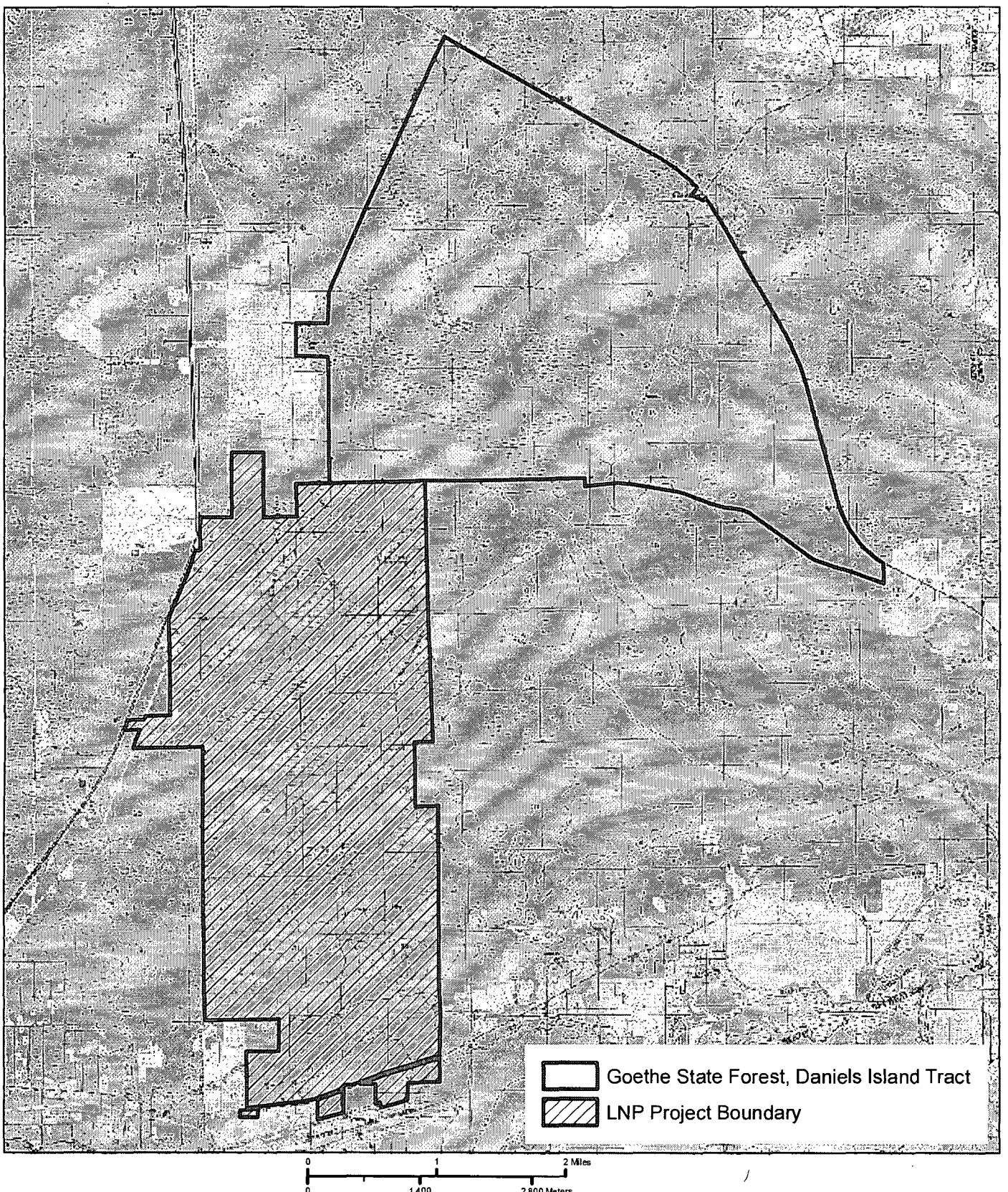

Exhibit 2-3-2
LNP Site and GSF
Daniels Island Tract
USGS Quadrangle Map

Image:USGS Quad Yankeetown, Yankeetown SE and GSF

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2.3.3 Soils

According to the Natural Resources Conservation Service (NRCS) soil survey for Levy County, Florida (USDA 1996), fourteen and thirteen soils units are present on the LNP and Daniels Island Tract-GSF, respectively (**Tables 2-3** and **2-4**). Locations of soil units are depicted on **Exhibits 2-4-3** and **2-5-3**. Soils in the mitigation areas, particularly in the drier areas, have been extensively disturbed through clearing, logging road construction, and bedding. Approximately 30% of the soils of the overall mitigation areas meet hydric soil criteria. The predominant upland and wetland soil types on the LNP and GSF sites are Smyrna fine sands and Placid and Samsula soils, depressional (**Exhibits 2-4-3** and **2-5-3**). Smyrna fine sands are described as poorly drained and level soils in flatwoods, with a seasonal high water table at 18 in. for 1 to 4 months. Placid and Samsula soils, depressional, are described as very poorly drained and nearly level soils in depressions in flatwoods. In a non-degraded setting, they are ponded, with the seasonal high water table typically above the surface for more than 6 months and within a depth of 12 in. during the rest of the year. The predominant soils map unit on the site is common across the region, covering approximately 28 percent of the Levy County acreage.

Table 2-3. USDA NRCS Soil Types on the LNP Site.

Soil Number	Soil Type	Hydric*	Acres
2	Tavares Fine Sand	No	59.8
8	Smyrna Fine Sand	No	2874.4
9	Pomona Fine Sand	No	121.3
11	Placid and Samsula Soils, Depressional	Yes	1184.7
13	Wekiva Fine Sand	Yes	110.9
16	Chobee-Gator Complex, Frequently Flooded	Yes	300.1
17	Adamsville Fine Sand; 0-5 Percent Slopes	No	262.3
18	Wauchula Fine Sand	No	292.0
23	Zolfo Sand	No	36.8
27	Placid and Popoash Soils, Depressional	Yes	3.5
34	Cassia-Pomello Complex	No	142.2
38	Myakka Sand	No	69.5
74	Arents, 0-5 Percent Slopes	No	3.7
99	Water, < 40 acres	Yes	4.8

Table 2-4. USDA NRCS Soil Types within the GSF.

Soil Number	Soil Type	Hydric*	Acres
2	Tavares Fine Sand	No	63.1
8	Smyrna Fine Sand	No	2932.2
9	Pomona Fine Sand	No	1120.1
10	Placid Fine Sand	Yes	0.5
11	Placid and Samsula Soils, Depressional	Yes	413.1
13	Wekiva Fine Sand	Yes	123.3
16	Chobee-Gator Complex, Frequently Flooded	Yes	942.0
17	Adamsville Fine Sand; 0-5 Percent Slopes	No	264. 8
21	Pompano Fine Sand	Yes	109.4
23	Zolfo Sand	No	18.5
24	Terra Ceia Muck, depressional	Yes	99.7
29	Chobee-Bradenton Complex, frequently flooded	Yes	85.6
58	Boca-Holopaw, Limestone Substratum, complex	Yes	153.1

*included on the USDA Hydric Soils List/Per the USDA Hydric Soils List meets criteria as a hydric soils mapping unit

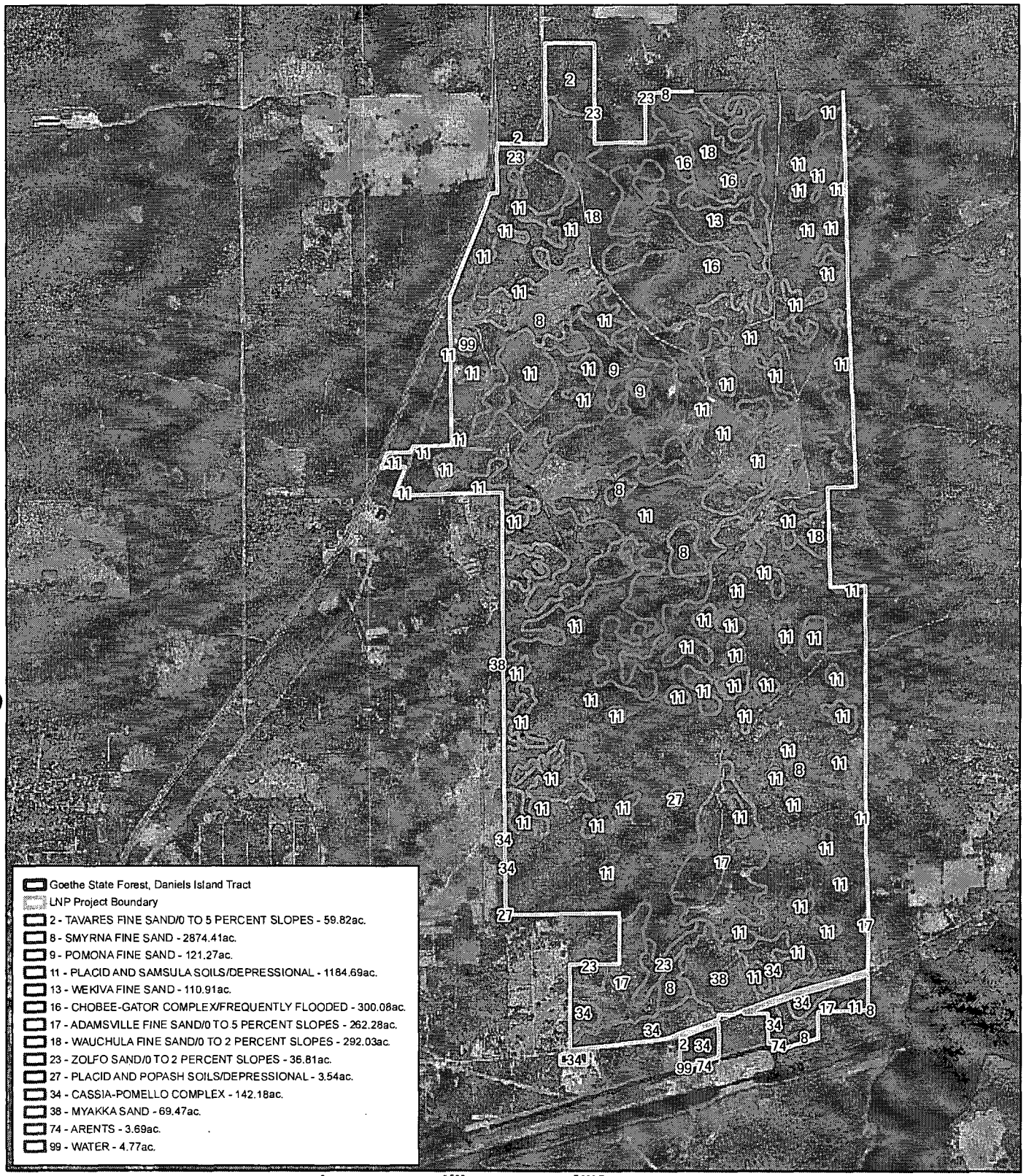

Exhibit 2-4-3
LNP Site
NRCS Soils Map

Image:2009

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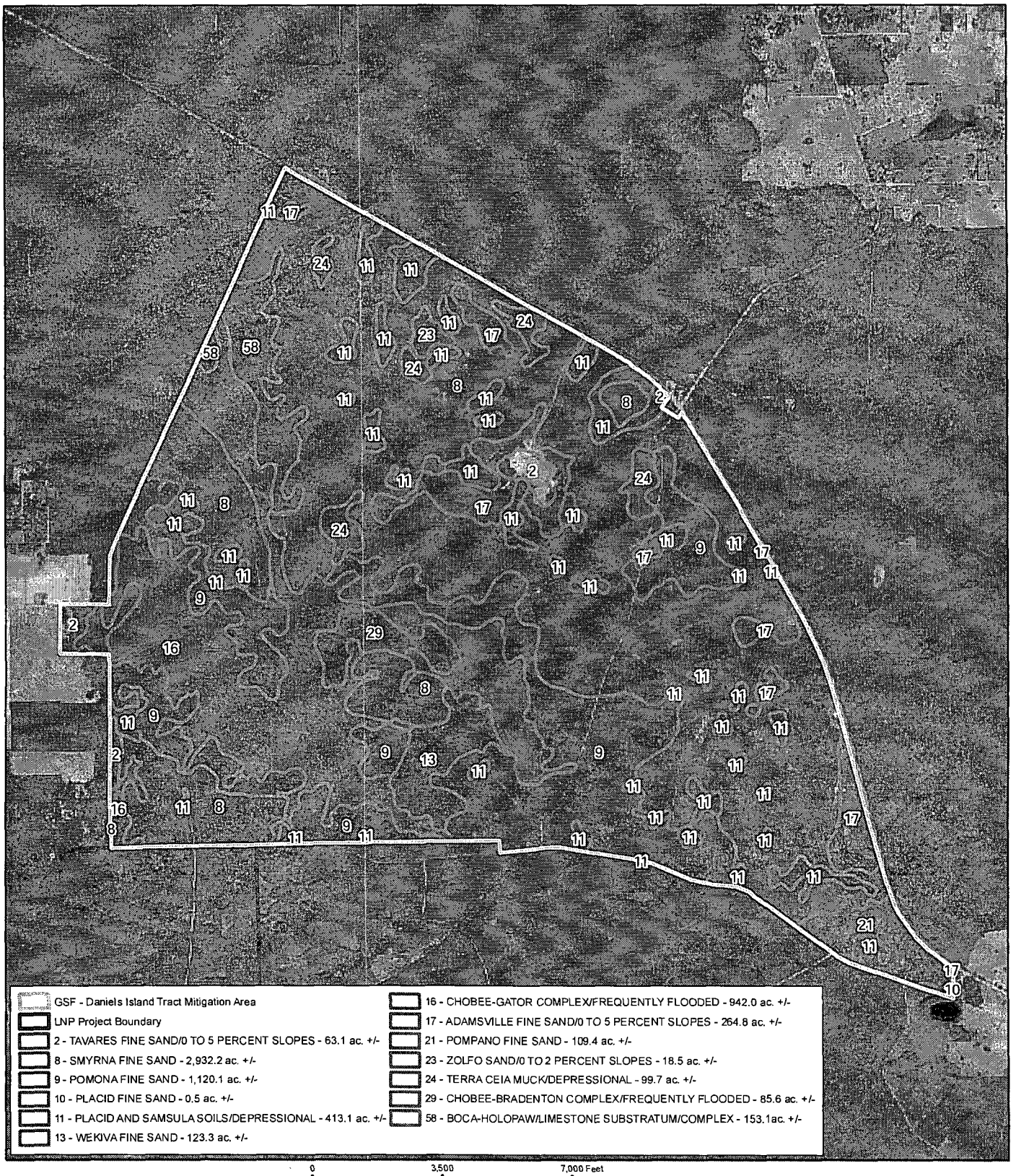

Exhibit 2-5-3
GSF - Daniels Island Tract
NRCS Soils Map

Image: 2009

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Placid and Samsula Soils, Depressional, soils support a natural vegetative community of cypress (*Taxodium distichum*), red maple (*Acer rubrum*), sweetbay (*Magnolia virginiana*), and sweetgum (*Liquidambar styraciflua*) in the overstory with pickerelweed (*Pontederia cordata*), lizard's tail (*Saururus cernuus*), iris (*Iris* spp.) and scattered cabbage palm (*Sabal palmetto*) in the understory.

The two soil types which support the majority of the upland planted pines, Smyrna Fine Sand and Pomona Fine Sand, both support a natural vegetative coverage of a slash (*Pinus elliottii*), longleaf (*Pinus palustris*), and loblolly pine (*Pinus taeda*) overstory with a saw palmetto (*Serenoa repens*), bluestem (*Andropogon* spp.), wax myrtle (*Myrica cerifera*), and gallberry (*Ilex glabra*) understory. These species are characteristic of the mesic pine flatwoods community, which historically occurred on the sites prior to conversion to silviculture. Restoration to these community types will be simplified by the presence of appropriate soil types.

2.3.4 Historic Conditions

Based on review of historic aerial photography, assessment of soils and typical associated plant communities, an assessment of likely historic conditions was conducted (**Exhibit 2-3-4**). The historic condition is a pine flatwoods landscape with an interspersion of cypress and hardwood basin swamps and wet prairies, both rimmed with wet prairie ecotones and that grade to low coastal flatwoods and hammocks to the west toward the Gulf of Mexico. The landscape was less densely forested than at present and exhibited clearer ecotonal transitions from wetland to upland plant communities.

2.4 LEVY NUCLEAR PLANT SITE

This section describes conditions in the mitigation areas. Existing conditions of the impact sites within the LNP parcel are similar to those described below, but details specific to the impact areas were addressed in the Site Certification Application (SCA)(PEF 2008a).

2.4.1 Current Conditions

Until it was purchased by PEF in September 2007, LNP site property was in active silvicultural use and leased for hunting and target practice. Silvicultural activities will continue on the property in areas surrounding the mitigation. The LNP site is undeveloped except for a network of limerock roads that were constructed for logging and hunting access. Surface drainage is generally to the west, but localized drainage patterns on the site have been altered through silvicultural activities such as grading, construction of logging roads, and limited ditching.

The LNP site comprises a range of cleared and forested cover types, as evident in an aerial photograph of the property (**Exhibit 2-4-5**). Existing vegetative cover types on the LNP site that are described below are based on the Florida Land Use, Cover and Forms Classification System (FLUCFCS), as interpreted and mapped by the SWFWMD and field-verified during ecological surveys performed by the consulting team (**Exhibit 2-4-6**). The FLUCFCS types on the LNP site are provided in **Table 2-5** and are described in **Section 6.3**.

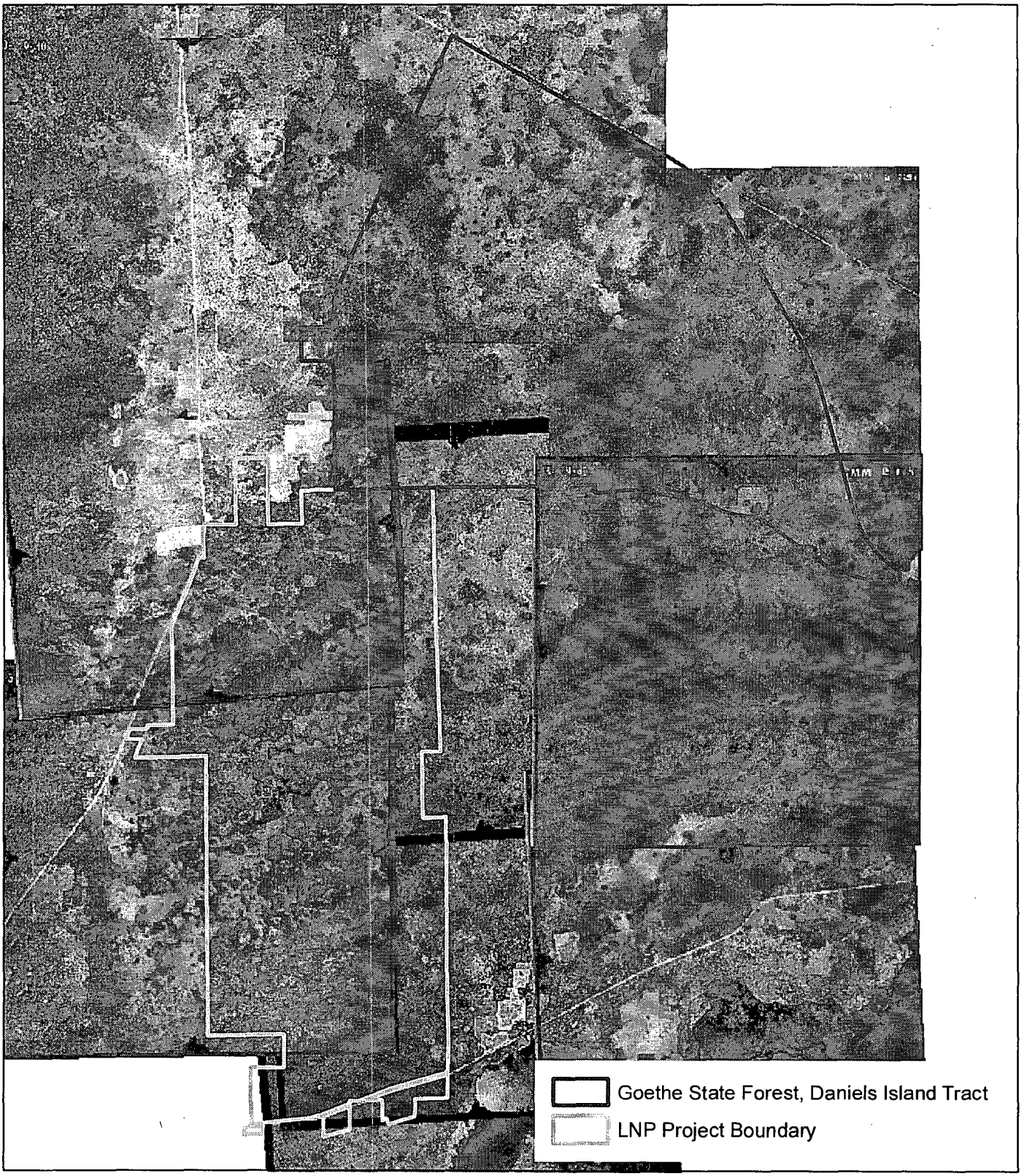

Exhibit 2-3-4
LNP Site and GSF
Daniels Island Tract
1940s Historic Aerial

Image: 1940s

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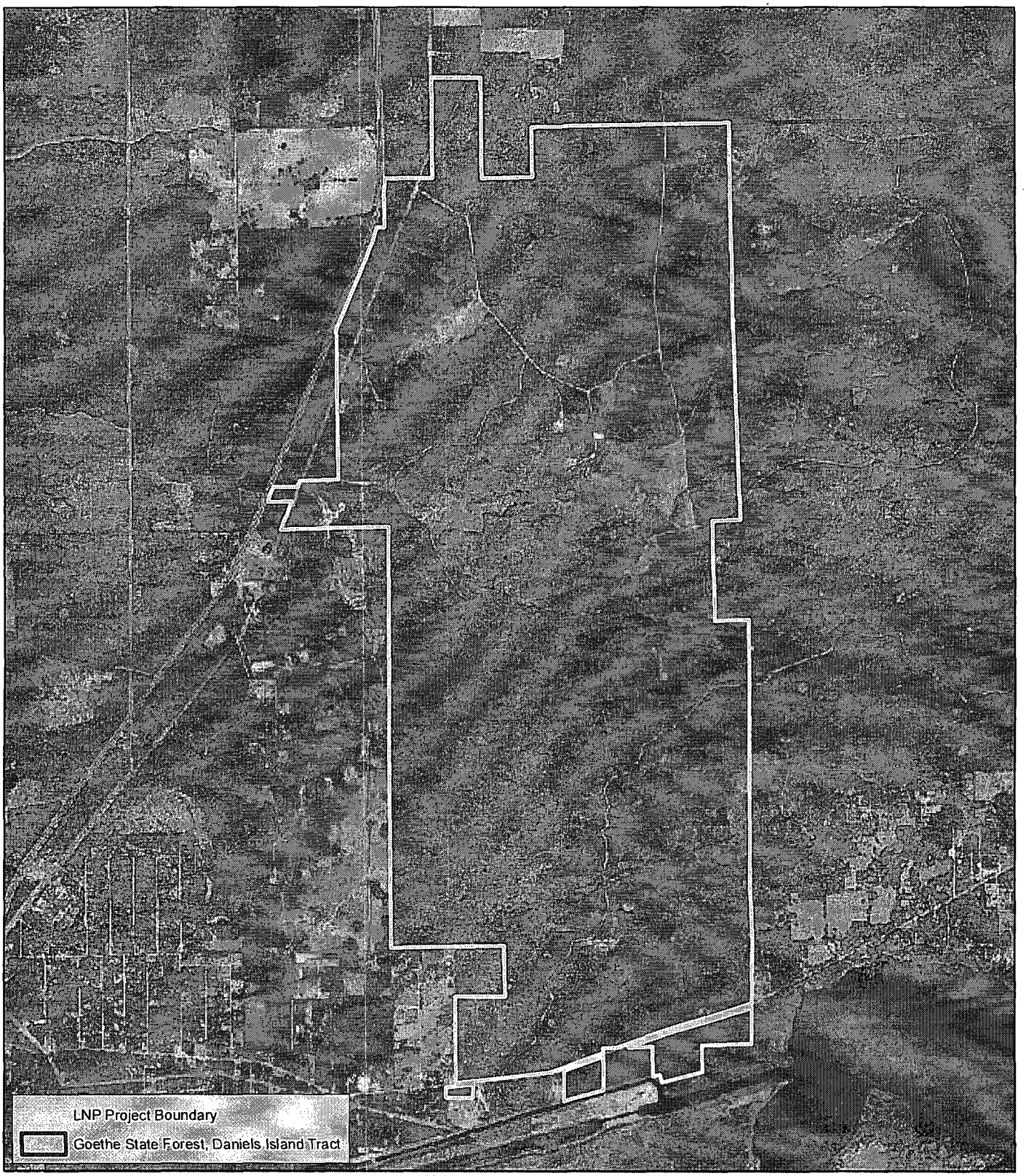

Exhibit 2-4-5
LNP Site
2009 Aerial Map

Image:2009

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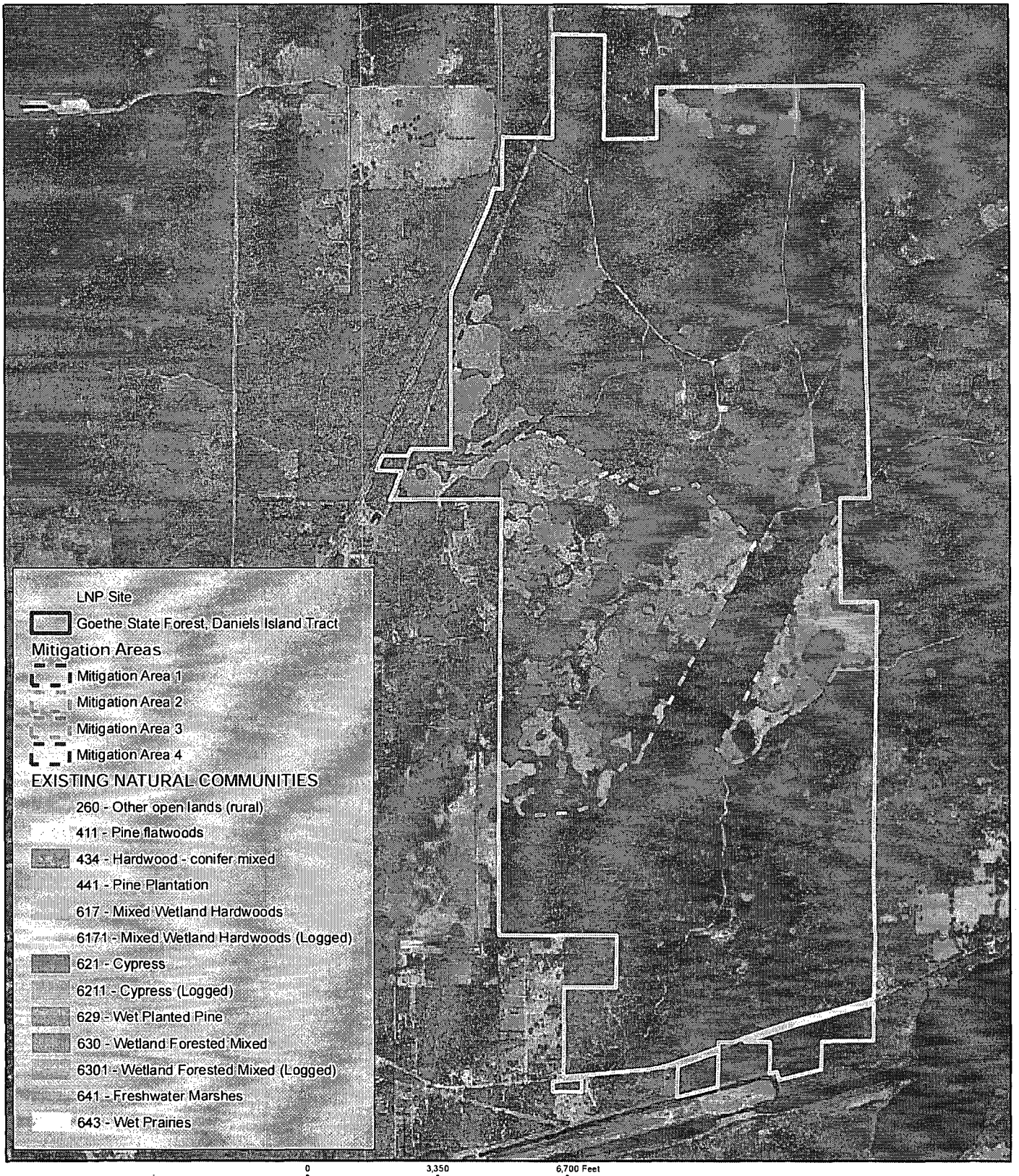

Exhibit 2-4-6
LNP Site
Existing Land Use and Land Cover

Image:2009

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Table 2-5. Existing Land Uses within Mitigation Areas 1-4 (FLUCFCS Communities).

FLUCFCS	Area 1 Acres	Area 2 Acres	Area 3 Acres	Area 4 Acres	Total Acres
260-Other Open Lands (Rural)			14.4		14.4
411-Pine Flatwoods		6.5	4.3	2.5	13.3
434-Hardwood-Conifer Mixed			2.8		2.8
441-Pine Plantations	76.3	251.7	97.0	37.2	462.2
617-Mixed Wetland Hardwoods		0.5			0.5
617-1-Mixed Wetland Hardwoods, Logged		15.1			15.1
621-Cypress	98.9	102.4	28.5	26.4	256.2
621-1-Cypress, Logged		4.7	13.6	3.9	22.2
629-Wet Planted Pine	11.6	245.2	29.4	32.0	318.2
630-Wetland Forested Mix		214.1	0.9	11.0	226.0
630-1-Wetland Forested Mix, Logged		190.5	12.8		203.3
641-Freshwater Marshes	6.7	2.4	2.2		11.3
643-Wet Prairies	0.1	1.8	1.3		3.2
Total Acres	**193.6**	**1034.9**	**207.2**	**113.0**	**1548.7**

Natural forested wetland communities located on the LNP site have been logged and are in various stages of regeneration (**Table 2-5**). Remnant natural systems, such as logged cypress swamps in which cypress no longer comprises the dominant vegetative canopy cover, are described in **Section 6.3** under the classification that reflects current vegetative composition.

Even-aged and monospecific planted pine stands generally exhibit lower biodiversity compared to native forests. Pine plantations are often managed to exclude vegetative strata and species that provide habitat for a variety of wildlife species (Allen et al. 1996). With the short rotation scale characteristic of pulpwood operations, for example, trees are harvested before reaching their maximum growth, thereby excluding species such as cavity-dwelling birds that use mature trees. The closed canopy in planted pine stands blocks sunlight for ground cover species, while the profuse needle litter effectively smothers the grasses and forbs that support a diverse wildlife population (Marion et al. 1996).

Although individual pine stands at the LNP site are even-aged, they are at different stages of growth, expanding the habitat types available to wildlife. The landscape matrix of cypress swamps, clearcut areas, and hardwoods interspersed within the planted pine stands provides habitat for common species of mammals, birds, reptiles, and amphibians. Mammalian species that occur at the LNP site are those widespread in the pine plantation/cypress swamp landscape mosaic of the region. These include whitetail deer (*Odocoileus virginianus*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), feral hog (*Sus scrofa*), nine-banded armadillo (*Dasypus novemeinctus*), raccoon (*Procyon lotor*), and opossum (*Didelphis virginiana*). The common mammals on the LNP site are generalists in that they are not exclusive to any one habitat type, but use various habitats for different purposes.

Bird species that were observed on the LNP site or are considered likely to use the site include northern cardinal (*Cardinalis cardinalis*), eastern kingbird (*Tyrannus tyrannus*), black vulture (*Coragyps atratus*), turkey vulture (*Cathartes aura*), and northern mockingbird (*Mimus polyglottus*). Nesting colonies of wading birds have not been observed, nor is it considered likely that colonies will become established on the LNP site because of the absence of open water habitats that are preferred by these species. Near the Gulf of Mexico and along the path of the Eastern Atlantic Flyway, the site is well-situated as a stopover for migratory birds; although, the proximity of natural areas such as the Goethe State Forest and Waccasassa Bay Preserve State Park may make the LNP site a relatively less attractive alternative for some avifauna. Migratory bird species observed on the LNP site include American robin (*Turdus migratorius*), yellow-rumped warbler (*Dendroica coronata*), yellow-throated warbler (*Dendroica dominica*), and cedar waxwing (*Bombycilla cedrom*; Progress Energy 2008b).

2.4.2 Target Conditions

There are four distinct mitigation areas on the LNP site. Areas 1- 3 are located on the west central portion and east central portions of the LNP site. Area 4 abuts with the portion of GSF where wetland mitigation will be performed, as described in **Section 2.5**. The four areas total 1,548.7 acres. The remainder of the LNP property will remain in pine plantation. The southern extent of Areas 2 and 3 was determined based on field conditions in the wetland systems, specifically hydrology. The apparent water table drawdown related to the CFBC has resulted in severely reduced hydroperiods in many of the southern wetlands on-site (refer to **Sections 2.3** and **2.3.2**). Many of these wetlands lack hydrologic indicators and PEF was concerned that hydroperiod restoration may not be achievable. There has been a drought in recent years which may be an interacting factor. Rather than develop a plan that has a low chance of success, PEF has opted to define our mitigation area boundaries to encompass wetlands that are restorable.

Mitigation areas 1, 2 and 3 are separated by the proposed transmission lines, heavy haul road and blowdown pipeline. The transmission line ROW are a very passive land use and will be hospitable to most wildlife. The heavy haul road will only be used during plant construction and repair periods; it will not be used for plant facility access. Because of the tremendous weights of the materials being hauled n this road, road speeds will be extremely slow. As a result, wildlife wetland impacts due to traffic on the haul road are not expected. The blowdown pipeline will be buried on the site and become a passive land use. Wildlife will be able to use the transmission line and safely traverse the rest of the area between mitigation areas 2 and 3.

Most of the mitigation areas are mesic to wet flatwoods that have been planted in loblolly and slash pine plantations for an industrial silviculture operation. As is typical for pine plantations, the tract has been fire-suppressed for many years to promote commercial pine production. The effects of silviculture will be removed from the site and native communities will be restored resulting in a pine flatwoods landscape with an interspersion of cypress and hardwood basin swamps rimmed by herbaceous wetlands (**Exhibit 2-4-7**). The target communities are listed in **Table 2-6**. They are described in **Section 6.4**.

Table 2-6. Target Communities Using FNAI Nomenclature.

FNAI	Area 1 Acres	Area 2 Acres	Area 3 Acres	Area 4 Acres	Total Acres
Basin Swamp-Cypress Dominant	98.9	107.1	42.1	30.3	278.4
Basin Swamp-Hardwood Dominant	0.0	420.2	13.7	11.0	444.9
Depression Marsh	6.7	2.4	2.2	0.0	11.3
Mesic Flatwoods	76.3	258.2	118.5	39.7	492.7
Wet Prairies	11.7	247.0	30.7	32.0	321.4
Total Acres	**193.6**	**1034.9**	**207.2**	**113.0**	**1548.7**

2.4.3 Mitigation Activities

The mitigation at the LNP site is designed to restore the pre-pine plantation/historical communities to the LNP site. Specifically, it entails the restoration of a total of a mosaic of pine flatwoods with embedded depressional forested swamps and their herbaceous wetlands edges. The ecological goals for the LNP mitigation site are to recreate the landscape mosaic as it appears on 1944 aerial photographs, which precedes pine plantation conversion activities (**Exhibit 2-3-4**). This will result in the re-establishment the species composition and structure of the 1944 plant communities, with respect to life form distribution, vertical stratification, overall species abundance, and patterns of dominance. The mitigation efforts will return natural patterns of surface run-off by filling ditches, installing equalizer culverts under and creating hardened low water crossings in permanent roads, and will implement a "natural" prescribed fire regime at the site.

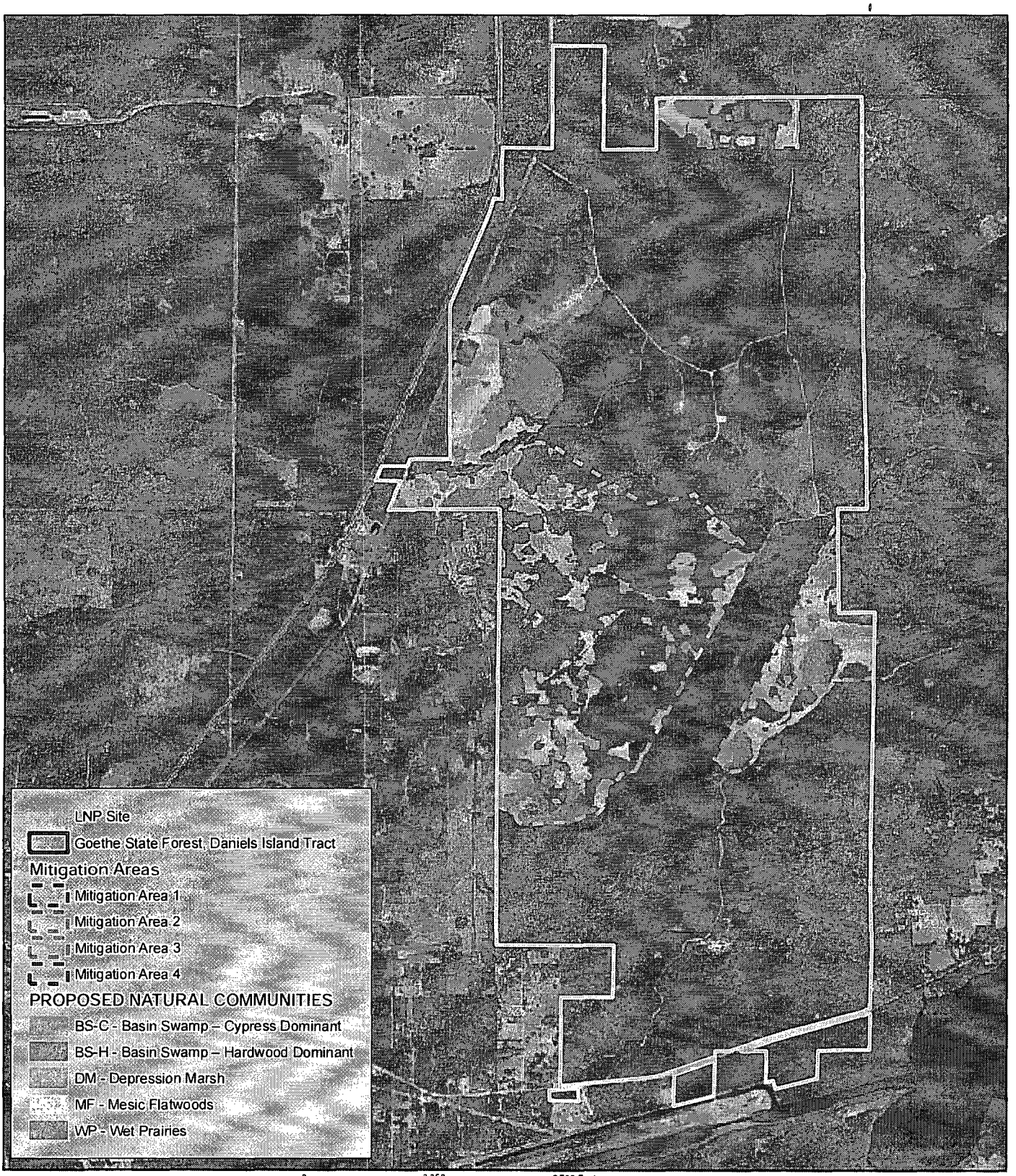

Exhibit 2-4-7
LNP Site
Proposed Land Use and Land Cover

Image:2009

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At the request of the USACE, the target community types have been classified by the FNAI Natural Community nomenclature (FNAI 2009). A total of five community types classified by FNAI have been targeted as a goal for restoration activities including cypress- and hardwood-dominant basin swamps, wet prairies, depression marshes, and mesic flatwoods. The exact acreage of each post-restoration type is less important than achieving a healthy, integrated mosaic of communities with approximately these percentages of component communities, as depicted below. The majority of the pine plantations located on upland soils will be restored to longleaf pine flatwoods. **Table 2-7** shows the general conversion from FLUCFCS category to FNAI category.

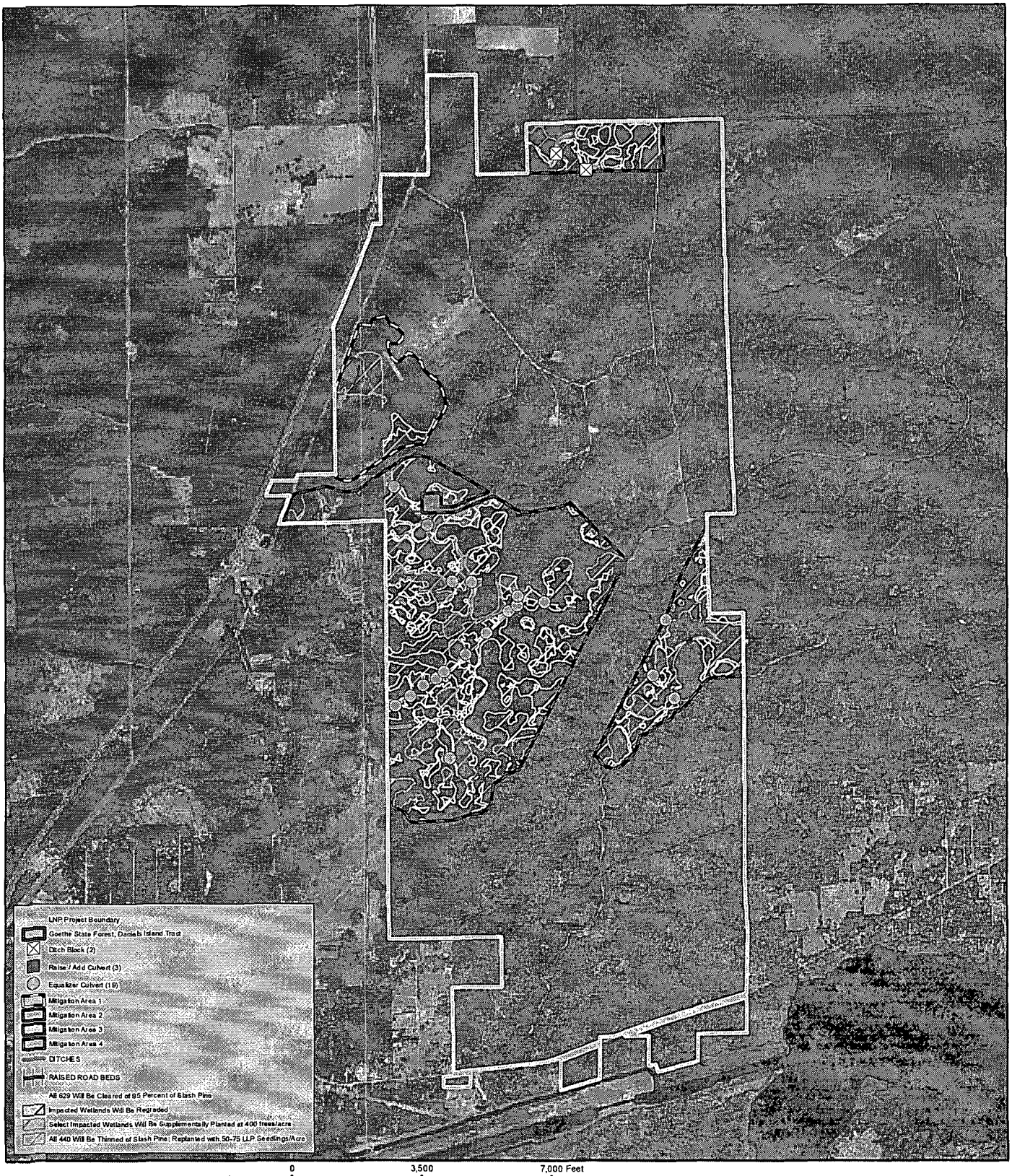
Table 2-7. Matrix of Existing to Post-Restoration Land Uses and Acreages.

Existing Types	Mesic Flatwoods	Basin Swamp-Hardwood Dominant	Basin Swamp-Cypress Dominant	Wet Prairie	Depression Marsh	Total
260-Other Open Lands (Rural)	14.4					14.4
411-Pine Flatwoods	13.3					13.3
434-Hardwood-Conifer Mixed	2.8					2.8
441-Pine Plantations	462.2					462.2
617-Mixed Wetland Hardwoods		0.5				0.5
617-1-Mixed Wetland Hardwoods, Logged		15.1				15.1
621-Cypress			256.2			256.2
621-1-Cypress, Logged			22.2			22.2
629-Wet Planted Pine				318.2		318.2
630-Wetland Forested Mix		226.0				226.0
630-1-Wetland Forested Mix, Logged		203.3				203.3
641-Freshwater Marshes					11.3	11.3
643-Wet Prairies				3.2		3.2
Total	**492.7**	**444.9**	**278.4**	**321.4**	**11.3**	**1548.7**

Restoration of vegetative communities at the LNP site generally entails converting the plantations through appropriate tree removal and restoring the primary physical processes that mold this type of landscape: hydrology and fire. Short-term activities will focus on hydrologic restoration and re-establishment of wetland communities. Restoration of a natural fire regime will help in restoring the vegetation and habitat dynamics of the site. Long-term management activities will continue to enhance the health and viability of the restored wetlands and to maintain the high ecological value of the restored ecosystem. As discussed in **Section 2.2.3**, species that rely on this type of natural landscape were considered in the mitigation design, to ensure that the restored habitat mosaic would yield productive habitat. The activities to be implemented at the LNP site are described below and depicted on **Exhibits 2-4-8**.

The mitigation activities include the following:

- Placement of low water crossings, replacement culverts, and road segment removals to restore natural surface water flow.
- Partial ditch block filling along roadside ditches or raising of road beds to eliminate drainage from existing wetlands and to restore natural sheet flow patterns.
- Removal of planted pines in historically herbaceous wetlands.
- Seeding or planting of appropriate native species if natural recruitment is not occurring in logged wetlands.
- Prevention of further silviculture wetland impacts through establishment of a conservation easement.
- Protection of wildlife through habitat enhancement.
- Nuisance species removal.
- Implementation of a monitoring program to ensure mitigation success.



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0 900 1,800 Meters

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Exhibit 2-4-8
LNP Site
Mitigation Activity Map

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2.4.3.1 Hydrologic Restoration

Hydrology will be improved with removal of encroaching pines. Reestablishment of historic hydroperiods will facilitate appropriate restoration of historic vegetative distributions and community structure. Once the plantation pines are removed from the site, a water table rise of about five inches is expected (Amatya and Skaggs 2008). Replanting of pines in the uplands will be at a much lower density, so the raised water table effects will persist.

Hydrologic improvements including modification of the existing system of roads and culverts will restore historic site conditions. Field engineering is needed to refine the specific placements and elevations so that these activities will not affect site access and adjacent non-target lands. Specific modeling of current or future hydrologic conditions resulting from mitigation activities have not yet been conducted. Site-specific topographic and hydrologic assessments will be conducted prior to installation of new or-adjustment of existing culverts, raising of road beds and installation of low water crossings. Survey and modeling results will be shared with the review agencies as appropriate prior to implementing restoration activities. Adjustments to this restoration plan may be warranted following this final field engineering.

2.4.3.2 Community Structure Restoration

Restoration will focus first on thinning the existing slash pine plantation and then on selective pine removal from basin swamp edges. Trees will be thinned and forestry operations will be conducted as described in **Section 6.5**.

The areas designated as mesic flatwoods will be thinned to about 50 pines per acre. For areas targeted as wet prairies, which rim the basin swamps, the pines will be thinned to less than 20 trees per acre. The thinned stands will be re-planted with 50 to 75 and up to 20 longleaf pines per acre in the mesic pine flatwoods and wet prairies edges respectively. Where pines are to be thinned from basin swamps, low impact machinery will be used within wetlands to minimize rutting and soil disturbance. Further restoration activities will occur following periods of extended rainfall to encourage regeneration of native species. Chainsaws and hand removal of slash pine will occur where necessary to avoid rutting.

With the removal of the dense pine plantation canopy and pine needle litter the ground cover is expected to reestablish from the seed bank, seeding from adjacent areas, and the invigoration from extended light. Where ground cover species have not responded in the former plantation sites within two years, seeding of those areas will be conducted.

As previously stated, installation of ditch blocks at the historic wetland-upland interface to reestablish historic hydroperiods will assist in restoring historic community structure. Extended hydroperiods historically present will limit woody shrub growth to hummocks and permit more hydrophytic and aquatic vegetation to reestablish from existing seed banks.

Exotic plants such as Chinese tallow and skunk vine occur in some cypress domes on adjacent properties and will be monitored. If the species appear on the LNP site, they will need to be treated and eradicated.

2.4.3.3 Prescribed Fire

Fire will be introduced after the pine thinning operation is complete via the application of prescribed fire, as described in **Section 6.5**. The first burn will occur during the dormant season after the thinning operation is complete. Future burns will be weighted toward the growing season. During the implementation phase, the flatwoods will be burned on a 1-7 year frequency, as often as fuel loads allow. Once the communities are re-established, stewardship phase fire intervals should average from 2-5 years, with predominantly growing season burns.

Fires will be allowed to burn into the adjacent pine flatwoods and continue into the herbaceous and the forested wetland communities so long as the wetlands are appropriately moist. After the first burn, it is appropriate to have a patchy burn pattern where not all areas of a community burn during any particular fire event.

2.4.4 Levy Nuclear Plant Site Schedule

Restoration activities will be performed in phases, which might best be defined by age of plantation. The restoration areas defined in **Exhibits 2-4-6**, **2-4-7**, and **2-4-8** are divided into areas based on connectivity to GSF, hydrologic restoration needs as well as the desire to provide a connection between GSF and the LNP site. Plantations closest to maturity will be logged first, as this will provide some income from the sale of the pines. As other plantations mature, they will be logged and restored. The youngest plantations were planted in 2001 and will be of marketable timber size in 2015. Most of the plantations are currently marketable for pulp and were planted for fiber production. Clearing un-marketable plantations is possible if UMAM credits are needed on an earlier timeline, but the cost for removal is significant on a per acre basis.

Table 2-8 summarizes the mitigation project schedule. Work begins on Phase 1 in year one with logging, shrub and brush removal through fire, followed by installation of the hydrologic improvements and exotic control activities as detailed below. Other phases are anticipated to follow a similar schedule, with each successive phase being initiated on a yearly basis, as presented in the following table. However, PEF, in consultation with the authorizing agencies, may elect to postpone the initiation of a phase. Conversely, the conservation easement and financial assurances may be implemented in advance of other implementation steps. Once initiated, the physical mitigation activities in the phase shall proceed in a timely manner.

Table 2-8. Schedule for Implementation of Restoration and Monitoring Activities.

Activity	Year 1	Year 2	Year 3	Year 4
Removing pines through logging	Dry season (November to April)			Monitor following removal and planting of longleaf for performance.
Prescribed fire for logged areas		6 months to 1 year post logging		Incorporate in typical burn rotation below
Prescribed fire in restoration uplands	Burn 30% of uplands in the growing season where no additional work (logging or mulching is needed)	Burn additional upland acres and wetland edges where appropriate. Some may require dormant season fire based on fuel loads.	Burn 30% of uplands not previously burned.	Burn 30% of uplands not previously burned in the past 2 years.
Monitoring to assess release of groundcover from prescribed burns	Monitor wetlands prior to burning. Monitor uplands where credit is desired prior to burning	Monitor vegetative community for response to fire (increase in groundcover realized).	Monitor vegetative communities burned the previous years for response to fire.	Continue monitoring.
Seed collection if necessary for adding additional diversity to wet prairie fringes that were logged.		Seed areas necessary and provide maintenance as necessary	Monitor vegetation to determine increase in species and cover	Monitor vegetation to determine success of seeding
Ditch block and low water crossing construction	Install these features, unless increased hydroperiod would negatively affect logging	Install remaining features		

2.5 GOETHE STATE FOREST

Working closely with the Florida Division of Forestry (DOF), PEF will partner on a wetland rehabilitation and restoration project that will be to the regional benefit of wildlife species and vegetative communities by enhancing lands in the Daniels Island tract at GSF. The GSF is already in public ownership and management, so the mitigation is limited to unfunded wetland rehabilitation and restoration work. The GSF project will yield significant UMAM functional lift by rehabilitating and restoring wetland habitats on the site.

GSF is a 53,460-acre state forest that is adjacent to the LNP site (**Exhibits 2-1-1 and 2-5-5**). The GSF lands were mostly acquired in the early 1990s, with additional parcels being added as feasible. Unique features of the forest are many scattered remnant cat-faced longleaf pine trees; older longleaf/slash pine flatwoods supporting a thriving red-cockaded woodpecker (RCW; *Picoides borealis*) population; and a nine-foot diameter bald-cypress tree which is listed as being the seventh largest in the state of Florida. In addition to timber management, a primary purpose for this acquisition was protection of ground and surface waters.

The focus of this plan is on the Daniels Island tract at the southern end of the forest and abutting the LNP site. The mitigation plan is consistent with DOF's established goals and objectives for the forest. This plan has been designed to restore and/or enhance wetland habitats in the southern region of the GSF to increase its suitability for use by wildlife as foraging, nesting and denning habitat. This plan will also result in increased flood storage and attenuation restoration and increased water quality to downstream receiving waters. The restoration activities are not in the current state forest funding program, and there is no DOF timeline for their completion.

2.5.1 Current Conditions

The land uses and land cover types at GSF were mapped by FNAI using their Natural Community definitions (FNAI 1990), which PEF has updated to the nomenclature of their 2009 system (FNAI 2009). Vegetative communities within the wetlands targeted for mitigation are depicted on **Exhibit 2-5-6**.The Daniels Island tract is managed for timber, recreation, water resource protection and other passive uses. It is similar to the LNP site in that it is a pine flatwoods landscape with an interspersion of large basin swamps, which are rimmed by ecotonal wet flatwoods and depression marshes. A series of known RCW trees are located throughout the project area. They are indicated on **Exhibit 2-5-6.** Other known wildlife using the forest are the Florida black bear, bald eagle, and a variety of birds, reptiles and amphibians. Twenty-eight species of orchids are known to occur at GSF.

The wetlands slated for restoration are primarily mixed cypress/hardwood and cypress dominated forested wetland swamps and wet flatwoods. All but the deepest portions of these systems currently contain highly elevated densities of pine trees primarily due to the presence of drainage ditches. Elevated pine density in un-ditched wetlands is likely attributed to a historic fire suppression. Ditches observed on historic aerials appear primarily upland cut, although some do exist in part within current wetland limits and appear occasionally to follow historic cypress stringers. The coverage extent of these communities and associated wetland status is summarized in **Table 2-9**.

Table 2-9. Current Site Conditions.

FNAI Community Type	Acreage
Basin Swamp - Ditched	99.4
Basin Swamp Pine Encroachment - Ditched	82.4
Cypress Swamp – Ditched	25.3
Cypress Swamp Pine Encroachment - Ditched	41.5
Shrub Bog - Ditched	37.9
Shrub Bog Pine Encroachment - Ditched	24.2
Wet Flatwoods - Ditched	164.4
Total	**475.1**

2.5.2 Target Conditions

A total of five community types have been targeted for restoration activities. Target communities include basin swamp, cypress swamp, depression marsh, shrub bog and wet flatwoods. The future conditions within these communities, with appropriate continued management, will be similar to historical natural structure and vegetative assemblages and are shown in **Exhibit 2-5-7** and further herein described. The conversion of specific types of current communities to their target community types, and potential acreages, is depicted in **Table 2-10**. Descriptions of target communities can be found in **Section 6.4**.

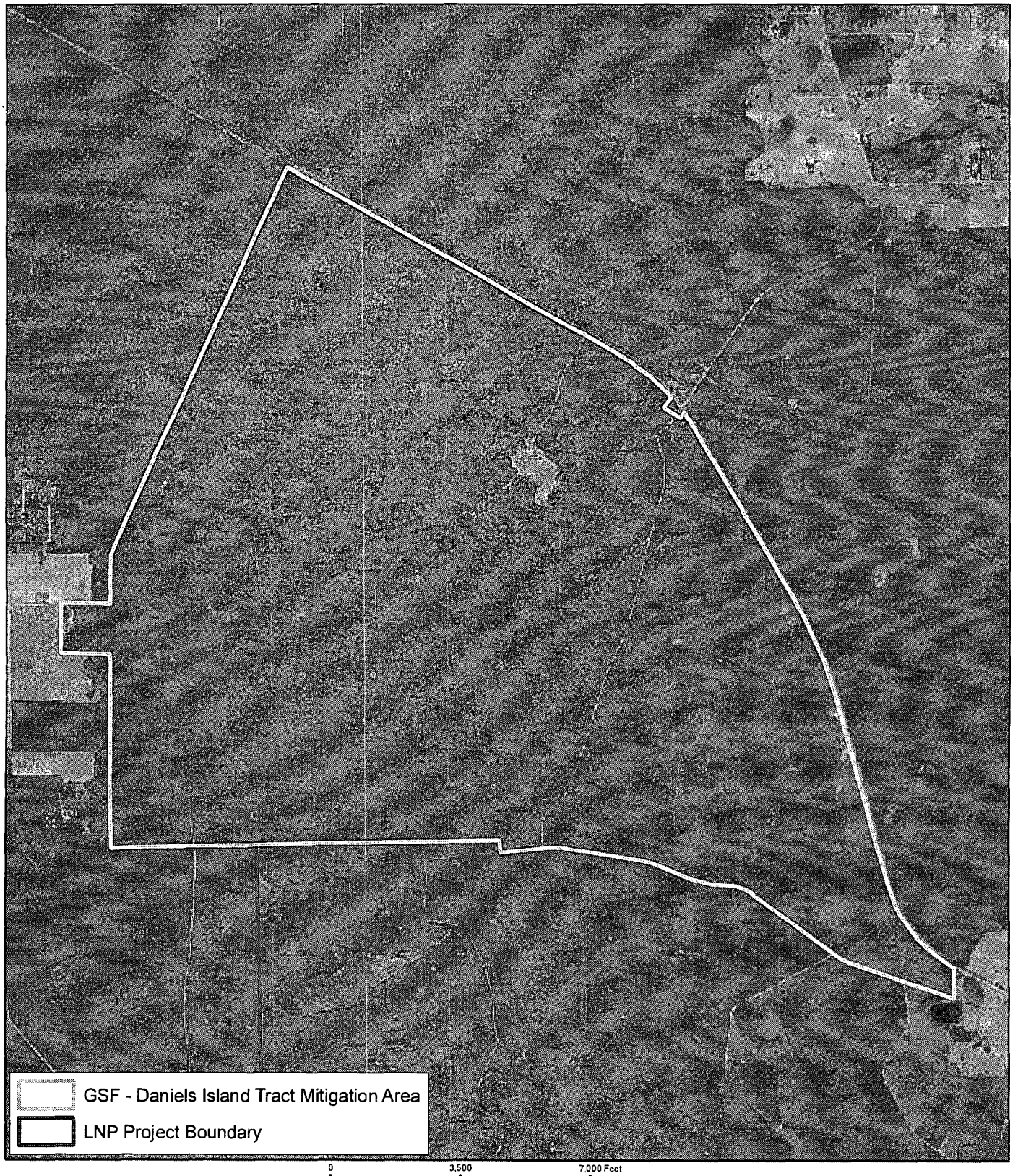

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Exhibit 2-5-5
GSF - Daniels Island Tract
2009 Aerial Map

Image: 2009

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Coordinate System:
NAD 1983 Florida State Plane West

Date: 03/26/2010Rev. Date: 04/05/2010 PM. SRD GIS Analyst: MAB Map Document: DIT_aerial_20100326.mxd Project Number: 6691-020 PDF Document: DIT_aerial_20100326.pdf Plot Size: 8.5 x 11

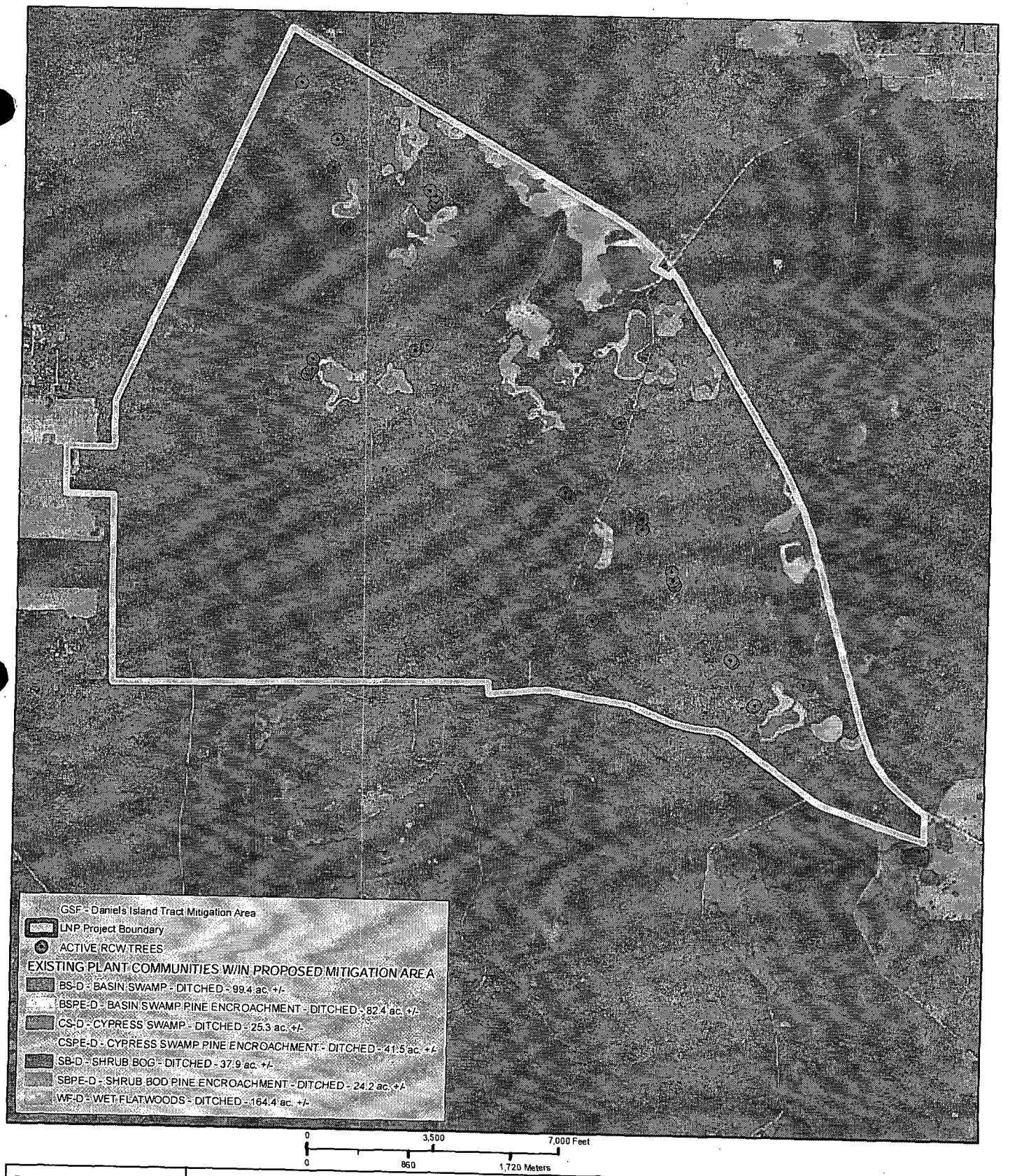

Exhibit 2-5-6
GSF - Daniels Island Tract
Existing Land Use and Land Cover
Mitigation Wetlands

Image: 2009

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Date: 03/26/2010 Rev. Date: 04/12/2010 PM: SRD GIS Analyst: GdA Map Document: DIT_EXISTLU_20100326.mxd Project Number: 6691-020 PDF Document: DIT_EXISTLU_20100412.pdf Plot Size: 8.5 x 11

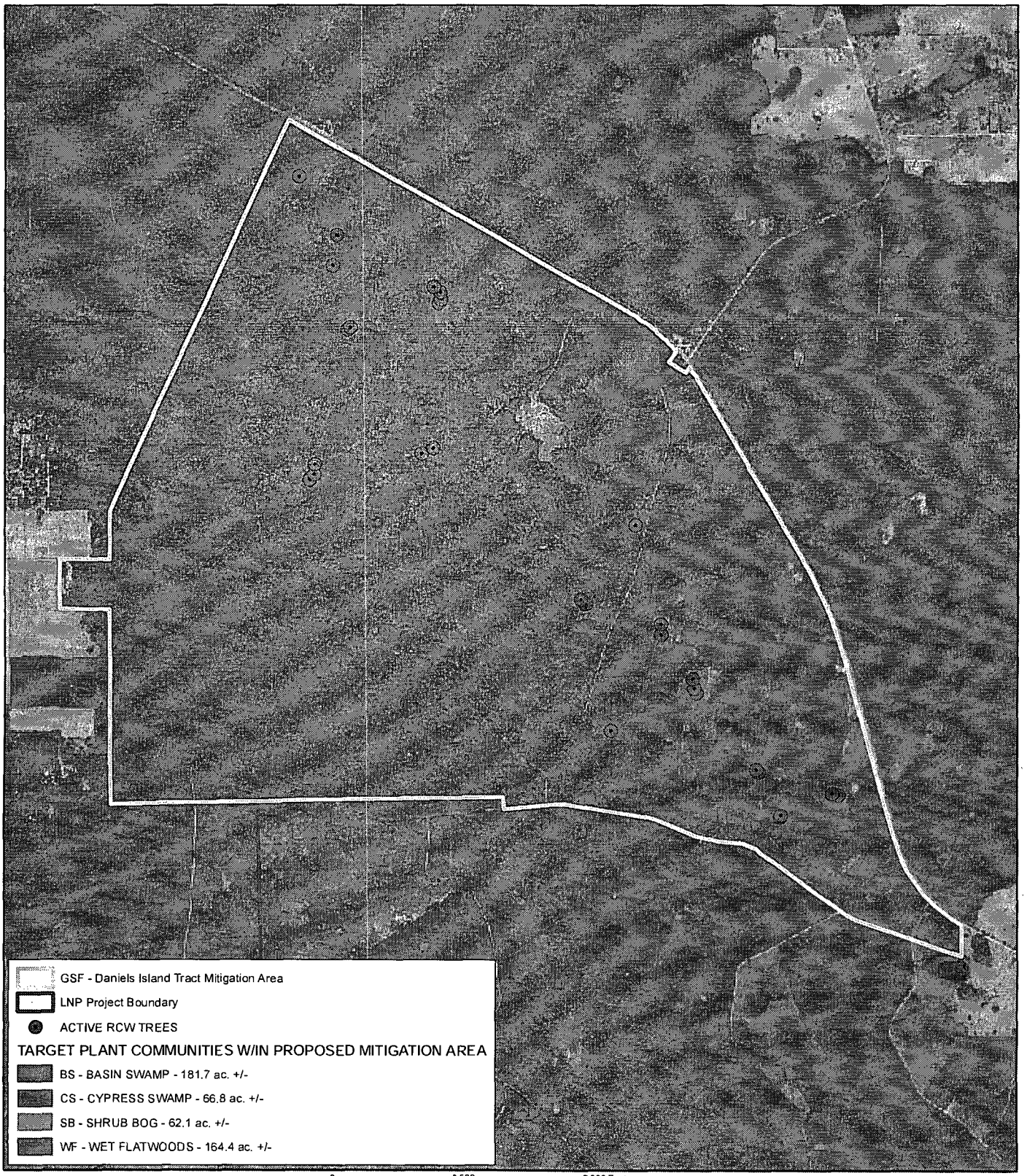

Exhibit 2-5-7
GSF - Daniels Island Tract
Proposed Land Use and Land Cover
Mitigation Wetlands

Image:2009

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Table 2-10. Matrix of Existing to Target Land Uses and Acreages.

Current Communities	Proposed Communities				
	Basin Swamp	Cypress Swamp	Shrub Bog	Wet Flatwoods	Total (Acres)
Basin Swamp - Ditched	99.4				99.4
Basin Swamp Pine Encroachment - Ditched	82.4				82.4
Cypress Swamp - Ditched		25.3			25.3
Cypress Swamp Pine Encroachment - Ditched		41.5			41.5
Shrub Bog - Ditched			37.9		37.9
Shrub Bog Pine Encroachment - Ditched			24.2		24.2
Wet Flatwoods - Ditched				164.4	164.4
Total	**181.8**	**66.8**	**62.1**	**164.4**	**475.1**

2.5.3 Mitigation Activities

The DOF identified a series of locations in the Daniels Island Tract that would benefit from hydrologic restoration activities. Field inspections identified these locations as culverted road crossings, elevated roadbeds, low-water crossings and historic upland- and wetland-cut drainage ditches. These locations and the associated contiguous wetland system were reviewed in the field to determine the required hydrologic improvement actions and associated ecological lift potential. Some of these locations required only minor restoration activities, such as simple road crossing repairs, which would result in little or no hydroperiod changes, ecological improvement or only minor sedimentation improvements; these areas were omitted from this plan. Locations identified by DOF as possessing the greatest potential of ecological lift were further analyzed for potential mitigation opportunities.

Specific restoration activities will be conducted in general accordance with the Resource Management Plan for GSF (FDACS, DOF 2007c). The general forest management practices at GSF are to promote forest health and to restore native species, implement even- and uneven-age management of pine stands, remove of non-native species, and implement the regular use prescribed fire. Some mechanical and chemical treatments are allowed, but prescribed fire will be the primary method of site preparation prior to tree planting. Primary restoration activities include installation of ditch blocks and removal/thinning of slash pine from areas where it was historically absent or present at lower than existing densities. The location of proposed ditch blocks and limits of pine removal are detailed on **Exhibit 2-5-8**.

2.5.3.1 Hydrologic Restoration

Partial or complete plugging/filling within wetland-cut ditches will be used to restore historic hydroperiods within interconnecting wetlands. Hydrology will also be improved with removal of encroaching pines. Reestablishment of historic hydroperiods will facilitate restoration of historic vegetative distributions and community structure.

On-site fill sources will be used to the extent possible, especially when available in close proximity to fill locations. Any necessary off-site fill needed for the ditch fill work shall be construction-grade clean sand material free of nuisance vegetation and debris. Fill areas will be graded to match existing adjacent wetland elevations. Graded areas shall be allowed to revegetate naturally with a contingency that they will be planted if desirable vegetation fails to colonize successfully.

Although hydrologic improvements will restore historic site conditions, field engineering is needed to refine the specific placements and elevations so that these activities will not affect site access and adjacent non-target lands. Specific modeling of current or future hydrologic conditions resulting from mitigation activities has not yet been conducted. Site-specific topographic and hydrologic surveys will be conducted and the hydrologic response to mitigation actions analyzed prior to commencing earth works. Survey and modeling results will be shared with and approved by GSF DOF and other review agencies as appropriate prior to implementing restoration activities. Adjustments to this restoration plan may be warranted following these investigations.

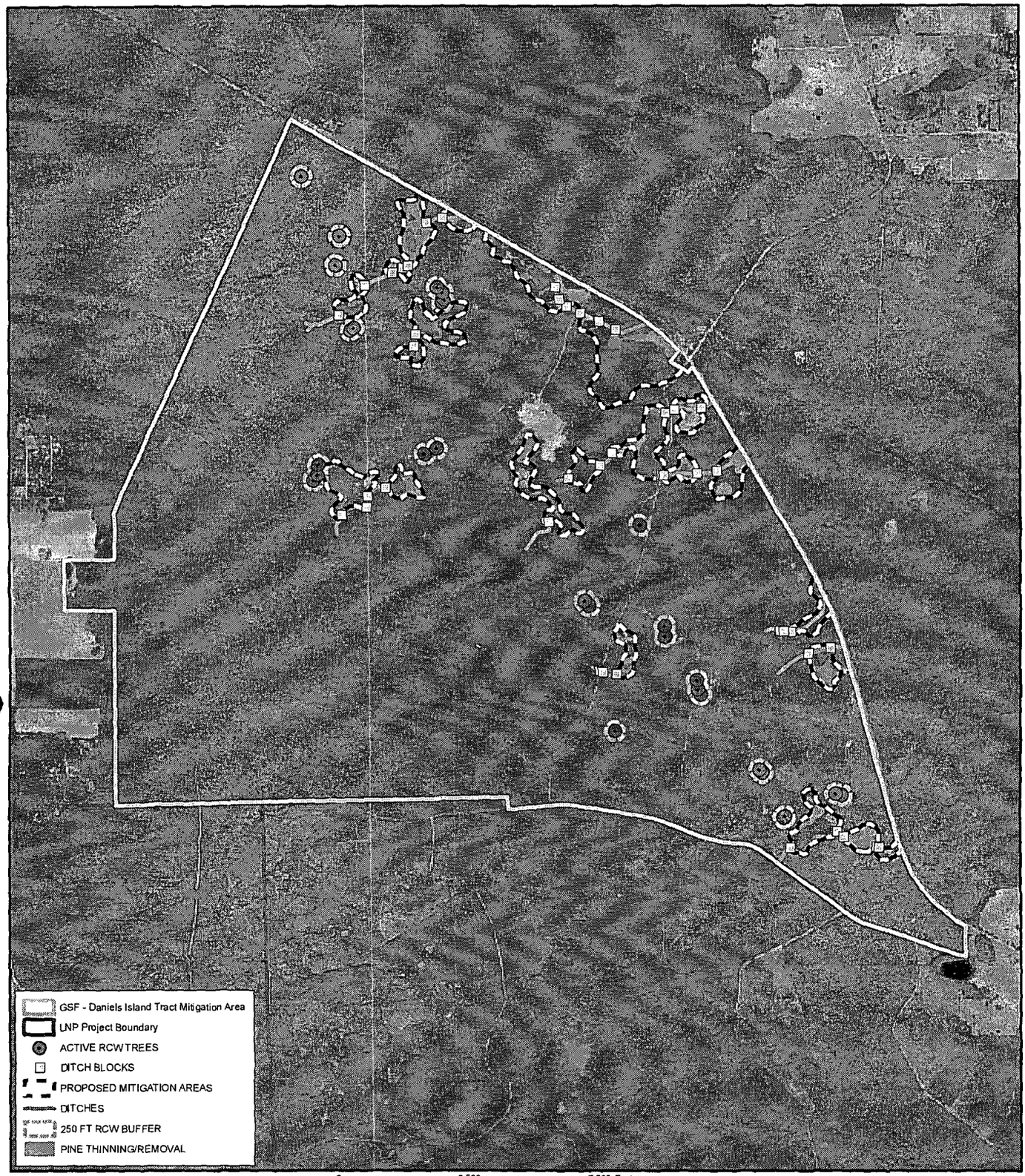

Exhibit 2-5-8
GSF - Daniels Island Tract
Mitigation Activities Map
Mitigation Wetlands

Image: 2009

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Date: 03/26/2010Rev. Date: 04/12/2010 PM; SRD GIS Analyst: MAE Map Document: DIT_mit_activities_20100416.mxd Project Number: 6691-020 PDF Document: DIT_mit_activities_20100416.pdf Plot Size: 8.5 x 11

Hydrological restoration will be conducted in accordance with best management practices (BMP) as described in **Section 6.5**.

2.5.3.2 Community Structure Restoration

Community structure restoration will be facilitated through removal or thinning of slash pine and reestablishment of historic hydroperiods. Initial slash pine target densities in trees per acre per target community are provided in **Table 2-11**. Trees will be thinned and forestry operations will be conducted as described in **Section 6.5**.

Table 2-11. Target Slash Pine Densities per Target Community.

FNAI Community Type	Target Density (per Acre)
Basin Swamp	<15
Cypress Swamp	<5
Depression Marsh	15
Shrub Bog	<5
Wet Flatwoods	*no change*

Pine thinning will occur only once within any area but this single thinning may take multiple actions should weather, flooding, or other factors necessitate it.

As previously stated, installation of ditch blocks at the wetland-upland interface to reestablish historic hydroperiods will assist in restoring historic community structure. Restoration of the extended hydroperiods historically present should limit woody shrub growth to hummocks and permit more hydrophytic and aquatic vegetation to reestablish from existing seed banks.

No work will be conducted within RCW cavity tree (250-ft) work setback zones or during the nesting season (April-June). The locations of known RCW cavity trees and associated setbacks are detailed on **Exhibits 2-5-6**, **2-5-7**, and **2-5-8**. All restoration personnel will be notified of these restrictions and provided with **Exhibit 2-5-6** prior to commencing restoration activities.

Low impact machinery will be used within wetlands to minimized rutting and soil disturbance. Further, restoration activities will occur following periods of extended rainfall to encourage reproduction of native species. Chainsaws and hand removal of slash pine will occur where necessary to avoid rutting.

All activities will be conducted in accordance with DOF BMP (FDACS, DOF 2009).

2.5.3.3 Prescribed Fire

Prescribed fire will be implemented in concert with the GSF management plan; although there will be a need for more frequent fire in the implementation phase. The standard planned fire return interval at GSF is 3 to 4 years for flatwoods communities, such as are the subject of this plan. No firelines will be used to prevent fire from going into forested wetlands unless the wetlands are experiencing drought conditions or there is concern with smoke management. When a fireline is necessary, heavy equipment will be used only to mow or "lay down" vegetation by driving equipment over the area of concern, with attention to avoiding wet, mucky areas. If the previous two methods are unsatisfactory and the situation is considered a serious threat, careful planning and consideration for a lightly harrowed line as determined by DOF staff is acceptable. In the flatwoods, GSF restoration protocols are to use prescribed fire one to two years after thinning in the dormant season until fuel loads are reduced and then begin transitioning to growing season burns on 3 to 4 year intervals. The protocol for fire and wetlands is to allow fires to reduce woody plants on the wetland edges and within the upland-wetland ecotone.

2.5.3.4 Management Context

Management of the forest will continue as currently implemented by DOF. Following mitigation activities, any excess shrub coverage will be reduced or eliminated from the basin floor with elimination depending on length of hydroperiod and position within the wetland. Once the hydroperiod has been increased, shrubs other than buttonbush should effectively be limited to the outer wetland edges and hummocks.

2.5.4 Goethe State Forest Site Schedule

Work begins in year one with logging, shrub and brush removal through fire, followed by installation of the hydrologic improvements and exotic species control activities as detailed below. Other phases are anticipated to follow a similar schedule, with each successive phase being initiated on a yearly basis, as presented in **Table 2-12**. However, PEF, in consultation with the authorizing agencies, may elect to postpone the initiation of a phase. Once initiated, the physical mitigation activities in the phase shall proceed in a timely manner.

Table 2-12. Schedule for Implementation of Restoration and Monitoring Activities.

Activity	Year 1	Year 2	Year 3	Year 4
Removing pines through logging	Dry season (November to April)			
Prescribed fire for logged areas		6 months to 1 year post logging - preferred		Incorporate in typical burn rotation below
Prescribed fire in restoration uplands	Burn in conjunction with DOF's ongoing fire management program			
Monitoring to assess release of groundcover from prescribed burns	Monitor wetlands prior to burning. Monitor uplands where credit is desired prior to burning	Monitor vegetative community for response to fire (increase in groundcover realized).	Monitor vegetative communities burned the previous years for response to fire.	Continue monitoring.
Seed collection if necessary for adding additional diversity to wet prairie fringes that were logged.	Seed areas necessary and provide maintenance as necessary	Monitor vegetation to determine increase in species and cover	Monitor vegetation to determine success of seeding	Monitor as necessary.
Ditch block and low water crossing construction	Install these features, unless increased hydroperiod would negatively affect logging	Install remaining features		

2.6 UMAM EVALUATION

The proposed project will result in wetland impacts to 433.6 acres of wetlands in the Waccasassa watershed and 136.9 ac. of wetland impacts in the Withlacoochee watershed on the LNP site. Based on the results of the UMAM analysis, these wetland impacts result in 213.5 functional loss units on the LNP site, 182.4 and 31.1 in the Waccasassa and Withlacoochee watersheds, respectively. The total functional lift available from the on-site mitigation areas is 180.6 wetland and 145.0 upland units. A type-for-type comparison of functional loss to lift results in an excess of herbaceous wetland mitigation units on-site, and a deficit of on-site forested wetland mitigation units, which are easily absorbed by mitigation at GSF. An additional 61.0 units of wetland lift have been identified at GSF.

To accomplish this mitigation program in logical ecological and hydrological units, five more units of lift will be generated at GSF than are required to offset otherwise unpermittable wetland impacts. The "excess" and Upland-derived LNP and GSF UMAM credits are proposed to be reserved and applicable to additional project impacts, if that need is established by an appropriate regulatory agency, or applied to future impacts within the watershed, if proven unnecessary for this project.

A summary of the results of the UMAM analysis is presented in **Table 2-13**. A more detailed discussion of the UMAM scoring may be found in **Section 6.6**.

Table 2-13. On-site Impact and Mitigation Acreage and UMAM Summary.

Area	Herbaceous (including Open Water)		Forested		Total	
	Acres	Functional Loss/Lift	Acres	Functional Loss/Lift	Acres	Functional Loss/Lift
Waccasassa Watershed Impacts						
Permanent Fill	137.9	-55.5	222.9	-124.6	360.8	-180.1
Permanent Clearing	NA	NA	72.8	-2.3	72.8	-2.3
Total Impacts	**137.9**	**-55.5**	**295.7**	**-126.9**	**433.6**	**-182.4**
Withlacoochee Watershed Impacts						
Permanent Fill	7.8	-3.2	40.8	-22.8	48.6	-26.0
Permanent Clearing	NA	NA	88.3	-5.1	88.3	-5.1
Total Impacts	**7.8**	**-3.2**	**129.1**	**-27.9**	**136.9**	**-31.1**
Combined Total Impact	**145.7**	**-58.7**	**424.8**	**-154.8**	**570.5**	**-213.5**
Mitigation						
LNP Site	332.7	+81.8	723.3	+98.8	1056.0	+180.6
Goethe State Forest	0	0	475.1	+61.0	475.0	+61.0
Subtotal Mitigation (excluding uplands)	**332.7**	**+81.8**	**1198.4**	**+159.8**	**1531.0**	**+241.6**
LNP Uplands					**492.7**	**+145.0**
				Total Mitigation	**2023.7**	**+386.6**

2.7 MONITORING, MAINTENANCE AND MANAGEMENT

Upon implementation of the mitigation plans, it will be necessary to monitor the project for compliance and performance. Performance will be measured in relation to the project's success criteria (**Section 2.8**). Initial baseline monitoring will address conditions upon implementation, with annual progress monitoring used to chart the progression to success. Detailed monitoring methods will be developed per the guidelines provided in **Section 6.7**. Annual monitoring reports will be provided to describe mitigation performance.

An integrated maintenance program of chemical and manual methods will be used to control nuisance vegetation, while allowing for the growth of beneficial species. This management approach goes beyond the chemical treatment of problems by identifying possible causes and managing those factors to further minimize the problems. Target species will be those that could adversely the success of the mitigation effort.

Section 6.7 addresses monitoring protocols and **Section 6.8** addresses maintenance and management protocols in more detail.

2.8 SUCCESS CRITERIA

Success criteria for the types of natural communities detailed in this plan are provided in **Section 6.9**. To ensure that the performance standards are met, an adaptive management approach will be an integral part of project implementation. If the USACE/FDEP decides, based on the selected performance standards and the annual monitoring reports, that the mitigation project is not meeting its goals, PEF will coordinate with the USACE/FDEP and professional ecologists to develop and implement remedial measures.

2.9 PUBLIC INTEREST

Public land management goals at the GSF are to maintain and enhance a multiple-use landscape that is natural in character and that allows for a variety of uses, including resource management, public use, and timber extraction. The proposed mitigation activities assist the public land managers (DOF) in meeting these goals by providing needed enhancements to drainage and land management that would otherwise

go unfunded. Through these activities the mosaic of natural communities and the wildlife that they support will continue to improve.

The restoration plan at the LNP site will expand the area of natural lands available to wildlife. It will restore highly altered pine plantations to a more natural condition. As there is no resource extraction (timber production) objective, the ultimate forest conditions at the LNP site may be even more diverse and provide even better habitats for wildlife that those at the GSF. The LNP restoration will increase wetland functions and values over a broad area. The overall result of this mitigation program will be an increase in regional biodiversity habitat quality as well as improved wetland conditions and functions.

2.10 APPENDICES

2.10.1 Draft Conservation Easement-Levy Nuclear Plant Site

The referenced Draft Conservation Easement follows this page.

CONSERVATION EASEMENT

THIS CONSERVATION EASEMENT is given this _____ day of _____, 20____, by Florida Power Corporation d/b/a Progress Energy Florida, Inc., having an address at 299 First Ave N, St. Petersburg, FL 33701 (Grantor) to the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA (BOARD OF TRUSTEES), whose address is Department of Environmental Protection, Division of State Lands, 3900 Commonwealth Boulevard, Mail Station 130, Tallahassee, Florida, 32399-3000 (Grantee). As used herein, the term Grantor shall include any and all heirs, successors or assigns of the Grantor, and all subsequent owners of the Property (as hereinafter defined) and the term Grantee shall include any successor or assignee of Grantee.

WITNESSETH

WHEREAS, the Grantor is the sole owner in fee simple of certain lands situated in _____ County, Florida, more specifically described in Exhibit A attached hereto and incorporated herein (Property).

WHEREAS, the Site Certification Order number _____ related to Grantee's Levy County Nuclear Plant Project ("Site Certification") authorizes certain activities which affect waters in or of the State of Florida;

WHEREAS, the Grantor desires to construct certain facilities related to the Levy County Nuclear Plant Project (the "Project") through certain wetlands and uplands at a site in _____ County, which is subject to the regulatory jurisdiction of the Department of Environmental Protection (Department) under Part IV of Chapter 373 of the Florida Statutes;

WHEREAS, the Site Certification, which includes a plan or plans for mitigating the environmental impacts of the construction of the Project requires that the Grantor preserve, enhance, restore or mitigate wetlands, other surface waters, or uplands under the Department's jurisdiction; and

WHEREAS, Grantor grants this Conservation Easement to offset or prevent adverse impacts to water quality and natural resources, such as fish, wildlife, and wetland or other surface water functions. Specifically, this Conservation Easement is intended to offset impacts to wetlands and other surface waters.

NOW THEREFORE, in consideration of the above and the mutual covenants, terms, conditions and restrictions contained herein, together with other good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, Grantor hereby voluntarily grants and conveys a perpetual conservation easement upon the Property, for and in favor of the Grantee upon the Property which shall run with the land and be binding upon the Grantor, its heirs, successors and assigns.

The scope, nature and character of this conservation easement shall be as follows:

1. Purpose. The purpose of this Conservation Easement is to retain land or water areas in their natural, vegetative, hydrologic, scenic, open, agricultural or wooded condition and to retain such areas as suitable habitat for fish, plants or wildlife. Those wetland or upland areas included in the Conservation Easement that are to be enhanced or created pursuant to the Site Certification shall be retained and maintained in the enhanced or created conditions required by the Site Certification.

2. Rights of Grantee. To carry out this purpose, the following rights are conveyed to Grantee by this Conservation Easement:

a. The right to take action to preserve and protect the environmental value of the Property;

b. The right to prevent any activity on or use of the Property, that is not otherwise permitted herein, that is inconsistent with the purpose of this Conservation Easement, and to require the restoration of areas or features of the Property that may be damaged by any inconsistent activity or use;

c. With prior notice to Grantor, the right to enter upon and inspect the Property in a reasonable manner and at reasonable times, including the right to use vehicles and all necessary equipment to determine if Grantor or its successors and assigns are complying with the covenants and prohibitions contained in this Conservation Easement so long as Grantor complies with Grantee's safety requirements regarding access in or near active construction sites and/or an operating power plant; and

d. The right to enforce this Conservation Easement by injunction or proceed at law or in equity to enforce the provisions of this Conservation Easement and the covenants set forth herein, and to prevent the occurrence of any of the prohibited activities hereinafter set forth.

3. Prohibited Uses. Any activity on or use of the Property that is not expressly permitted herein and is inconsistent with the purpose of this Conservation Easement is prohibited. Without limiting the foregoing, the following activities and uses are expressly prohibited, except for restoration, creation, enhancement, maintenance, and monitoring activities authorized by the Site Certification:

a. Subject to the terms and rights herein, including but not limited to Section 4, construction or placing of structures on, above, or below the ground, including but not limited to: buildings, roads, docks, piers, boardwalks, billboards or other advertising; utilities; signs (other than those marking the conservation easement) or other structures;

b. Dumping or placing of soil or other substance or material as land fill, or dumping or placing of trash, waste, or unsightly or offensive materials;

c. Removal or destruction of trees, shrubs, or other vegetation (other than those required by any mitigation plan approved by Grantor), except nuisance, invasive, exotic, or nonnative species;

d. Planting or seeding of exotic or nuisance species or other plants that are outside their natural range or zone of dispersal and have or are able to form self-sustaining, expanding, and free-living populations in a natural community with which they have not previously associated;

e. Extraction of oil or gas, and excavation, dredging, or removal of loam, peat, gravel, soil, rock, or other material substance in such manner as to affect the surface;

f. Surface use except for purposes that permit the land or water area to remain in its natural condition;

g. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation including, but not limited to, ditching, diking, dredging, and fencing;

h. Acts or uses detrimental to such aforementioned retention and maintenance of land or water areas;

i. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites on the Property having historical, architectural, archeological, or cultural significance;

4. Reserved Rights/Permitted Activities. Nothing in this Conservation Easement shall be construed as prohibiting the following activities and rights and Grantee expressly acknowledges that the permitted activities, and Grantor's exercise of its rights hereunder, shall not be deemed to constitute a violation of any provisions of this Conservation Easement:

a. Construction, operation, and/or maintenance of rights-of-ways for electric transmission and distribution lines, communication lines, pipelines, and/or associated facilities, including access roads and/or railroad crossings located on or immediately adjacent to the Property.

b. Trimming, cutting and/or clearing trees, limbs and undergrowth on such portion of the Property as necessary and convenient for any uses permitted herein.

c. The right to run any discharge of runoff from any impervious surfaces or use the Property for discharge.

d. Any fire fighting or fire suppression activities or machine clearing of fire lines/fire breaks as part of controlled burn activities, fire fighting, or fire suppression.

e. Grantor's right to restrict access to the Property by means of locked gates or otherwise at locations on the Property deemed appropriate by Grantor.

f. All rights as owner of the Property, including the right to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose of this Conservation Easement. The lists of specifically allowed uses provided herein are examples of uses allowed, however, other uses may be allowed depending on whether or not they violate the proposes of the Conservation Easement.

5. Public Access. No right of access by the general public to any portion of the Property is conveyed by this conservation easement.

6. Responsibilities of Parties. Grantor, on behalf of itself and its successors or assigns hereby agrees to bear all costs and liabilities related to the operation, upkeep, or maintenance of the Property. Grantee, its successors or assigns, shall have no responsibility for any costs or liabilities related to the operation, upkeep or maintenance of the Property.

7. Taxes. Grantor, its successors or assigns, shall pay taxes, assessments, fees, and charges of whatever description levied on or assessed by competent authority on the Property.

8. Liability. Grantor, its successors or assigns, will assume all liability for any injury or damage to the person or property of third parties which may occur on the Property arising from use of the Property by the Grantor, its successors or assigns. Furthermore, the Grantor, its successors or assigns, shall indemnify and hold harmless Grantee for all liability, any injury or damage to the person or property of third parties which may occur on the Property, provided, however that Grantor shall not be liable for any injury to any one injured on the Property acting on behalf of the Grantee.

9. Hazardous Waste. Grantor covenants and represents that no hazardous substance or toxic waste exists nor has been generated, treated, store, used, disposed of, or deposited in or on the Property, and that there are not now any underground storage tanks located on the Property. Grantor, its successors or assigns, further indemnify the Grantee for any and all liability arising

from any subsequent placement by Grantor of hazardous or toxic material on the Property. In the event such material is discovered, Grantor, its successors or assigns, shall be responsible for the removal of the materials following coordination and written approval of the Grantee.

10. Enforcement Discretion. Enforcement of the terms, provisions and restrictions of this Conservation Easement shall be at the reasonable discretion of Grantee, and any forbearance on behalf of either party to exercise its rights hereunder in the event of any breach, shall not be deemed or construed to be a waiver of that party's rights.

11. Venue and Enforcement Costs. Venue to enforce the terms of this conservation easement shall be in _____ County, Florida. Grantee may seek any available remedies against Grantor, or its successors and assigns, solely and exclusively for Grantor's, or its successors and assigns', violation of the terms of this Conservation Easement, but not for violation of the terms of the Site Certification or any associated mitigation plans. Such remedies are in addition to any other remedy, fine or penalty which may be applicable under Chapters 373 and 403, Florida Statutes. This Conservation Easement shall not be construed to entitle Grantee to bring any action against Grantor, or its parent or subsidiary companies for any injury to or change in the Property resulting from natural causes beyond Grantor's control, including, without limitation, fire, flood, storm, and earth movement, or from any necessary action to create the least impact to the Property by Grantor under emergency conditions.

12. Assignment of Rights. Grantee agrees to hold this Conservation Easement exclusively for conservation purposes and that it will not assign its rights and obligations under this conservation easement except to another organization qualified to hold such interests under applicable state laws.

13. Recording in Land Records. Grantor agrees to record this Conservation Easement and any amendments hereto in a timely fashion in the Official Records of _____ County, Florida. Grantor shall pay all recording costs and taxes necessary to record this conservation easement in the public records.

14. Successors. The covenants, terms, conditions and restrictions of this conservation easement shall be binding upon, and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property.

15. Notices. All notices, consents, approvals or other communications hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest.

16. Subsequent Deeds. Grantor shall insert the terms and restrictions of this conservation easement in any subsequent deed or other legal instrument by which Grantor divests itself of any interest in the Property. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this conservation easement or limit its enforceability in any way.

17. Severability. If any provision of this conservation easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this conservation easement shall not be affected thereby, as long as the purpose of the conservation easement is preserved.

18. Alteration or Revocation. This conservation easement may be amended, altered, released or revoked only by permit modification as necessary and written agreement between the parties hereto or their heirs, assigns or successors-in-interest, which shall be filed in the public records in _____ County.

19. Controlling Law. The interpretation and performance of this conservation easement shall be governed by the laws of the State of Florida.

20. Grantor hereby covenants with said Grantee that Grantor is lawfully seized of said Property in fee simple; that Grantor has good right and lawful authority to convey this conservation easement; and that it hereby fully warrants and defends the title to the conservation easement hereby conveyed against the lawful claims of all person whomsoever.

TO HAVE AND TO HOLD unto Grantee forever. The covenants, terms, conditions, restrictions and purpose imposed with this conservation easement shall be binding upon Grantor, and shall continue as a servitude running in perpetuity with the Property.

[REMAINDER OF PAGE LEFT BLANK]

IN WITNESS WHEREOF, the Grantor has executed this Conservation Easement on the day and year first above written.

Signed and delivered
In our presence as witnesses:

_____
Signature of Witness

_____
Printed/Typed Name

_____
Signature of Witness

_____
Printed/Typed Name

_____
Florida Power Corporation d/b/a
Progress Energy Florida, Inc.

By:_____
Print Name:

Title:_____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20___, by _____ as _____ of the (corporation's name) _____. He/she is personally known to me or has produced _____ as identification.

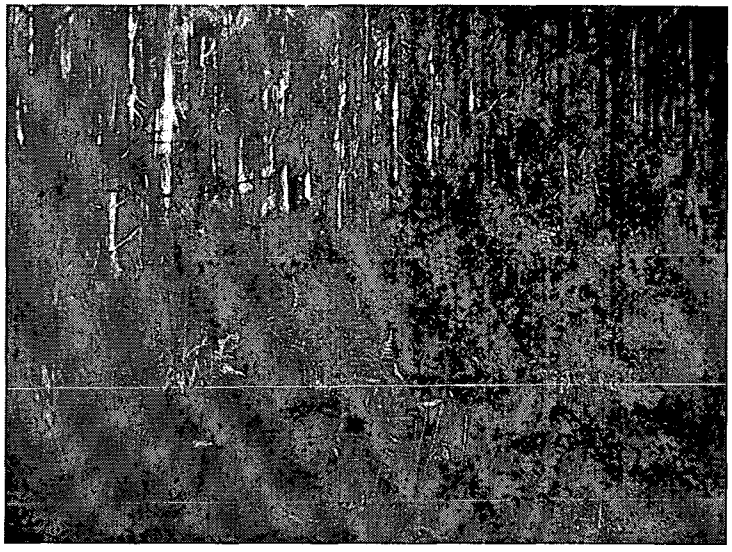
(SEAL)

_____
Notary Public Signature

_____
Printed/Typed Name of Notary

Commission No.:_____
Commission Expires:_____

2.10.2 Site Photos-Levy Nuclear Plant Site



Wet Planted Pine (FLUCFCS 629)

Pine Plantation (FLUCFCS 441)

Mixed Wetland Hardwood (FLUCFCS 617)

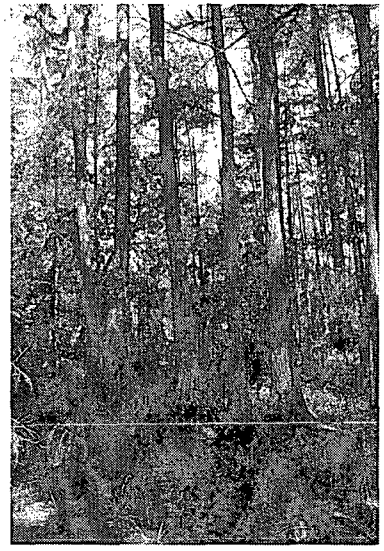
Wet Prairie (FLUCFCS 643)

Wet Planted Pine (FLUCFCS 629)

Other Open Lands (FLUFCS 260-Utilities and FLUCFCS 830-Well Monitoring Station)

Cypress Wetland-Logged (FLUCFCS 621-1)

Cypress Wetland (FLUCFCS 621)



Wetland Forested Mixed (FLUCFCS 630)

Mixed Wetland Hardwoods (FLUCFCS 617)

Herbaceous Wetland (FLUCFCS 641)

Mixed Wetland Hardwoods – Logged (FLUCFCS 617-1)

2.10.3 UMAM Scores-Levy Nuclear Plant Site

UMAM Scores for Waccasassa Watershed Wetland Mitigation Areas – Please see maps at the end of the section for locations.

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
10-MA	621 - Cypress	5	7	7	7	8	7	0.27	1.25	1.25	0.02	0.01
10-MA	621 - Cypress	5	7	7	8	8	9	19.28	1.25	1.25	0.09	1.64
11-MA	621 - Cypress	3	7	5	7	5	9	4.78	1.25	1.25	0.21	1.02
13-MA	641 - Freshwater Marshes	4	7	5	9	5	9	0.45	1.25	1.14	0.26	0.12
13-MA	641 - Freshwater Marshes	4	7	5	9	5	9	6.20	1.25	1.14	0.26	1.59
14-MA	621 - Cypress	5	7	7	8	8	9	6.05	1.25	1.25	0.09	0.51
16-MA	621 - Cypress	5	8	6	7	5	7	21.40	1.25	1.25	0.13	2.74
17-MA	643 - Wet Prairies	3	7	6	9	6	9	0.02	1.25	1.14	0.23	0.01
18-MA	643 - Wet Prairies	3	7	6	9	6	9	0.04	1.25	1.14	0.23	0.01
19-MA	643 - Wet Prairies	3	7	6	9	6	9	0.01	1.25	1.14	0.23	0.00
1-MA	621 - Cypress	4	8	6	6	5	7	2.41	1.25	1.25	0.13	0.31
20-MA	643 - Wet Prairies	3	7	6	9	6	9	0.01	1.25	1.14	0.23	0.00
21-MA	643 - Wet Prairies	3	7	6	9	6	9	0.01	1.25	1.14	0.23	0.00
2-MA	621 - Cypress	3	7	5	7	5	6	0.20	1.25	1.25	0.15	0.03
2-MA	621 - Cypress	3	8	5	8	5	7	1.56	1.25	1.25	0.21	0.33
3-MA	643 - Wet Prairies	3	8	5	9	5	7	0.12	1.25	1.14	0.26	0.03
4-MA	643 - Wet Prairies	3	8	5	9	5	7	0.05	1.25	1.14	0.26	0.01
5-MA	641 - Freshwater Marshes	3	8	5	8	5	7	1.71	1.25	1.14	0.23	0.40
6-MA	641 - Freshwater Marshes	3	8	5	9	5	7	0.65	1.25	1.14	0.26	0.17
8-MA	621 - Cypress	3	7	5	7	5	6	0.37	1.25	1.25	0.15	0.05
8-MA	621 - Cypress	3	8	5	8	5	7	2.60	1.25	1.25	0.21	0.56
9-MA	643 - Wet Prairies	3	7	5	7	5	6	0.13	1.25	1.14	0.16	0.02
9-MA	643 - Wet Prairies	3	8	5	8	5	7	0.43	1.25	1.14	0.23	0.10
LNP-011-A-11-MA	621 - Cypress	5	8	7	8	7	9	0.45	1.25	1.25	0.13	0.06
LNP-011-A-11-MA	621 - Cypress	5	9	7	8	7	9	25.24	1.25	1.25	0.15	3.77
LNP-011-A1c-MA	630-1 - Wetland Forested Mixed (Logged)	6	9	7	9	6	9	32.40	1.5	1.68	0.11	3.43
LNP-011-A3-G-1-MA	630 - Wetland Forested Mixed	5	9	7	9	7	9	17.79	1.25	1.25	0.17	3.04

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-011-A3-H1-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	6	8	7	9	5.70	1.5	1.68	0.12	0.68
LNP-011-A3-H-2-MA	630 - Wetland Forested Mixed	5	9	6	8	7	9	3.60	1.25	1.25	0.17	0.61
LNP-011-A3-H3-MA	621 - Cypress	5	9	6	8	7	9	0.08	1.25	1.25	0.17	0.01
LNP-011-A4-G-MA	630 - Wetland Forested Mixed	5	9	6	8	6	9	0.16	1.25	1.25	0.19	0.03
LNP-011A-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	0.02	1.5	1.68	0.13	0.00
LNP-011A-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	40.31	1.5	1.68	0.13	5.33
LNP-011-B-19-MA	621 - Cypress	5	9	7	8	8	9	5.34	1.25	1.25	0.13	0.68
LNP-011-B1C-MA	630 - Wetland Forested Mixed	4	9	7	9	7	9	0.12	1.25	1.25	0.19	0.02
LNP-011-B1C-MA	630 - Wetland Forested Mixed	4	9	7	9	7	9	11.59	1.25	1.25	0.19	2.22
LNP-013B-MA	621-1 - Cypress (Logged)	4	9	6	8	5	9	0.07	1.5	1.68	0.15	0.01
LNP-014B-MA	621-1 - Cypress (Logged)	4	8	6	8	5	9	0.25	1.5	1.68	0.13	0.03
LNP-014C-MA	621-1 - Cypress (Logged)	4	8	6	8	5	9	0.50	1.5	1.68	0.13	0.07
LNP-014-E-MA	641 - Freshwater Marshes	3	8	6	8	5	9	0.28	1.25	1.14	0.26	0.07
LNP-015-E-1-Y-1-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	7	9	0.59	1.5	1.68	0.12	0.07
LNP-015-E-1-Y-2-MA	621-1 - Cypress (Logged)	4	9	6	8	6	9	0.20	1.5	1.68	0.13	0.03
LNP-015-E-1-Y-2-MA	621-1 - Cypress (Logged)	4	9	6	8	6	9	0.48	1.5	1.68	0.13	0.06
LNP-015-E-1-Y-4-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	0.62	1.5	1.68	0.13	0.08
LNP-015-E-1-Y-4-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	32.05	1.5	1.68	0.13	4.24
LNP-015-EE-A-1-MA	630-1 - Wetland Forested Mixed (Logged)	4	7	7	8	6	9	0.00	1.5	1.68	0.09	0.00
LNP-015-EE-A-1-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	7	8	6	9	0.42	1.5	1.68	0.11	0.04
LNP-015-EE-A-1-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	7	8	6	9	1.28	1.5	1.68	0.11	0.13
LNP-015-EE-A-1-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	7	8	6	9	2.37	1.5	1.68	0.11	0.25
LNP-015-EE-A-1-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	7	8	6	9	27.65	1.5	1.68	0.11	2.92
LNP-015-EE-A-7-MA	630-1 - Wetland Forested Mixed (Logged)	5	8	7	8	6	9	0.28	1.5	1.68	0.09	0.03

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-015-EE-A-7-MA	630-1 - Wetland Forested Mixed (Logged)	5	8	7	8	6	9	2.20	1.5	1.68	0.09	0.20
LNP-015-GG-3-MA	621-1 - Cypress (Logged)	4	9	7	9	5	9	0.91	1.5	1.68	0.15	0.13
LNP-015-GG-B-1-MA	630-1 - Wetland Forested Mixed (Logged)	6	9	5	7	5	9	2.58	1.5	1.68	0.12	0.31
LNP-015-GG-B-2-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	6	8	6	9	0.81	1.5	1.68	0.13	0.11
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	8	7	9	8	9	0.01	1.25	1.25	0.13	0.00
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	8	7	9	8	9	0.18	1.25	1.25	0.13	0.02
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	8	7	9	8	9	0.47	1.25	1.25	0.13	0.06
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	8	7	9	8	9	1.57	1.25	1.25	0.13	0.20
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	8	7	9	8	9	14.34	1.25	1.25	0.13	1.83
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	9	7	9	8	9	0.00	1.25	1.25	0.15	0.00
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	9	7	9	8	9	0.05	1.25	1.25	0.15	0.01
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	9	7	9	8	9	1.75	1.25	1.25	0.15	0.26
LNP-015-X-1-MA	630 - Wetland Forested Mixed	5	9	7	9	8	9	66.38	1.25	1.25	0.15	9.90
LNP-015-X-2-MA	630 - Wetland Forested Mixed	5	8	7	9	7	9	0.16	1.25	1.25	0.15	0.02
LNP-015-X-2-MA	630 - Wetland Forested Mixed	5	8	7	9	7	9	3.19	1.25	1.25	0.15	0.48
LNP-015-X-2-MA	630 - Wetland Forested Mixed	5	9	7	9	7	9	13.53	1.25	1.25	0.17	2.31
LNP-016-A-1-MA	621 - Cypress	5	9	7	9	8	9	8.91	1.25	1.25	0.15	1.33
LNP-016-A-2-MA	621-1 - Cypress (Logged)	6	9	7	9	7	9	3.88	1.5	1.68	0.09	0.36
LNP-016-B-3-MA	621 - Cypress	4	9	7	9	8	9	0.01	1.25	1.25	0.17	0.00
LNP-016-B-3-MA	621 - Cypress	4	9	7	9	8	9	0.01	1.25	1.25	0.17	0.00
LNP-016-B-3-MA	621 - Cypress	4	9	7	9	8	9	0.24	1.25	1.25	0.17	0.04
LNP-016-B-3-MA	621 - Cypress	4	9	7	9	8	9	5.39	1.25	1.25	0.17	0.92
LNP-016-B-7-MA	621 - Cypress	4	9	7	9	7	9	0.01	1.25	1.25	0.19	0.00
LNP-016-B-7-MA	621 - Cypress	4	9	7	9	7	9	3.19	1.25	1.25	0.19	0.61
LNP-016-B-9-MA	621 - Cypress	4	9	7	9	8	9	4.61	1.25	1.25	0.17	0.79
LNP-016-H-MA	630 - Wetland Forested Mixed	5	9	7	9	8	9	10.96	1.25	1.25	0.15	1.63
LNP-019-A-6-MA	621 - Cypress	5	7	7	8	8	9	0.10	1.25	1.25	0.09	0.01
LNP-019-A-6-MA	621 - Cypress	5	7	7	8	8	9	0.20	1.25	1.25	0.09	0.02
LNP-019-A-6-MA	621 - Cypress	5	7	7	8	8	9	1.55	1.25	1.25	0.09	0.13
LNP-019-A-6-MA	621 - Cypress	5	7	7	8	8	9	8.27	1.25	1.25	0.09	0.70

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-019-S-15X-MA	630 - Wetland Forested Mixed	4	9	6	8	7	9	1.06	1.25	1.25	0.19	0.20
LNP-019-Y-1B-MA	621 - Cypress	5	7	7	8	8	9	0.01	1.25	1.25	0.09	0.00
LNP-019-Y-1B-MA	621 - Cypress	5	7	7	8	8	9	0.02	1.25	1.25	0.09	0.00
LNP-019-Y-1B-MA	621 - Cypress	5	7	7	8	8	9	0.02	1.25	1.25	0.09	0.00
LNP-019-Y-1B-MA	621 - Cypress	5	7	7	8	8	9	0.15	1.25	1.25	0.09	0.01
LNP-019-Y-1B-MA	621 - Cypress	5	7	7	8	8	9	0.99	1.25	1.25	0.09	0.08
LNP-019-Y-1B-MA	621 - Cypress	5	7	7	8	8	9	2.85	1.25	1.25	0.09	0.24
LNP-019-Y-1B-MA	621 - Cypress	5	7	7	8	8	9	54.33	1.25	1.25	0.09	4.62
LNP-019-Y-1B-MA	621 - Cypress	6	7	7	8	8	9	0.01	1.25	1.25	0.06	0.00
LNP-026-MA	643 - Wet Prairies	4	8	6	8	6	9	0.01	1.25	1.14	0.21	0.00
LNP-026-MA	643 - Wet Prairies	4	8	6	8	6	9	0.11	1.25	1.14	0.21	0.02
LNP-036-MA	643 - Wet Prairies	4	9	6	8	6	9	0.00	1.25	1.14	0.23	0.00
LNP-036-MA	643 - Wet Prairies	4	9	6	8	6	9	0.69	1.25	1.14	0.23	0.16
LNP-553-MA	621-1 - Cypress (Logged)	4	8	6	8	5	9	2.58	1.5	1.68	0.13	0.34
LNP-557-MA	641 - Freshwater Marshes	4	8	6	8	6	9	1.03	1.25	1.14	0.21	0.22
LNP-567-MA	630 - Wetland Forested Mixed	4	8	6	8	6	9	0.94	1.25	1.25	0.19	0.18
LNP-577-A-MA	621 - Cypress	5	8	7	9	7	9	0.17	1.25	1.25	0.15	0.03
LNP-577-A-MA	621 - Cypress	5	8	7	9	7	9	9.45	1.25	1.25	0.15	1.41
LNP-577-A-MA	621 - Cypress	5	9	7	9	7	9	17.12	1.25	1.25	0.17	2.93
LNP-577-B-MA	621 - Cypress	5	9	7	9	7	9	3.93	1.25	1.25	0.17	0.67
LNP-577-C-MA	621 - Cypress	3	9	7	9	7	9	0.55	1.25	1.25	0.21	0.12
LNP-578-MA	630 - Wetland Forested Mixed	3	9	6	8	6	9	1.02	1.25	1.25	0.23	0.24
LNP-579-MA	621-1 - Cypress (Logged)	4	9	6	8	6	9	2.06	1.5	1.68	0.13	0.27
LNP-580-MA	621-1 - Cypress (Logged)	4	9	6	8	6	9	1.02	1.5	1.68	0.13	0.13
LNP-581-MA	621 - Cypress	4	9	6	8	6	9	3.73	1.25	1.25	0.21	0.80
LNP-582-B-MA	621 - Cypress	4	9	7	9	6	9	0.76	1.25	1.25	0.21	0.16
LNP-582-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	6.00	1.5	1.68	0.13	0.79
LNP-584-MA	630 - Wetland Forested Mixed	4	8	7	9	8	9	4.30	1.25	1.25	0.15	0.64
LNP-584-MA	630 - Wetland Forested Mixed	4	9	7	9	8	9	0.10	1.25	1.25	0.17	0.02
LNP-584-MA	630 - Wetland Forested Mixed	4	9	7	9	8	9	3.39	1.25	1.25	0.17	0.58
LNP-585A-MA	630 - Wetland Forested Mixed	4	8	7	9	8	9	1.47	1.25	1.25	0.15	0.22
LNP-585A-MA	630 - Wetland Forested Mixed	4	9	7	9	8	9	8.99	1.25	1.25	0.17	1.54

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-585C-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	4.58	1.5	1.68	0.13	0.60
LNP-585-E-2-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	11.66	1.5	1.68	0.13	1.54
LNP-585-E-3-MA	630 - Wetland Forested Mixed	4	9	7	9	8	9	13.54	1.25	1.25	0.17	2.31
LNP-585E-MA	630 - Wetland Forested Mixed	4	8	7	9	8	9	7.58	1.25	1.25	0.15	1.13
LNP-585E-MA	630 - Wetland Forested Mixed	4	9	7	9	8	9	17.29	1.25	1.25	0.17	2.95
LNP-585F-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	7	9	6	9	1.68	1.5	1.68	0.12	0.20
LNP-585F-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	1.13	1.5	1.68	0.13	0.15
LNP-585F-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	12.49	1.5	1.68	0.13	1.65
LNP-588-MA	643 - Wet Prairies	3	9	5	7	5	9	0.29	1.25	1.14	0.28	0.08
LNP-594-MA	617 - Mixed Wetland Hardwoods	4	9	6	8	6	9	0.49	1.25	1.25	0.21	0.10
LNP-595A-MA	617-1 - Mixed Wetland Hardwoods (Logged)	4	8	7	9	5	9	2.83	1.50	1.68	0.13	0.37
LNP-595A-MA	617-1 - Mixed Wetland Hardwoods (Logged)	4	9	7	9	5	9	3.47	1.50	1.68	0.15	0.51
LNP-595B-MA	617-1 - Mixed Wetland Hardwoods (Logged)	4	8	7	9	6	9	0.77	1.50	1.68	0.12	0.09
LNP-595B-MA	617-1 - Mixed Wetland Hardwoods (Logged)	4	9	7	9	6	9	2.18	1.50	1.68	0.13	0.29
LNP-595C-MA	617-1 - Mixed Wetland Hardwoods (Logged)	4	8	7	9	6	9	0.02	1.50	1.68	0.12	0.00
LNP-595C-MA	617-1 - Mixed Wetland Hardwoods (Logged)	4	8	7	9	6	9	0.10	1.50	1.68	0.12	0.01
LNP-595C-MA	617-1 - Mixed Wetland Hardwoods (Logged)	4	8	7	9	6	9	3.47	1.50	1.68	0.12	0.41
LNP-595C-MA	617-1 - Mixed Wetland Hardwoods (Logged)	4	9	7	9	6	9	2.28	1.50	1.68	0.13	0.30
LNP-599-MA	621 - Cypress	5	8	6	7	5	7	0.03	1.25	1.25	0.13	0.00
LNP-599-MA	621 - Cypress	5	8	6	7	5	7	1.02	1.25	1.25	0.13	0.13
LNP-639-MA	621-1 - Cypress (Logged)	4	8	6	8	6	9	0.95	1.5	1.68	0.12	0.11
LNP-639-MA	621-1 - Cypress (Logged)	4	8	6	8	6	9	1.53	1.5	1.68	0.12	0.18
LNP-639-MA	621-1 - Cypress (Logged)	4	8	6	8	6	9	1.72	1.5	1.68	0.12	0.21
LNP-650-MA	621 - Cypress	6	9	7	9	8	9	1.25	1.25	1.25	0.13	0.16

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-651-MA	621 - Cypress	4	9	7	9	6	9	2.80	1.25	1.25	0.21	0.60
LNP-HPP-MA	629 - Wet Planted Pine	0	8	4	6	4	9	0.00	1.25	1.14	0.35	0.00
LNP-HPP-MA	629 - Wet Planted Pine	0	9	4	6	4	9	0.00	1.25	1.14	0.37	0.00
LNP-HPP-MA	629 - Wet Planted Pine	3	8	4	6	4	9	0.06	1.25	1.14	0.28	0.02
LNP-HPP-MA	629 - Wet Planted Pine	3	8	4	6	4	9	0.07	1.25	1.14	0.28	0.02
LNP-HPP-MA	629 - Wet Planted Pine	3	8	4	6	4	9	0.09	1.25	1.14	0.28	0.03
LNP-HPP-MA	629 - Wet Planted Pine	3	8	4	6	4	9	0.25	1.25	1.14	0.28	0.07
LNP-HPP-MA	629 - Wet Planted Pine	3	8	4	6	4	9	0.62	1.25	1.14	0.28	0.17
LNP-HPP-MA	629 - Wet Planted Pine	3	9	4	6	4	9	0.02	1.25	1.14	0.30	0.01
LNP-HPP-MA	629 - Wet Planted Pine	3	9	4	6	4	9	0.03	1.25	1.14	0.30	0.01
LNP-HPP-MA	629 - Wet Planted Pine	3	9	4	6	4	9	0.12	1.25	1.14	0.30	0.04
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.00	1.25	1.14	0.26	0.00
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.00	1.25	1.14	0.26	0.00
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.01	1.25	1.14	0.26	0.00
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.03	1.25	1.14	0.26	0.01
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.08	1.25	1.14	0.26	0.02
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.09	1.25	1.14	0.26	0.02
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.25	1.25	1.14	0.26	0.06
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.25	1.25	1.14	0.26	0.06
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.27	1.25	1.14	0.26	0.07
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.33	1.25	1.14	0.26	0.09
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.35	1.25	1.14	0.26	0.09
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.57	1.25	1.14	0.26	0.15
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.82	1.25	1.14	0.26	0.21
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	1.07	1.25	1.14	0.26	0.28
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	1.11	1.25	1.14	0.26	0.29
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	1.12	1.25	1.14	0.26	0.29
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	2.09	1.25	1.14	0.26	0.54
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	2.56	1.25	1.14	0.26	0.66
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.00	1.25	1.14	0.28	0.00
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.00	1.25	1.14	0.28	0.00
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.05	1.25	1.14	0.28	0.01

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.09	1.25	1.14	0.28	0.02
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.17	1.25	1.14	0.28	0.05
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.24	1.25	1.14	0.28	0.07
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.25	1.25	1.14	0.28	0.07
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.25	1.25	1.14	0.28	0.07
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.34	1.25	1.14	0.28	0.10
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.61	1.25	1.14	0.28	0.17
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.64	1.25	1.14	0.28	0.18
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.66	1.25	1.14	0.28	0.19
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.69	1.25	1.14	0.28	0.19
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.76	1.25	1.14	0.28	0.21
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	1.07	1.25	1.14	0.28	0.30
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	1.08	1.25	1.14	0.28	0.30
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	1.67	1.25	1.14	0.28	0.47
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	1.76	1.25	1.14	0.28	0.49
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	2.07	1.25	1.14	0.28	0.58
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	2.59	1.25	1.14	0.28	0.73
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	3.12	1.25	1.14	0.28	0.88
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.00	1.25	1.14	0.21	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.00	1.25	1.14	0.21	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.01	1.25	1.14	0.21	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.01	1.25	1.14	0.21	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.03	1.25	1.14	0.21	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.03	1.25	1.14	0.21	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.06	1.25	1.14	0.21	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.07	1.25	1.14	0.21	0.02
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.08	1.25	1.14	0.21	0.02
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.10	1.25	1.14	0.21	0.02
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.13	1.25	1.14	0.21	0.03
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.13	1.25	1.14	0.21	0.03
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.16	1.25	1.14	0.21	0.03
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.19	1.25	1.14	0.21	0.04

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.20	1.25	1.14	0.21	0.04
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.21	1.25	1.14	0.21	0.05
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.22	1.25	1.14	0.21	0.05
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.31	1.25	1.14	0.21	0.07
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.32	1.25	1.14	0.21	0.07
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.38	1.25	1.14	0.21	0.08
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	0.50	1.25	1.14	0.21	0.11
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	2.10	1.25	1.14	0.21	0.44
LNP-HPP-MA	629 - Wet Planted Pine	5	7	4	6	4	9	6.32	1.25	1.14	0.21	1.33
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.00	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.04	1.25	1.14	0.23	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.05	1.25	1.14	0.23	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.05	1.25	1.14	0.23	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.08	1.25	1.14	0.23	0.02
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.09	1.25	1.14	0.23	0.02
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.16	1.25	1.14	0.23	0.04
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.24	1.25	1.14	0.23	0.06
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.35	1.25	1.14	0.23	0.08
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.36	1.25	1.14	0.23	0.08
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.47	1.25	1.14	0.23	0.11
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.64	1.25	1.14	0.23	0.15
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.70	1.25	1.14	0.23	0.16
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.80	1.25	1.14	0.23	0.19
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.96	1.25	1.14	0.23	0.23
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.97	1.25	1.14	0.23	0.23
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	1.19	1.25	1.14	0.23	0.28
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	1.85	1.25	1.14	0.23	0.43
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	2.01	1.25	1.14	0.23	0.47
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.00	1.25	1.14	0.26	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.07	1.25	1.14	0.26	0.02
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.08	1.25	1.14	0.26	0.02
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.11	1.25	1.14	0.26	0.03

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.14	1.25	1.14	0.26	0.04
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.15	1.25	1.14	0.26	0.04
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.20	1.25	1.14	0.26	0.05
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.21	1.25	1.14	0.26	0.05
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.23	1.25	1.14	0.26	0.06
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.31	1.25	1.14	0.26	0.08
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.34	1.25	1.14	0.26	0.09
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.37	1.25	1.14	0.26	0.10
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.42	1.25	1.14	0.26	0.11
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.46	1.25	1.14	0.26	0.12
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.66	1.25	1.14	0.26	0.17
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.79	1.25	1.14	0.26	0.20
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.90	1.25	1.14	0.26	0.23
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	1.14	1.25	1.14	0.26	0.29
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	1.18	1.25	1.14	0.26	0.30
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	1.86	1.25	1.14	0.26	0.48
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	2.05	1.25	1.14	0.26	0.53
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	2.22	1.25	1.14	0.26	0.57
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	3.36	1.25	1.14	0.26	0.86
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	4.16	1.25	1.14	0.26	1.07
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	4.36	1.25	1.14	0.26	1.12
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	5.31	1.25	1.14	0.26	1.37
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	6.70	1.25	1.14	0.26	1.73
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	8.31	1.25	1.14	0.26	2.14
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	11.22	1.25	1.14	0.26	2.89
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	13.69	1.25	1.14	0.26	3.53
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	65.97	1.25	1.14	0.26	16.99
LNP-HPP-MA	629 - Wet Planted Pine	6	7	4	6	4	9	0.01	1.25	1.14	0.19	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.00	1.25	1.14	0.21	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.01	1.25	1.14	0.21	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.02	1.25	1.14	0.21	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.03	1.25	1.14	0.21	0.01

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.03	1.25	1.14	0.21	0.01
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.03	1.25	1.14	0.21	0.01
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.04	1.25	1.14	0.21	0.01
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.07	1.25	1.14	0.21	0.01
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.07	1.25	1.14	0.21	0.02
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.08	1.25	1.14	0.21	0.02
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.09	1.25	1.14	0.21	0.02
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.13	1.25	1.14	0.21	0.03
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.13	1.25	1.14	0.21	0.03
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.15	1.25	1.14	0.21	0.03
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.18	1.25	1.14	0.21	0.04
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.19	1.25	1.14	0.21	0.04
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.25	1.25	1.14	0.21	0.05
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.30	1.25	1.14	0.21	0.06
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.30	1.25	1.14	0.21	0.06
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.35	1.25	1.14	0.21	0.07
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.44	1.25	1.14	0.21	0.09
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.64	1.25	1.14	0.21	0.13
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.81	1.25	1.14	0.21	0.17
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.84	1.25	1.14	0.21	0.18
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	1.35	1.25	1.14	0.21	0.28
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	1.35	1.25	1.14	0.21	0.28
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	1.43	1.25	1.14	0.21	0.30
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	1.73	1.25	1.14	0.21	0.36
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	4.34	1.25	1.14	0.21	0.91
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	5.56	1.25	1.14	0.21	1.17
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.00	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.01	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.01	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.01	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.02	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.02	1.25	1.14	0.23	0.00

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.19	1.25	1.14	0.23	0.04
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.25	1.25	1.14	0.23	0.06
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.50	1.25	1.14	0.23	0.12
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	3.82	1.25	1.14	0.23	0.89
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	11.34	1.25	1.14	0.23	2.65
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	20.67	1.25	1.14	0.23	4.83
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	29.71	1.25	1.14	0.23	6.94
LNP-HPP-MA	629 - Wet Planted Pine	7	8	4	6	4	9	0.39	1.25	1.14	0.19	0.07
LNP-HPP-MA	629 - Wet Planted Pine	7	9	4	6	4	9	0.19	1.25	1.14	0.21	0.04
Wetlands Total:								**936.06**				**159.41**

UMAM Scores for Withlacoochee Watershed Wetland Mitigation Areas – Please see maps at the end of the section for locations.

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-011-A-11-MA	621 - Cypress	5	8	7	8	7	9	0.78	1.25	1.25	0.13	0.10
LNP-011-A-11-MA	621 - Cypress	5	9	7	8	7	9	0.00	1.25	1.25	0.15	0.00
LNP-011-A-11-MA	621 - Cypress	5	9	7	8	7	9	0.46	1.25	1.25	0.15	0.07
LNP-011-A-11-MA	621 - Cypress	5	9	7	8	7	9	4.76	1.25	1.25	0.15	0.71
LNP-011-A1b-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	6	8	5	9	5.90	1.5	1.68	0.13	0.78
LNP-011-A2a-2-MA	621-1 - Cypress (Logged)	4	8	6	8	5	9	0.15	1.5	1.68	0.13	0.02
LNP-011-A3-G-1-MA	630 - Wetland Forested Mixed	5	9	7	9	7	9	0.01	1.25	1.25	0.17	0.00
LNP-011-A3-G-1-MA	630 - Wetland Forested Mixed	5	9	7	9	7	9	2.73	1.25	1.25	0.17	0.47
LNP-011-A3-G-1-MA	630 - Wetland Forested Mixed	5	9	7	9	7	9	2.91	1.25	1.25	0.17	0.50
LNP-011-A3-G-1-MA	630 - Wetland Forested Mixed	5	9	7	9	7	9	4.38	1.25	1.25	0.17	0.75
LNP-011-A3-K-2-MA	621 - Cypress	5	8	7	8	8	9	0.03	1.25	1.25	0.11	0.00
LNP-011-A3-K-2-MA	621 - Cypress	5	8	7	8	8	9	0.57	1.25	1.25	0.11	0.06
LNP-011-A3-K-2-MA	621 - Cypress	5	8	7	8	8	9	2.12	1.25	1.25	0.11	0.23
LNP-011-A3-K-MA	630 - Wetland Forested Mixed	6	9	7	8	8	9	0.04	1.25	1.25	0.11	0.00
LNP-011-A3-K-MA	630 - Wetland Forested Mixed	6	9	7	8	8	9	0.35	1.25	1.25	0.11	0.04
LNP-011-A4-G-MA	630 - Wetland Forested Mixed	5	9	6	8	6	9	0.50	1.25	1.25	0.19	0.10
LNP-011-A4-G-MA	630 - Wetland Forested Mixed	5	9	6	8	6	9	1.82	1.25	1.25	0.19	0.35
LNP-011A-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	0.89	1.5	1.68	0.13	0.12

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-011A-MA	630-1 - Wetland Forested Mixed (Logged)	4	9	7	9	6	9	2.82	1.5	1.68	0.13	0.37
LNP-011-B1C-MA	630 - Wetland Forested Mixed	4	9	7	9	7	9	2.17	1.25	1.25	0.19	0.42
LNP-011-B1C-MA	630 - Wetland Forested Mixed	4	9	7	9	7	9	5.61	1.25	1.25	0.19	1.08
LNP-539A-MA	621-1 - Cypress (Logged)	4	8	6	8	5	9	1.95	1.5	1.68	0.13	0.26
LNP-539B-MA	621 - Cypress	4	8	6	8	6	9	0.76	1.25	1.25	0.19	0.15
LNP-539B-MA	621 - Cypress	4	8	6	8	6	9	6.95	1.25	1.25	0.19	1.34
LNP-542-A-MA	621 - Cypress	5	8	7	8	8	9	0.00	1.25	1.25	0.11	0.00
LNP-542-A-MA	621 - Cypress	5	8	7	8	8	9	18.05	1.25	1.25	0.11	1.92
LNP-542-B-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	6	8	5	9	3.50	1.5	1.68	0.13	0.46
LNP-543-A-MA	643 - Wet Prairies	4	8	6	8	6	9	0.96	1.25	1.14	0.21	0.20
LNP-543-B-MA	643 - Wet Prairies	4	8	6	8	6	9	0.31	1.25	1.14	0.21	0.06
LNP-548-A-MA	621-1 - Cypress (Logged)	4	8	7	8	7	9	0.13	1.5	1.68	0.09	0.01
LNP-548-A-MA	621-1 - Cypress (Logged)	4	8	7	8	7	9	3.26	1.5	1.68	0.09	0.30
LNP-548-B-MA	641 - Freshwater Marshes	4	8	7	8	6	9	0.92	1.25	1.14	0.19	0.17
LNP-550-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	6	8	5	9	0.11	1.5	1.68	0.13	0.01
LNP-550-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	6	8	5	9	0.23	1.5	1.68	0.13	0.03
LNP-550-MA	630-1 - Wetland Forested Mixed (Logged)	4	8	6	8	5	9	3.05	1.5	1.68	0.13	0.40
LNP-553-MA	621-1 - Cypress (Logged)	4	8	6	8	5	9	0.46	1.5	1.68	0.13	0.06
LNP-641-MA	643 - Wet Prairies	4	8	6	8	6	9	0.06	1.25	1.14	0.21	0.01
LNP-HPP-MA	629 - Wet Planted Pine	3	8	4	6	4	9	0.11	1.25	1.14	0.28	0.03
LNP-HPP-MA	629 - Wet Planted Pine	3	8	4	6	4	9	0.15	1.25	1.14	0.28	0.04
LNP-HPP-MA	629 - Wet Planted Pine	3	8	4	6	4	9	0.19	1.25	1.14	0.28	0.05
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	0.24	1.25	1.14	0.26	0.06
LNP-HPP-MA	629 - Wet Planted Pine	4	8	4	6	4	9	3.06	1.25	1.14	0.26	0.79
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.03	1.25	1.14	0.28	0.01
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.09	1.25	1.14	0.28	0.02
LNP-HPP-MA	629 - Wet Planted Pine	4	9	4	6	4	9	0.14	1.25	1.14	0.28	0.04
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.00	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.00	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.00	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.00	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.02	1.25	1.14	0.23	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.03	1.25	1.14	0.23	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.03	1.25	1.14	0.23	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.24	1.25	1.14	0.23	0.06

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.26	1.25	1.14	0.23	0.06
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.60	1.25	1.14	0.23	0.14
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.61	1.25	1.14	0.23	0.14
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.72	1.25	1.14	0.23	0.17
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	0.86	1.25	1.14	0.23	0.20
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	1.06	1.25	1.14	0.23	0.25
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	1.64	1.25	1.14	0.23	0.38
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	2.19	1.25	1.14	0.23	0.51
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	2.72	1.25	1.14	0.23	0.64
LNP-HPP-MA	629 - Wet Planted Pine	5	8	4	6	4	9	4.40	1.25	1.14	0.23	1.03
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.00	1.25	1.14	0.26	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.01	1.25	1.14	0.26	0.00
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.02	1.25	1.14	0.26	0.01
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.29	1.25	1.14	0.26	0.07
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.30	1.25	1.14	0.26	0.08
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.83	1.25	1.14	0.26	0.22
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.86	1.25	1.14	0.26	0.22
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.88	1.25	1.14	0.26	0.23
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	0.94	1.25	1.14	0.26	0.24
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	1.55	1.25	1.14	0.26	0.40
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	1.63	1.25	1.14	0.26	0.42
LNP-HPP-MA	629 - Wet Planted Pine	5	9	4	6	4	9	2.50	1.25	1.14	0.26	0.64
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.25	1.25	1.14	0.21	0.05
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.29	1.25	1.14	0.21	0.06
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.31	1.25	1.14	0.21	0.06
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	0.33	1.25	1.14	0.21	0.07
LNP-HPP-MA	629 - Wet Planted Pine	6	8	4	6	4	9	1.00	1.25	1.14	0.21	0.21
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	0.02	1.25	1.14	0.23	0.01
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	3.97	1.25	1.14	0.23	0.93
LNP-HPP-MA	629 - Wet Planted Pine	6	9	4	6	4	9	4.69	1.25	1.14	0.23	1.10
Wetlands Total:								**119.76**				**21.11**

UMAM Scores for Waccasassa and Withlacoochee Watershed Upland Mitigation Areas – Please see maps at the end of the section for locations.

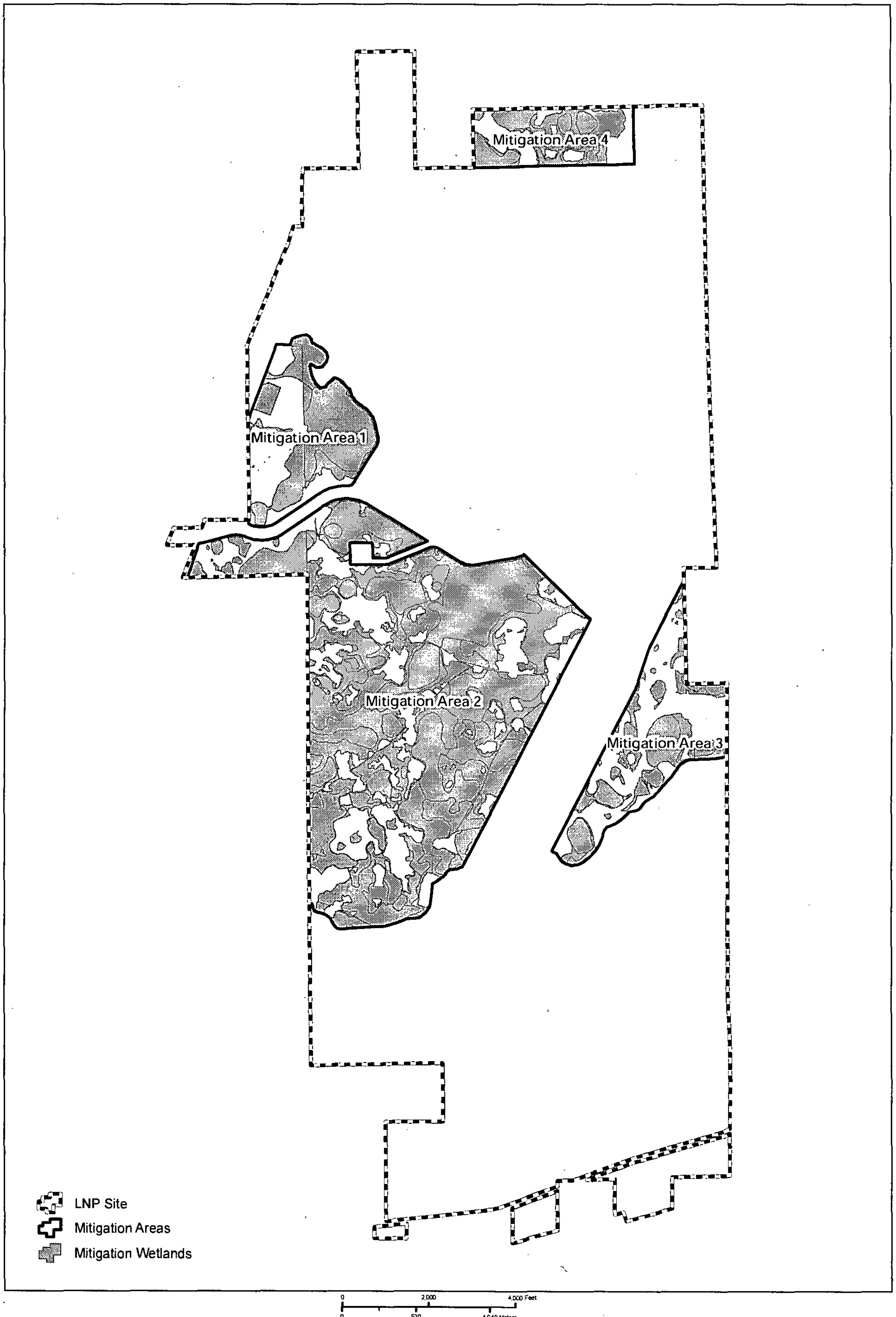
Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
Waccasassa Upland	260 - Other open lands (rural)	5	8	0	0	3	9	2.39	1.14	1.25	0.32	0.75
Waccasassa Upland	260 - Other open lands (rural)	5	5	0	0	4	4	0.64	1.14	1.25	0.00	0.00
Waccasassa Upland	320 - Shrub & brushland	5	8	0	0	6	9	0.45			0.21	0.10
Waccasassa Upland	320 - Shrub & brushland	8	8	0	0	6	9	0.64			0.11	0.07
Waccasassa Upland	411 - Pine flatwoods	4	8	0	0	6	9	0.07			0.25	0.02
Waccasassa Upland	411 - Pine flatwoods	4	8	0	0	6	9	0.26			0.25	0.06
Waccasassa Upland	411 - Pine flatwoods	5	8	0	0	6	9	4.71			0.21	0.99
Waccasassa Upland	411 - Pine flatwoods	6	8	0	0	6	9	1.13			0.18	0.20
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.00	1.25	1.25	0.34	0.00
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.04	1.25	1.25	0.34	0.01
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.10	1.25	1.25	0.34	0.03
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.12	1.25	1.25	0.34	0.04
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.12	1.25	1.25	0.34	0.04
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.13	1.25	1.25	0.34	0.04
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.14	1.25	1.25	0.34	0.05
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.23	1.25	1.25	0.34	0.08
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.26	1.25	1.25	0.34	0.09
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.29	1.25	1.25	0.34	0.10
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.35	1.25	1.25	0.34	0.12
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.36	1.25	1.25	0.34	0.12
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.50	1.25	1.25	0.34	0.17
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.53	1.25	1.25	0.34	0.18
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.94	1.25	1.25	0.34	0.32
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	1.47	1.25	1.25	0.34	0.49
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	1.52	1.25	1.25	0.34	0.51
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	1.61	1.25	1.25	0.34	0.54
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	1.62	1.25	1.25	0.34	0.55
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	1.65	1.25	1.25	0.34	0.55
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	1.99	1.25	1.25	0.34	0.67

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	0.58	1.25	1.25	0.34	0.19
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	1.02	1.25	1.25	0.34	0.34
Waccasassa Upland	440 - Tree Plantations	4	8	0	0	4	9	2.42	1.25	1.25	0.34	0.81
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.00	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.00	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.02	1.25	1.25	0.30	0.01
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.02	1.25	1.25	0.30	0.01
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.06	1.25	1.25	0.30	0.02
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.08	1.25	1.25	0.30	0.02
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.17	1.25	1.25	0.30	0.05
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.21	1.25	1.25	0.30	0.06
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.26	1.25	1.25	0.30	0.08
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.57	1.25	1.25	0.30	0.17
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.62	1.25	1.25	0.30	0.18
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.63	1.25	1.25	0.30	0.19
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	1.50	1.25	1.25	0.30	0.45
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	3.46	1.25	1.25	0.30	1.03
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	3.60	1.25	1.25	0.30	1.08
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	6.33	1.25	1.25	0.30	1.89
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	6.85	1.25	1.25	0.30	2.05
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	52.06	1.25	1.25	0.30	15.57
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.00	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.00	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.01	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.01	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.01	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.02	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.02	1.25	1.25	0.30	0.01
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.09	1.25	1.25	0.30	0.03
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.17	1.25	1.25	0.30	0.05
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.17	1.25	1.25	0.30	0.05
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.25	1.25	1.25	0.30	0.07

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.25	1.25	1.25	0.30	0.08
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.37	1.25	1.25	0.30	0.11
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.39	1.25	1.25	0.30	0.12
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.49	1.25	1.25	0.30	0.15
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.66	1.25	1.25	0.30	0.20
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.86	1.25	1.25	0.30	0.26
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.89	1.25	1.25	0.30	0.27
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.98	1.25	1.25	0.30	0.29
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	1.09	1.25	1.25	0.30	0.33
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	1.36	1.25	1.25	0.30	0.41
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	2.49	1.25	1.25	0.30	0.75
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	2.54	1.25	1.25	0.30	0.76
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	2.55	1.25	1.25	0.30	0.76
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	2.91	1.25	1.25	0.30	0.87
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	3.75	1.25	1.25	0.30	1.12
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	8.63	1.25	1.25	0.30	2.58
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	18.34	1.25	1.25	0.30	5.48
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	19.86	1.25	1.25	0.30	5.94
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	20.63	1.25	1.25	0.30	6.17
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	20.78	1.25	1.25	0.30	6.21
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	88.40	1.25	1.25	0.30	26.44
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.00	1.25	1.25	0.30	0.00
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	0.96	1.25	1.25	0.30	0.29
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	5.28	1.25	1.25	0.30	1.58
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	28.08	1.25	1.25	0.30	8.40
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	8.47	1.25	1.25	0.30	2.53
Waccasassa Upland	440 - Tree Plantations	5	8	0	0	4	9	13.91	1.25	1.25	0.30	4.16
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.00	1.25	1.25	0.26	0.00
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.00	1.25	1.25	0.26	0.00
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.00	1.25	1.25	0.26	0.00
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.00	1.25	1.25	0.26	0.00
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.05	1.25	1.25	0.26	0.01

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.08	1.25	1.25	0.26	0.02
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.28	1.25	1.25	0.26	0.07
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.59	1.25	1.25	0.26	0.15
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.63	1.25	1.25	0.26	0.16
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	1.39	1.25	1.25	0.26	0.36
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	1.52	1.25	1.25	0.26	0.40
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	4.30	1.25	1.25	0.26	1.12
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	5.21	1.25	1.25	0.26	1.36
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	10.20	1.25	1.25	0.26	2.67
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	0.01	1.25	1.25	0.26	0.00
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	1.08	1.25	1.25	0.26	0.28
Waccasassa Upland	440 - Tree Plantations	6	8	0	0	4	9	9.68	1.25	1.25	0.26	2.53
Waccasassa Upland	440 - Tree Plantations	7	8	0	0	4	9	0.08	1.25	1.25	0.22	0.02
Waccasassa Upland	440 - Tree Plantations	7	8	0	0	4	9	0.00	1.25	1.25	0.22	0.00
Waccasassa Upland	440 - Tree Plantations	7	8	0	0	4	9	6.08	1.25	1.25	0.22	1.36
Withlacoochee Upland	260 - Other open lands (rural)	5	8	0	0	3	9	0.31	1.14	1.25	0.32	0.10
Withlacoochee Upland	260 - Other open lands (rural)	5	8	0	0	3	9	11.07	1.14	1.25	0.32	3.49
Withlacoochee Upland	320 - Shrub & brushland	5	8	0	0	6	9	2.83			0.21	0.59
Withlacoochee Upland	411 - Pine flatwoods	4	8	0	0	6	9	0.73			0.25	0.18
Withlacoochee Upland	411 - Pine flatwoods	4	8	0	0	6	9	3.49			0.25	0.85
Withlacoochee Upland	411 - Pine flatwoods	5	8	0	0	6	9	1.83			0.21	0.38
Withlacoochee Upland	440 - Tree Plantations	0	8	0	0	4	9	0.00	1.25	1.25	0.49	0.00
Withlacoochee Upland	440 - Tree Plantations	4	8	0	0	4	9	0.15	1.25	1.25	0.34	0.05
Withlacoochee Upland	440 - Tree Plantations	4	8	0	0	4	9	0.94	1.25	1.25	0.34	0.32
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	0.25	1.25	1.25	0.30	0.07
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	0.32	1.25	1.25	0.30	0.09
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	0.77	1.25	1.25	0.30	0.23
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	1.28	1.25	1.25	0.30	0.38
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	0.06	1.25	1.25	0.30	0.02
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	0.23	1.25	1.25	0.30	0.07
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	0.93	1.25	1.25	0.30	0.28
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	3.45	1.25	1.25	0.30	1.03
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	12.66	1.25	1.25	0.30	3.78
Withlacoochee Upland	440 - Tree Plantations	5	8	0	0	4	9	44.28	1.25	1.25	0.30	13.24

Assessment Area Name	FLUCFCS Type	Location		Water		Community		Area Size (Acres)	Time Lag	Risk	RFG	FG
		Current	With	Current	With	Current	With					
Withlacoochee Upland	440 - Tree Plantations	6	8	0	0	4	9	0.20	1.25	1.25	0.26	0.05
Withlacoochee Upland	440 - Tree Plantations	6	8	0	0	4	9	0.63	1.25	1.25	0.26	0.16
Withlacoochee Upland	440 - Tree Plantations	6	8	0	0	4	9	0.83	1.25	1.25	0.26	0.22
Withlacoochee Upland	440 - Tree Plantations	6	8	0	0	4	9	1.28	1.25	1.25	0.26	0.34
Withlacoochee Upland	440 - Tree Plantations	6	8	0	0	4	9	2.87	1.25	1.25	0.26	0.75
Withlacoochee Upland	440 - Tree Plantations	7	8	0	0	4	9	0.32	1.25	1.25	0.22	0.07
Uplands Total:								**493.24**				**144.86**



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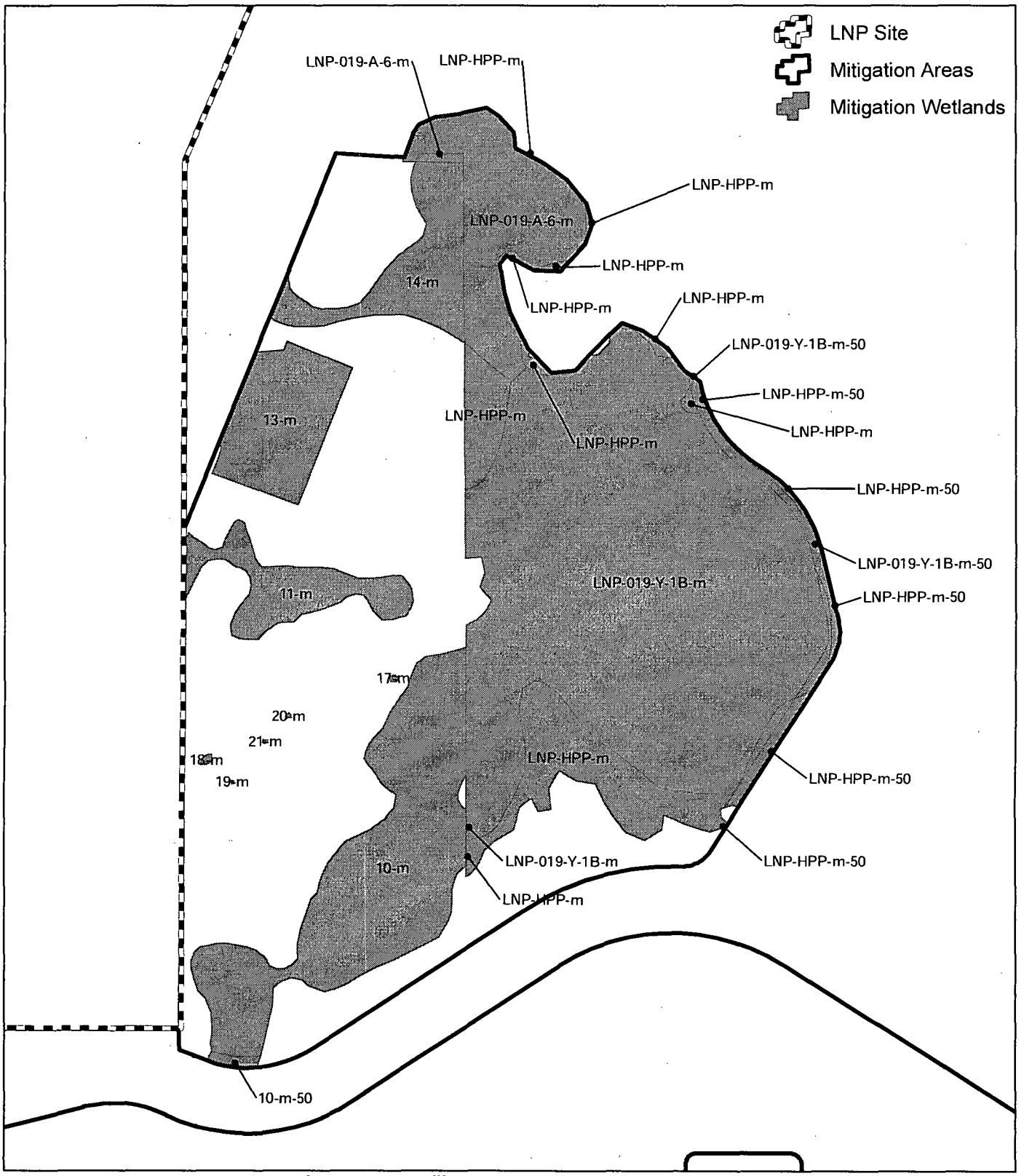
Mitigation Areas for LNP Site
(see maps which follow for Mitigation area details)

ENTRIX
3305 Crescent Park Drive
Riverview, FL 33578-3625
ph. (813) 664-4500
fx (813) 664-0440
www.entrix.com

Coordinate System:
NAD 1983 UTM Zone 17N feet

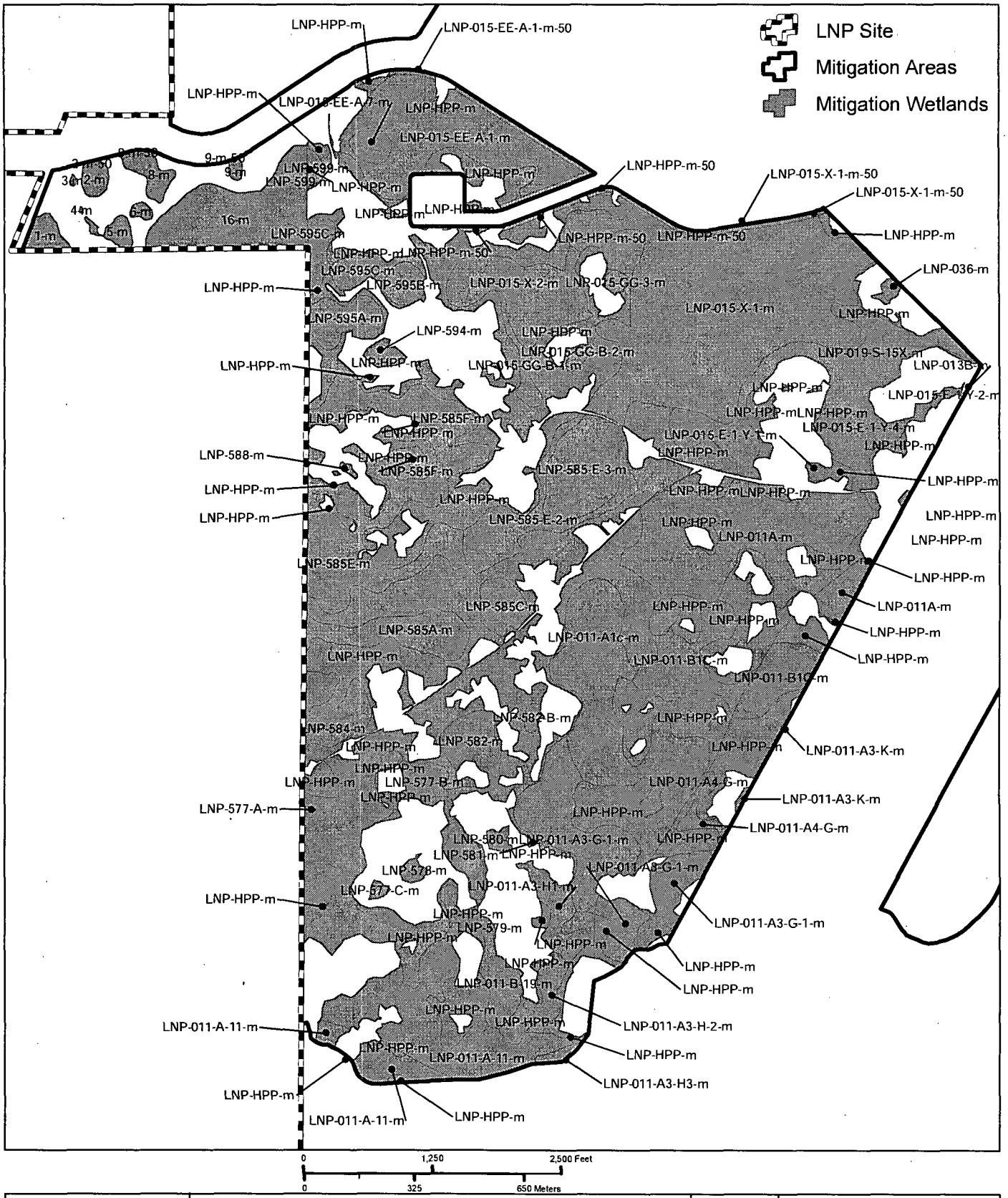


Assessment Areas in Mitigation Area 1

ENTRIX
3905 Crescent Park Drive
Riverview, FL 33578-3625
ph. (813) 664-4500
fx (813) 664-0440
www.entrix.com

Coordinate System:
NAD 1983 Florida State Plane West

Date: 03/25/2010 Rev. Date: n/a PM: SRD GIS Analyst: GdA Map Document: mit1_ID_A_20100325.mxd Project Number: 6691-020 PDF Document: mit1_ID_A_20100325.pdf Plot Size: 8.5 x 11

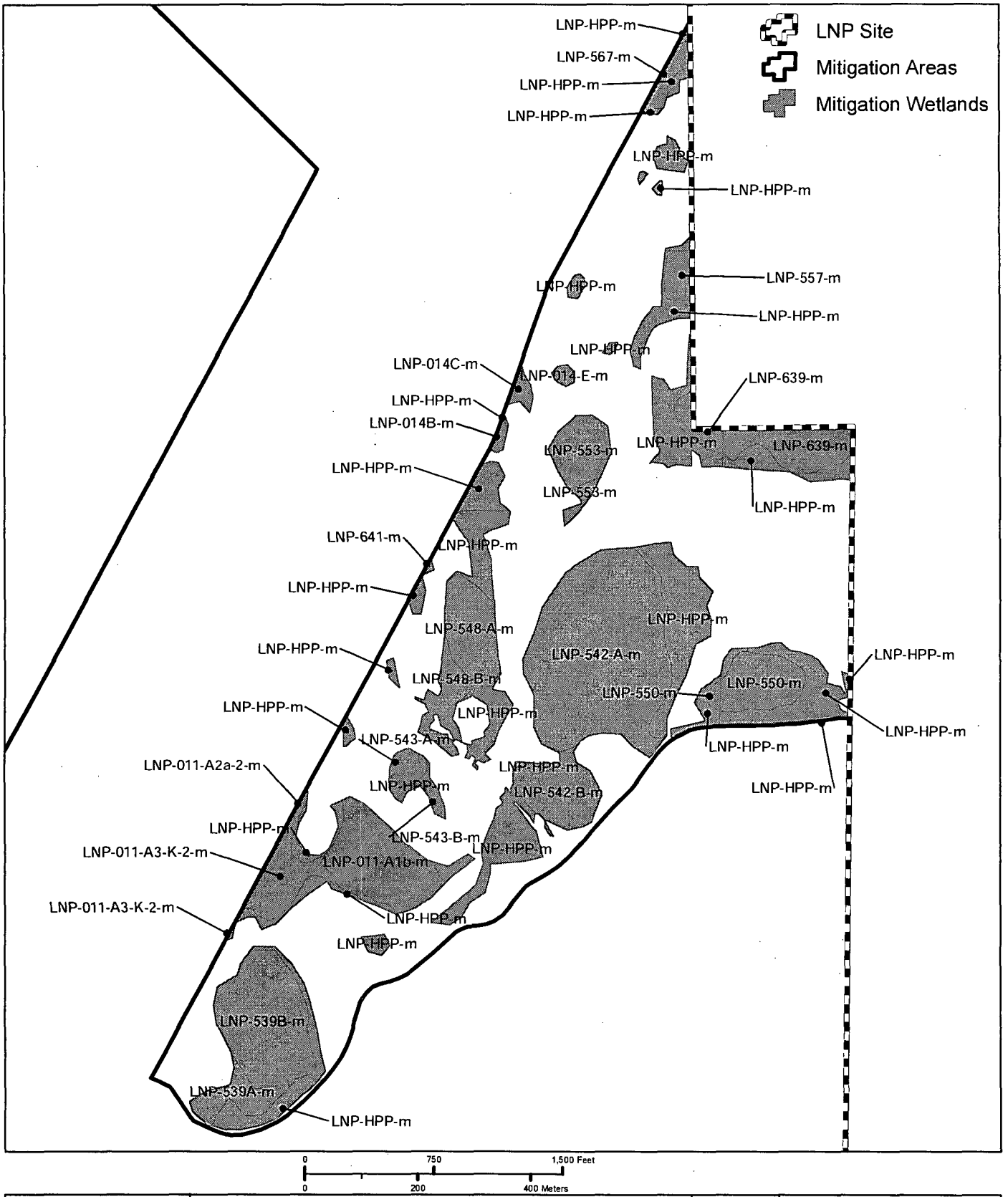


Assessment Areas in Mitigation Area 2

ENTRIX
3905 Crescent Park Drive
Riverview, FL 33578-3625
ph. (813) 664-4500
fx (813) 664-0440
www.entrix.com

Coordinate System:
NAD 1983 Florida State Plane West

Date: 03/25/2010 Rev. Date: n/a PM: SRD GIS Analyst: GdA Map Document: mit2_ID_A_20100325.mxd Project Number: 6691-020 PDF Document: mit2_ID_A_20100325.pdf Plot Size: 8.5 x 11



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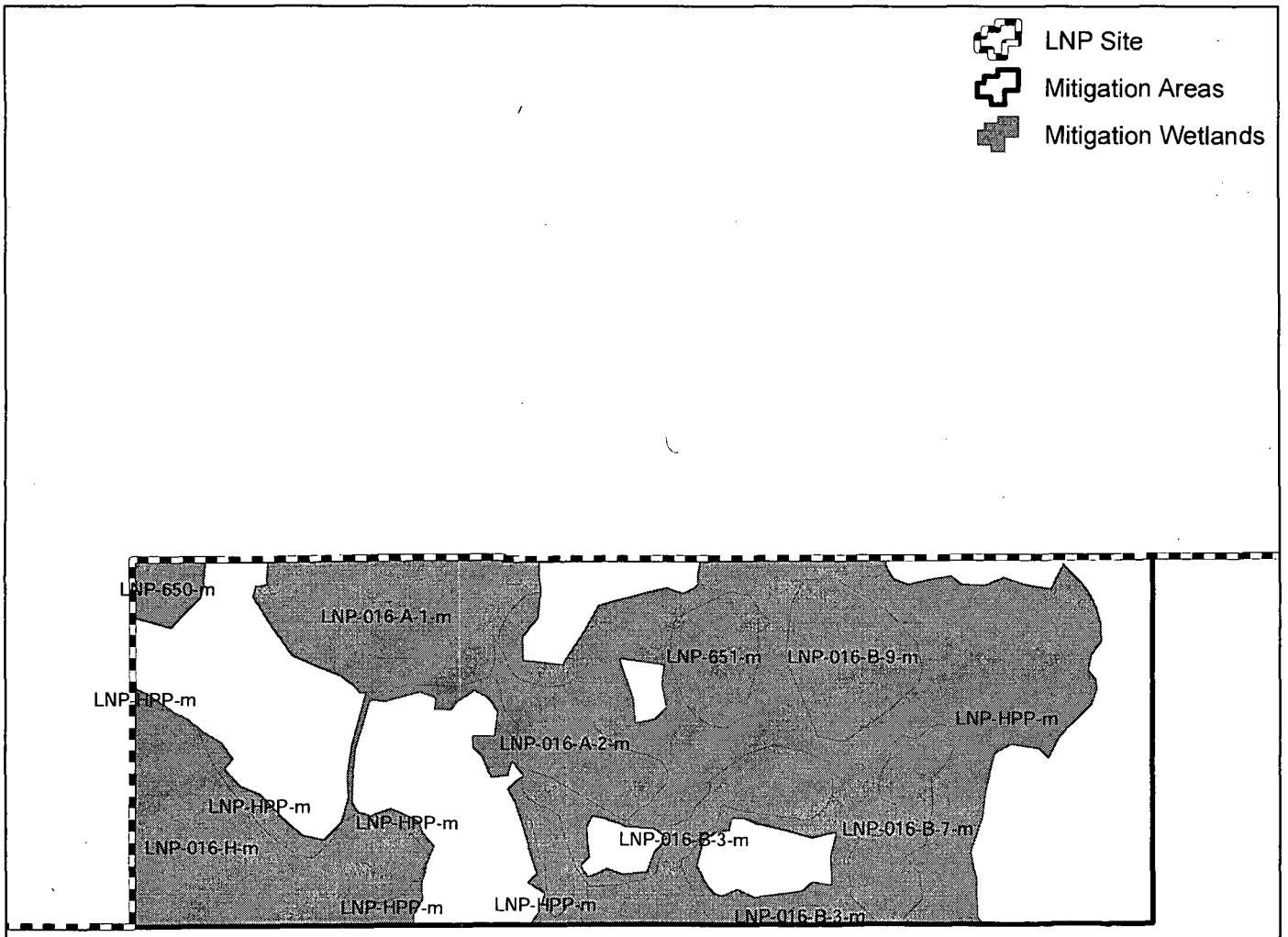
Assessment Areas in Mitigation Area 3

N

ENTRIX
3905 Crescent Park Drive
Riverview, FL 33578-3625
ph. (813) 664-4500
fx (813) 664-0440
www.entrix.com

Coordinate System:
NAD 1983 Florida State Plane West

Date: 03/25/2010 Rev. Date: n/a PM: SRD GIS Analyst: GdA Map Document: mit3_ID_A_20100325.mxd Project Number: 6691-020 PDF Document: mit3_ID_A_20100325.pdf Plot Size: 8.5 x 11



0 600 1,200 Feet

0 160 320 Meters

Assessment Areas in Mitigation Area 4

ENTRIX
3905 Crescent Park Drive
Riverview, FL 33578-3625
ph. (813) 664-4500
fx (813) 664-0440
www.entrix.com

Coordinate System:
NAD 1983 Florida State Plane West

Date: 03/25/2010 Rev. Date: n/a PM: SRD GIS Analyst: GdA Map Document: mit4_ID_A_20100325.mxd Project Number: 6691-020 PDF Document: mit4_ID_A_20100325.pdf Plot Size: 8.5 x 11

2.10.4 Letter of Agreement from DOF

The referenced letter follows this page.

Florida Department of Agriculture and Consumer Services
CHARLES H. BRONSON, Commissioner
The Capitol • Tallahassee, FL 32399-0800
www.doacs.state.fl.us

Respond to:
Florida Division of Forestry
3125 Conner Boulevard
Tallahassee, Florida 32399-1650
Telephone: 850-488-4274

March 5, 2010

Mr. Jim Maher
Program Administrator
Submerged Lands and Environmental Resource Permitting
Florida Department of Environmental Protection
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256

Dear Mr. Maher:

This letter is in reference to the off-site mitigation proposed by Progress Energy Florida (PEF) for its Levy Nuclear Plant and associated facilities. The site certification order is PPSA No. PA08-51. This letter is intended to provide PEF with authority to evaluate mitigation options on the Goethe State Forest and the Homosassa Tract of the Withlacoochee State Forest, with the ultimate intention of granting conceptual approval to the work proposed by PEF on both State Forests.

The Division of Forestry (DOF) understands that this proposal is a continuing part of the mitigation post-certification process and that more detailed planning will be developed, pending approval of FDEP. Once a formal restoration plan has been developed for project work involving either or both properties under DOF responsibility the Division of Forestry intends to cooperate fully with PEF to bring the restoration projects to fruition according to the permit requirements.

The Division of Forestry, based on several communications with PEF and their representatives over the last few months, has determined that this project is consistent with the resource management plans for each Forest. As proposed, restoration activities will neither impede scheduled DOF resource management activities nor create any negative impacts to DOF resource units.

Additionally, the Division of Forestry does not currently have any plans or funding to complete work described in this proposal in the foreseeable future. It is understood that upon completion of the mitigation project and PEF satisfying all of the success criteria of the post-certification conditions and applicable state and federal permits that responsibility of maintaining and protecting the mitigation site will revert back to the Division of Forestry.

We look forward to working with PEF and the state and federal permitting agencies in this endeavor.

Sincerely,

CHARLES H. BRONSON
COMMISSIONER OF AGRICULTURE

Jim Karels
Director, Division of Forestry

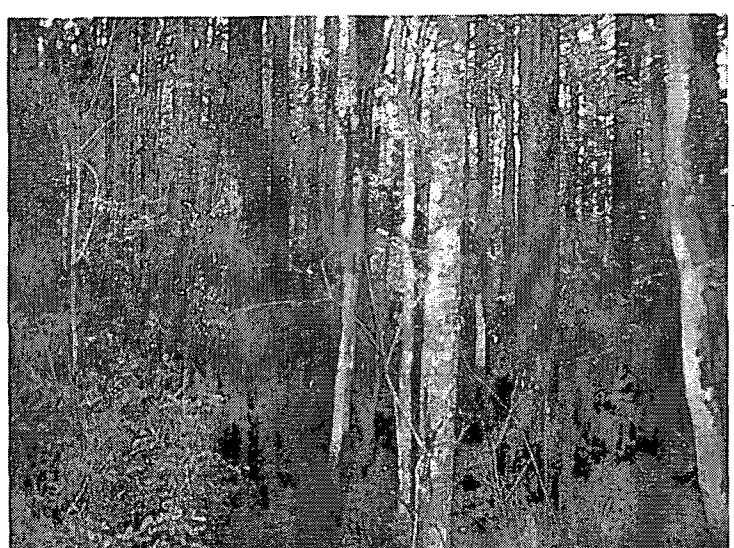
JRK/tg/vr

cc: Jeff Vowell, Chief, Field Operations
Steve Jennings, Chief, Forest Management
Winnie Schreiber, Manager, Withlacoochee Forest Center
Mike Penn, Resource Administrator, Withlacoochee Forest Center
Don West, Manager, Waccasassa Forest Center
Tom Gilpin, Wetland Restoration Specialist

2.10.5 Site Photos – Goethe State Forest

Wet Flatwoods (ecotone)

Depression Marsh

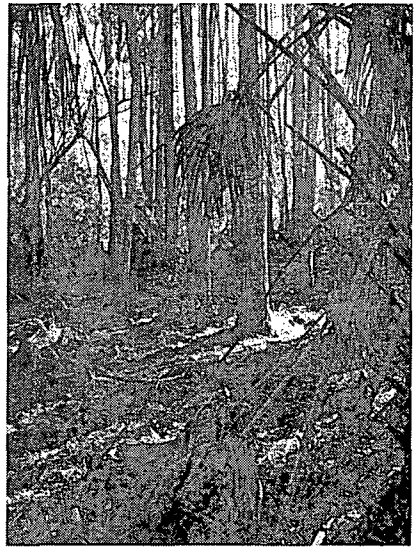


Cypress Swamp

Cypress Swamp-Ditched-Pine Encroachment

Cypress Swamp-Pine Encroachment

Cypress Swamp-Ditched



Basin Swamp-Ditched

Basin Swamp-Ditched-Pine Encroachment

2.10.6 UMAM Scores – Goethe State Forest

Assessment Area Name	Location		Water		Community		Area Size (acres)	Time Lag	Risk	RFG	FG
	Current	With	Current	With	Current	With					
Basin Swamp-Ditched	10	10	5	9	6	9	99.30	1.07	1.25	0.17	17.32
Basin Swamp-Pine Encroachment-Ditched	10	10	5	9	5	9	82.40	1.14	1.25	0.19	15.42
Cypress Swamp-Ditched	10	10	5	9	6	9	25.30	1.07	1.25	0.17	4.41
Cypress Swamp-Pine Encroachment-Ditched	10	10	5	9	5	9	41.50	1.14	1.25	0.19	7.77
Shrub Bog-Ditched	10	10	8	9	9	9	37.90	1.07	1.25	0.02	0.94
Shrub Bog- Pine Encroachment-Ditched	10	10	8	9	5	9	24.20	1.14	1.25	0.12	2.83
Wet Flatwoods-Ditched	10	10	9	9	6	9	164.40	1.07	1.25	0.07	12.29
Project Total:							**475.00**				**60.98**