# Preliminary Evaluations of the November 2024 Florida Forever Proposals

Submitted to the Office of Environmental Services Division of State Lands Florida Department of Environmental Protection November 2024

Florida Natural Areas Inventory Florida Resources and Environmental Assessment Center Institute of Science and Public Affairs Florida State University



#### Preliminary Evaluations of the November 2024 Florida Forever Proposals

The Florida Natural Areas Inventory (FNAI) is dedicated to gathering, interpreting, and disseminating information critical to the conservation of Florida's biological resources. The Inventory was founded in 1981 as a member of The Nature Conservancy's international network of natural heritage programs, and it is now part of Florida State University's Institute of Science and Public Affairs. Funding for FNAI is provided through contracts, which currently include work for the Florida Department of Environmental Protection (DEP), the U. S. Fish and Wildlife Service, Florida Forest Service, Florida Fish and Wildlife Conservation Commission, and Florida's Water Management Districts.

FNAI staff builds and maintains a comprehensive statewide database that now includes more than 35,000 occurrences of rare plant and animal species and high-quality natural communities. The database also contains information on more than 3,000 lands managed wholly or in part for conservation. This database includes national forests, parks and wildlife refuges; state parks, forests, aquatic preserves, and wildlife management areas; water management district lands; county and municipal parks; private preserves; and military installations with substantial natural areas. Boundaries of state land acquisition projects are also represented.

As part of an agreement with DEP, FNAI provides data and expertise to assist with the multi-step process of evaluating lands proposed for acquisition through the Florida Forever Program. This document presents our preliminary review of proposals submitted for the cycle beginning May 2024. This includes the following proposals:

- Hog Island
- Myakka River Corridor Addition
- St. Marks River Timberland and Springs
- Teal Timber

FNAI's review includes the following for the proposals: Natural Resource Description; Rare Species on the site; a tabular evaluation of selected Florida Forever Measures; and maps of the proposed site. Recreational and archeological values are not considered in this evaluation.

*Biological Conservation Priority:* Until 2021, FNAI summarized the overall preliminary assessment of each proposal as a "Biological Conservation Priority" for each site. This rank represented our initial assessment of a proposal's contribution to the protection of significant ecological resources from a statewide perspective. These ranks reflected the FNAI scientific staff's best judgment based on information available at the time of the evaluation. Because further assessment is generally needed to fully determine the biological importance of a site and many conservation factors may not be simply summarized, with the approval of DEP, this subjective rank is no longer included.

**Natural Resource Description:** The description of the natural resources presented for each proposal is developed from information provided in the proposal application, the FNAI Florida Natural Heritage Database, GIS data sources, FNAI staff comments, and aerial photographs. The natural communities listed in this evaluation and the percentage of the total area that each comprises were derived principally from aerial photographs as interpreted by FNAI staff and by landcover information from the Water Management Districts. These data were supplemented by FNAI natural community occurrence data where available. These sources were also used to determine the extent of disturbed lands that no longer support natural communities (agriculture areas, developed areas, mines, etc.). Acreages of communities and disturbances are approximate, but provide a reasonable estimate for this stage of the evaluation process. More precise landcover information is gathered during the Project Evaluation Report phase for those proposals selected for further evaluation.

Acreages of natural communities, particularly mesic and wet flatwoods, may differ from acreages given in the Florida Forever Measures Evaluation (FFME) table (described below). The FFME relies on statewide remotely sensed data where on-the-ground information is lacking. Using current high resolution aerial photography, FNAI scientists sometimes identify different acreage of certain landcover types--for example, pine plantation or flatwoods--than is identified through remotely sensed data.

Rare species on the proposed areas are listed in each evaluation. Species recorded in the FNAI database and those reported in the application are listed separately in the table. Potential rare species may be discussed in the evaluation text. FNAI Global and State ranks and Federal and State legal statuses are given for each species in the table. Rank and statuses provided in the text are listed in the same order after the scientific species name. A rank/status explanation sheet is included at the end of this document.

**Florida Forever Measures Evaluation:** Accompanying each evaluation is a table illustrating to what extent each proposed site meets 14 Florida Forever performance measures. These 14 measures were selected because they are resource-based criteria that can be used to set acquisition priorities. For each measure, we report the acres of the resource found on the proposed site and the percentage of the site containing the resource. The data in this assessment represent a highly standardized, statewide perspective of natural resource distributions. More detailed information may be gathered during the Project Evaluation Report phase for those proposals voted upon for further evaluation. The data used in this evaluation are described in detail in the Florida Forever Conservation Needs Assessment Summary Report and Technical Report, available at www.fnai.org.

**Maps:** This report provides two maps of each proposed site. The first is a small-scale map showing the proposed site in the context of surrounding conservation lands and land protection projects. The second map is of larger scale and uses recent aerial imagery that provides a view of the overall landcover of each site.

## **Elements and Element Occurrences**

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

## **Element Ranking and Legal Status**

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

#### FNAI GLOBAL ELEMENT RANK

**G1** = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.

**G2** = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.

G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.

**G4** = Apparently secure globally (may be rare in parts of range).

**G5** = Demonstrably secure globally.

**GH** = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).

**GX** = Believed to be extinct throughout range.

**GXC** = Extirpated from the wild but still known from captivity or cultivation.

G#? = Tentative rank (e.g., G2?).

**G#G#** = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).

G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1). G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).

**G#T#Q** = Same as above, but validity as subspecies or variety is questioned.

**GU** = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).

**GNA** = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).

**GNR** = Element not yet ranked (temporary).

**GNRTNR** = Neither the element nor the taxonomic subgroup has yet been ranked.

#### FNAI STATE ELEMENT RANK

**S1** = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.

**S2** = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.

S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.

**S4** = Apparently secure in Florida (may be rare in parts of range).

**S5** = Demonstrably secure in Florida.

**SH** = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).

**SX** = Believed to be extirpated throughout Florida.

**SU** = Unrankable; due to a lack of information no rank or range can be assigned.

**SNA** = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).

**SNR** = Element not yet ranked (temporary).

#### FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

**C** = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.

**E** = Endangered: species in danger of extinction throughout all or a significant portion of its range.

**E**, **T** = Species currently listed endangered in a portion of its range but only listed as threatened in other areas **E**, **PDL** = Species currently listed endangered but has been proposed for delisting.

**E**, **PT** = Species currently listed endangered but has been proposed for listing as threatened.

**E**, **XN** = Species currently listed endangered but tracked population is a non-essential experimental population.

 $\mathbf{T}$  = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.

**PE** = Species proposed for listing as endangered.

PS = -An infraspecific taxon or population has federal status but the entire species does not - status is in only a portion of the species range.

**PT** = Species proposed for listing as threatened.

**SAT** = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.

**SC** = Not currently listed, but considered a "species of concern" to USFWS.

**DL** = Delisted.

**UR** = Under review.

#### STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

**Animals:** Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

**C** = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service

**FE** = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service

FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service

**FXN** = Federal listed as an experimental population in Florida

**FT(S/A)** = Federal Threatened due to similarity of appearance

ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.

**SSC** = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC\* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)

**N** = Not currently listed, nor currently being considered for listing.

**Plants:** Definitions derived from Sections 581.011, 581.185 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: https://www.flrules.org/gateway/ChapterHome.asp?Chapter=5B-40.

E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.

 $\mathbf{T}$  = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.

**CE** = Commercially exploited: species native to the state which are subject to being removed in significant numbers from native habitats in the state and sold or transported for sale.

**N** = Not currently listed, nor currently being considered for listing.

## **Element Occurrence Ranking**

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

- **A** = Excellent estimated viability
- A? = Possibly excellent estimated viability
- **AB** = Excellent or good estimated viability
- **AC** = Excellent, good, or fair estimated viability
- **B** = Good estimated viability
- **B?** = Possibly good estimated viability
- **BC** = Good or fair estimated viability
- **BD** = Good, fair, or poor estimated viability
- **C** = Fair estimated viability
- **C?** = Possibly fair estimated viability
- **CD** = Fair or poor estimated viability
- **D** = Poor estimated viability
- **D?** = Possibly poor estimated viability
- **E** = Verified extant (viability not assessed)
- **F** = Failed to find
- $\mathbf{H}$  = Historical
- **NR** = Not ranked, a placeholder when an EO is not (yet) ranked.
- **U** = Unrankable
- $\mathbf{X}$  = Extirpated

\*For additional detail on the above ranks see: http://www.natureserve.org/explorer/eorankguide.htm

FNAI also uses the following EO ranks:

- **H?** = Possibly historical
- F? = Possibly failed to find
- X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).

## HOG ISLAND (PUTNAM COUNTY)

Acquisition Type: Fee Simple

#### **Preliminary Evaluation**

The Hog Island proposal includes ca. 203.2 acres in southern Putnam County, proposed by the owners for fee simple acquisition. It consists of an entire island in the St. Johns River, near the outlet of Lake George.

This evaluation is based on information gathered from the proposal, aerial photography, U.S. Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.7), the FNAI Natural Heritage database, and other publicly available GIS data sources. The property is situated about 1 mile southwest of Georgetown and 0.2 mile from the west shore of the St. Johns River, with the larger Drayton Island 0.6 mile to the east. Ocala National Forest extends to the western shore of the river to the west of the island; other conservation areas within 5 miles are the Welaka State Forest and Welaka Fish Hatchery connected to the Ocala National Forest to the north, and Lake George Conservation Area 3.75 miles east, which is part of a nearly contiguous corridor of managed lands along the eastern shore of Lake George connecting to Ocala National Forest. The nearest unacquired FFBOT lands are part of the Matanzas to Ocala Corridor FFBOT project, ca. 7.3 miles east on the eastern edge of the Lake George Conservation Area.

**Natural Resources Description:** The proposal area is a mostly forested island about 1.1 miles long and 0.3 mile wide in the St. Johns River, with approximately 16,000 feet of river shoreline. Cypressdominated floodplain swamps are the predominant vegetation (ca. 42% of the site); these occur in a fringe at the edges of the island, as well as in a north-south band crossing the island's eastern side. Evenly spaced across the island from west to east are three slightly higher and drier rises; the largest and highest of these on the west side of the island rises to about 5 feet above mean sea level. Sand pine scrub makes up the majority of these low hills, amounting to about 29% of the property as a whole. Hydric hammock (about 15% of the site) occupies the intergrade between the scrub and the surrounding floodplain swamp, and is also found in a zone between the western and central rises.

A small portion of the mapped boundary (8% of the site's acreage) falls within the river, and would be classified as blackwater stream.

Two developed areas (homesites) are also present; the largest is on the north side of the central part of the island. This area is mostly open with scattered cabbage palms; it contains a house, several outbuildings, a dock on the St. Johns, and a helicopter pad. A second smaller developed area, with a house and dock, is on the southeastern tip of the island. Artificial ponds make up a small portion of the site—the largest is on the south edge of the central developed area, and includes a small island connected by a footbridge and a covered dock. The second pond is near the northern edge of the western scrub. A road and powerline corridor follows a curving path between the central developed area and near the eastern homesite.

Community or Landcover	Acres	Percent of Proposal
Floodplain swamp	85	42
Scrub	59	29
Hydric hammock	30	15
Blackwater stream	16	8
Developed	8	4
Road	4	2
Artificial pond	1	<1
Total	203	100

Table 1. Natural communities and landcover types within the Hog Island Florida Forever proposal.

Two rare species are confirmed to occur on site, though biotic surveys have likely not been conducted. Florida black bear (*Ursus americanus floridanus*) is considered abundant in the region, although the river likely limits how commonly bears visit the island. Bald eagles (*Haliaaetus leucocephalus*) nest on the island, with multiple nesting locations documented. Although the scrub on the island has likely not been burned recently, it is possible that scrub-associated rare or imperiled species may be present, and other as-yet undocumented imperiled species are possible.

Table 2. Rare plants and animals documented or reported to occur within the Hog Island Florida Forever proposal.\*

		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Status
Rare plants documented on site					
none					
Additional rare plants reported on					
site by applicant					
none					
Rare animals documented on site					
Haliaaetus leucocephalus	bald eagle	G5	S3	N	N
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on					
site by applicant					
none					

\*Rank explanations attached.

The Florida Forever Measures Evaluation (FFME) at the end of this memo is based on the Florida Forever Conservation Needs Assessment developed by FNAI. The data used in that analysis represent a standardized, statewide perspective of natural resources; the statewide scope of this analysis accounts for any differences in natural community acreages between Table 1 and the FFME. According to the FFME, nearly the entire Hog Island proposal (93-100%) would support the following Florida Forever Measures: FNAI Habitat Conservation Priorities (priority 4), Ecological Greenways (priority 5), Natural Floodplain Function (mostly priority 1), and Surface Water Protection (priority 2).

Most of the site (79%) would also protect Strategic Habitat Conservation Areas (mostly priority 5); a slight majority (56%) would protect Functional Wetlands (mostly priority 1). A small amount (20%) would protect Aquifer Recharge.

#### Hog Island: Florida Forever Measures Evaluation 20241024

GIS ACRES =	203	
	Resource	% of
MEASURES	Acres <sup>a</sup>	project
B1: Strategic Habitat Conservat	ion Areas	
Priority 1	0	0%
Priority 2	4	2%
Priority 3	37	18%
Priority 4	0	0%
Priority 5	118	58%
Total Acres	159	79%
B2: FNAI Habitat Conservation		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	188	93%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	188	93%
B3: Ecological Greenways	_	
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	203	100%
Total Acres	203	100%
B4: Under-represented Natural		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (G2		35%
Rockland Hammock (G2)	0	0%
Dry Prairie (G2)	0	0%
Seepage Slope (G2)	0	0%
Sandhill (G3)	0	0%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	0	0%
Upland Hardwood Forest (G5)	0	0%
Total Acres	70	35%
B6: Occurrences of FNAI Track		
G1	0	
G2	0	
G3	0	
G4	1	
G5	1	
Total	2	
C4: Natural Floodplain Function		000/
Priority 1	137	68%
Priority 2	50	25%
Priority 3	3	2%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%

	Resource	% of
MEASURES (continued)	Acres <sup>a</sup>	project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	193	95%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%
Priority 7	0	0%
Total Acres	193	95%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	78	39%
Priority 2	34	17%
Priority 3	2	< 1%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	114	56%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	24	12%
Priority 4	16	8%
Priority 5	2	< 1%
Priority 6	0	0%
Total Acres	41	20%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways		Jniv. Florida)
Land Trail Priorities	0.0	
Land Trail Opportunities	0.0	
Total Miles	0.0	- 14
F2: Arch. & Historical Sites (number)	<u> </u>	sites
G1: Sustainable Forestry	0	00/
Priority 1	0	0%
Priority 2 Priority 3	0 0	0% 0%
Priority 3 Priority 4		0% 0%
Priority 4 Priority 5 Potential Pinalanda	0	0% 0%
Priority 5 - Potential Pinelands Total Acres	0	0%
G3: Forestland for Recharge	0	0%
of the stand for Recharge	0	0 /0

<sup>a</sup>Acres of each resource in the project and percentage of project represented by each resource are listed except where noted. This analysis converts site boundary into pixels, which causes slight differences from GIS acres; this effect is most noticeable on small sites.



# Hog Island Florida Forever Proposal



FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF OCTOBER 2024

Map Produced by: FL Natural Areas Inventory, N. Pasco, October 2024



Florida Forever Proposal Boundary
Existing Federal Conservation Lands



## MYAKKA CORRIDOR ADDITION (MANATEE COUNTY)

#### Acquisition Type: Fee Simple

### **Preliminary Evaluation**

The Myakka Corridor Addition proposal includes ca. 555.4 acres in southern Manatee County. The property is proposed by the owners for fee simple acquisition, to be managed by Manatee County. It consists of a contiguous tract of land under a single ownership.

This evaluation is based on information gathered from the proposal, aerial photography, U.S. Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.7), the FNAI Natural Heritage database, and other publicly available GIS data sources. The Myakka Corridor Addition proposal is situated slightly less than 3 miles west of Myakka City, in the upper Myakka River watershed. The property is accessed from State Road 70, which the tract's northern edge fronts for about 0.3 mile. The tract is directly east of the ca. 100-acre Triple Oak Preserve, a conservation tract recently purchased by Manatee County. The property would help to close a gap between managed areas to the northeast and to the south. To the north, Howze Ranch Agricultural and Conservation Easement and Pallardy Ranch Conservation Easement, within a mile, are in turn connected to Flatford Swamp Preserve and Rocking Seven Ranch and Farms Conservation Easement. Southward, Wetlands Reserve Program Easement #178 is within 1 mile, and is in turn connected to additional conservation easements and Myakka River State Park, and from there to a corridor of conservation lands reaching nearly to the Peace River. The tract lies near the northern edge of the archipelago of tracts comprising the Myakka Ranchlands FFBOT project, with the closest unacquired portions being about 2.2 miles south.

#### **Natural Resources Description:**

The proposal lies at the boundary of 2 different geomorphological provinces within the Peace River District. The Hardee Upland Province, which encompasses most of the tract, is an elevated plain underlain by relatively impermeable sediments, resulting in well-defined stream and river drainages. The southeastern corner and southern edge of the proposal is in the Peninsular Coastal Lowlands Province, a lower, level area shaped by ancient coastal processes. The topography of the site reflects its location at the margin of these two landforms, with higher elevations in the northern section of the tract falling off at an escarpment that defines boundary between the two zones to lower elevations at the southern portion of the site. The site's highest elevations are along the northwestern edge and drop off to the southeast, with a ridge of uplands projecting eastward into the middle of the property.

Drainage on the tract is generally eastward and southward towards Tatum Sawgrass/Lettuce Lake, 0.4 miles south of the site. The Tatum Sawgrass Slough is a significant--though highly altered--wetland system with considerable potential to influence water quality and flood dynamics of the Myakka River.

Only a small portion of the property is in natural or semi-natural vegetation; the main areas of natural communities that remain are patches of scrub found in a discontinuous band across the property, altogether accounting for about 5% of the tract. The remaining natural vegetation is associated with ditched creeks. A ditched stream extends onto the tract from the west, curving northeastward and exiting the eastern boundary, where it then flows south, near and east of the property's eastern boundary. Small amounts of forested wetlands (possibly bottomland forest) that fringe this waterway extend onto the property from the east, collectively amounting to less than 1% of the proposal. Three isolated forested wetlands that appear to be baygall (also about 1% of the tract) lie along and below the slopes in the southern portion of the property.

The remainder of the tract consists of highly modified landcovers and smaller acreages of semi-modified vegetation or regenerating forests. Improved pasture is the most prevalent land use on the tract, making up 64% of the site; the northern half of the property west and north of the remnant scrub is almost entirely improved pasture, and large areas of improved pasture are present southeast of the scrub and in the southwestern corner of the property as well. Semi-improved pasture makes up an additional 12% of the site. this occurs primarily surrounding and interspersed with the remnant scrub; several of the areas mapped as semi-improved pasture, although altered, appear to still contain remnant scrub and flatwoods species and could potentially be restored. Additional wetter areas of semi-improved pastures along the south slopes of the property may contain some patches of baygall. The south-central section of the tract contains two areas of pine plantation, together totaling 10% of the site. These surround a developed area containing agricultural buildings and a small area of successional hardwood forest or possibly xeric hammock. A small wet area near the northwestern canal appears to have formerly been regularly grazed but has succeeded to a successional hydric shrubland/forest. Additional minor land uses on the site comprise 2 small developed areas (homesites), and a few small stock ponds scattered through the pastures.

Community or Landcover	Acres	Percent of
	Acres	Proposal
scrub	28	5
forested wetlands	8	1
baygall	7	1
pasture – improved	358	64
pasture – semi-improved	69	12
pine plantation	55	10
successional hydric shrubland/forest	10	2
developed	10	2
canal/ditch	3	<1
road	3	<1
successional hardwood forest	3	<1
artificial pond	2	<1
Total	555	100

Table 1. Natural communities and landcover types within the Myakka CorridorAddition Florida Forever proposal.

No rare or imperiled species are documented on the site, according to FNAI's Natural Heritage Database. A few rare species may use the pastures, and various imperiled plants might persist in the scrub.

While Florida scrub jays (*Aphelocoma coerulescens*; G1G2, S1S2, T, FT\*) are not known to occur on the property, the site is within the region identified as important to managing the M4 metapopulation of this species, which occurs at Duette preserve and other nearby conservation lands. It is conceivable that with continued land acquisition in the area and appropriate scrub management, this tract could contribute to the continued stabilization of the local scrub jay population, and thus the long-term persistence of the species.

\* Rarity rankings in the following order: FNAI (global and state ranks), federal status, state status. Rank explanations attached.

Table 2. Rare plants and animals documented or reported to occur within the Myakka Corridor Addition Florida Forever proposal.

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
Rare plants documented on site					
none					
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
none					
Additional rare animals reported on site by applicant					
none					

The Florida Forever Measures Evaluation (FFME) at the end of this memo is based on the Florida Forever Conservation Needs Assessment developed by FNAI. The data used in that analysis represent a standardized, statewide perspective of natural resources; the statewide scope of this analysis accounts for any differences in natural community acreages between Table 1 and the FFME. According to the FFME, the entire property would contribute to Ecological Greenways (priority 3), Surface Water Protection (priorities 3 and 5), and Aquifer Recharge (priorities 4 and 5). A large majority of the site (89%) contributes to FNAI Habitat Conservation Priorities (mainly priority 6). Only small portions of the site (<10%) contribute to Strategic Habitat Conservation Areas, Natural Floodplain Function, and Functional Wetlands. The FFME notes that 6% of the site consists of Under-represented Natural Communities (scrub/scrubby flatwoods), which could be an underestimate, depending on whether any of the areas mapped as semi-improved pastures are undisturbed enough to be considered scrub or flatwoods. Myakka Corridor Addition: Florida Forever Measures Evaluation 20241024

555

GIS ACRES =

GIS ACRES =	Resource	% of
MEACUDES		
MEASURES	Acres <sup>a</sup>	project
B1: Strategic Habitat Conserva		0%
Priority 1 Priority 2	0 22	0% 4%
	17	4% 3%
Priority 3 Priority 4	0	0%
and the second	14	3%
Priority 5 Total Acres	53	10%
B2: FNAI Habitat Conservation		1070
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	1	< 1%
Priority 5	133	24%
Priority 6	363	65%
Total Acres	497	89%
B3: Ecological Greenways	101	0070
Priority 1	0	0%
Priority 2	Ő	0%
Priority 3	556	100%
Priority 4	0	0%
Priority 5	Ő	0%
Total Acres	556	100%
B4: Under-represented Natural		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (0	-	6%
Rockland Hammock (G2)	0	0%
Dry Prairie (G2)	0	0%
Seepage Slope (G2)	0	0%
Sandhill (G3)	0	0%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	0	0%
Upland Hardwood Forest (G5)	0	0%
Total Acres	32	6%
B6: Occurrences of FNAI Tracl		
G1	. 0	
G2	0	
G3	0	
G4	0	
G5	0	
Total	0	
C4: Natural Floodplain Functio	on	
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	8	1%
Priority 5	17	3%
Priority 6	2	< 1%
Total Acres	27	5%
		0,0

	Resource	% of
MEASURES (continued)	Acres <sup>a</sup>	project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	285	51%
Priority 4	3	< 1%
Priority 5	268	48%
Priority 6	0	0%
Priority 7	0	0%
Total Acres	556	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	8	1%
Priority 5	16	3%
Priority 6	2	< 1%
Total Acres	26	5%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	44	8%
Priority 4	311	56%
Priority 5	201	36%
Priority 6	0	0%
Total Acres	556	100%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenway		niv. Florida)
Land Trail Priorities	0.0	
Land Trail Opportunities	0.0	
Total Miles	0.0	
F2: Arch. & Historical Sites (number)	0:	sites
G1: Sustainable Forestry	0	
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5 - Potential Pinelands	0	0%
Total Acres	0	0%
G3: Forestland for Recharge	0	0%

<sup>a</sup>Acres of each resource in the project and percentage of project represented by each resource are listed except where noted. This analysis converts site boundary into pixels, which causes slight differences from GIS acres; this effect is most noticeable on small sites.



# Partie DA Farm Serv

# Myakka Corridor Addition Florida Forever Proposal

FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF OCTOBER 2024

Map Produced by: FL Natural Areas Inventory, N. Pasco, October 2024

Background: USDA NAIP Imagery Resolution = 1.0 meter

Miles





## ST. MARKS RIVER TIMBERLAND AND SPRINGS (WAKULLA COUNTY)

Acquisition Type: Fee Simple

## **Preliminary Evaluation**

The St. Marks River Timberlands and Springs Florida Forever proposal is located in eastern Wakulla County, north of Highway 98, south of Commerce Boulevard, east of Highway 267, and west of the St. Marks River. The project consists of a nearly contiguous area of approximately 4,711.3 acres, which is proposed for fee simple acquisition.

This evaluation is based on information gathered from the proposal, aerial photography, U.S. Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.7), the FNAI Natural Heritage Database, and other publicly available GIS data sources. The property is located about 3.3 miles north of the community of St. Marks and ca 11 miles south of Tallahassee, just north of the community of Newport. The western edge of the tract fronts County Highway 287 (Bloxham Cutoff Road) for about 2.4 miles of road frontage, and Old Plank Road bisects the property for a distance of about 3 miles. The southwestern corner of the tract extends south to US Highway 98. Small intervening parcels separate the tract from US 98 by 0.1 to 0.2 mile, although one disjunct ca. 2.5-acre parcel included in the proposal partially closes this gap.

The site is not adjacent to any existing managed lands, but is located just north of a band of conservation lands that extend inland from the coast. The closest is St. Marks National Wildlife Refuge, which is separated from the proposal's southeastern corner by the St. Marks River and US Highway 98; other conservation lands that are part of this coastal corridor and within 5 miles of the site are San Marcos de Apalache Historic State Park, Tallahassee-St. Marks Historic Railroad Trail State Park, St. Marks Mitigation Bank, and Wetlands America Trust Preserve. West of the tract, Wakulla State Forest and Edward Ball Wakulla Springs State Park are about 2 miles away; north and east of the site, the Gerrell Conservation Easement is about 1.3 miles away, and connects to Natural Bridge Battlefield Historic State Park and Plank Road State Forest. Aucilla Wildlife Management area is 6 miles away to the east. A patchwork of unacquired FFBOT project properties lie 2 miles to the west, including Wakulla Springs Protection Zone, and to a lesser extent, Florida's First Magnitude Springs, St. Joe Timberland, and Strategic Managed Area Lands List FFBOT projects.

#### **Natural Resources Description:**

The tract is in a region known as the Woodville Karst Plain, which slopes southward towards the Gulf of Mexico, and is characterized by karst features such as springs and sinkholes as well as remnant dunes and sand ridges resulting from ancient coastal processes. The site's highest elevations are at around 25 feet in a scattering of small hills in the northwest; from there the property gently slopes to an elevation of about sea level along the river. Slight depressions pockmark the property throughout.

The most notable feature of the tract is its almost 4.5 miles of frontage on the St. Marks River. The St. Marks is a deepwater river that originates in eastern Leon County, and flows ca. 36 miles to empty into the Gulf of Mexico in the St. Marks National Wildlife Refuge. Protection of the site could benefit the water quality of the river as well as the Big Bend Seagrasses Aquatic Preserve.

The tract has largely been converted to pine plantations, but about 15% of the site is naturally vegetated. Bottomland forest is the most prevalent mapped natural community on the site, accounting for about 8% of the proposal. Bottomland forests are most common in the southeastern edge of the property bordering the St. Marks River, but are also found in shallow drainages in the uplands, and in intergrades between pine plantations and lower, wetter areas of basin swamp.

Isolated dome swamps are scattered throughout the property. These are cypress dominated depressions that would formerly have been surrounded by fire-dependent natural communities, but are now surrounded by pine plantations. Approximately 40 dome swamps are scattered across the proposal, but due to their small size, they account for about 2% of the site.

Basin swamps—cypress dominated swamps similar to dome swamps—occupy about 2 percent of the site in a few areas. Most of these are relatively small swamps formed in the deepest, wettest portions of depressions or drainages, typically surrounded by bottomland forest. However, one large and irregularly shaped basin swamp is found in the midst of pine plantations in the western part of the property.

A portion of the proposal's boundary contains the edges of the St. Marks River. The St. Marks is considered a blackwater river, due to a large amount of its baseflow deriving from swamps in its headwaters, although it also receives some groundwater input from springs.

Portions of the forest along the edges of the St. Marks River in the northernmost parts of the site appear to be flooded for more of the year than the bottomlands elsewhere. These areas are cypress-dominated and are classified as floodplain swamp. They occupy less than 1 percent of the site.

Just west of the river on the northern part of the proposal is an area mapped as upland hardwood forest, between the pine plantations and the bottomland forests below. This community is normally a mix of deciduous and evergreen hardwood species, occurring on moderately well-drained, rich soils. Upland hardwood forest is considered an Under-represented Natural Community.

Two other natural communities—shrub bog and depression marsh—make up small portions of the proposal. The shrub bog is a wetland that may have formerly been a baygall, but now appears to be shrub and vine-dominated due to logging, wildfire, or other disturbance. A single depression marsh occurs in the southern part of the proposal not far inland from the river. This small depression in the midst of pine plantation is herb-dominated. It's possible that other depression marshes

formerly occurred but have undergone succession to dome swamps or been converted to pine plantation.

Although not listed by acreage in Table 1, there are 2 documented third-magnitude springs (Newport Sulphur Spring and St. Marks Sulphur Spring #1) on the site. The application also notes that multiple undocumented springs occur along the St. Marks on the proposal.

The majority of the site has been modified by a history of commercial timber production. The entirety of the uplands of the site—likely originally flatwoods and bottomland forest—have been converted to pine plantations, which now make up 73% of the site. A significant portion of the site (ca. 9%) consists of forested wetlands that are regenerating after past disturbance, or former marshes/wet prairies that have become dominated by woody plants due to a lack of fire. These areas are considered successional hydric forest/shrubland, and are estimated to cover 9 % of the site. A well-developed network of unpaved roads traverses the proposal, making up an estimated 3% of the proposal acreage. Clearings (likely wildlife openings and food plots) are scattered widely over the site and occupy about 1%. Other small portions of the site (<1%) contain successional hardwood forest, a small developed homesite area, and borrow pits.

Community or Londonyor	Acres	Percent of Proposal	
Community or Landcover	Acres		
bottomland forest	372	8	
dome swamp	81	2	
basin swamp	80	2	
blackwater stream	53	1	
floodplain swamp	26	<1	
upland hardwood forest	12	<1	
shrub bog	2	<1	
depression marsh	<1	<1	
pine plantation	3,454	73	
successional hydric forest/shrubland	412	9	
road	141	3	
clearing	64	1	
successional hardwood forest	11	<1	
developed	2	<1	
borrow area	<1	<1	
Total	4,711	100	

Table 1. Natural communities and landcover types within the St. Marks RiverTimberland and Springs Florida Forever proposal.

Two rare/imperiled species have been documented on the proposal site. One is the Florida dwarf crayfish (*Cambarellus schmittii*; G2G3, S2S3, N, N)\*, which has been found in one of the springs onsite. Florida black bear (*Ursus americanus floridanus*; G5T4, S4, N, N) is classified as Frequent in the area. The application reports several additional species on the tract as well (Table 2). Other rare or imperiled species may be possible, although the highly modified nature of the uplands makes it somewhat less likely. In particular, night-blooming wild petunia (*Ruellia noctiflora*, G3?, S2, N, E) occurs on roadsides very near the site and may be present on the property.

\* Rarity rankings in the following order: FNAI (global and state ranks), federal status, state status. Rank explanations are attached.

Table 2. Rare plants and animals documented or reported to occur within the St. Marks River	
Timberlands and Springs Florida Forever proposal.	

		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Status
Rare plants documented on site					
none					
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
Cambarellus schmittii	fontal dwarf crayfish	G2G3	S2S3	N	N
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on					
site by applicant					
Gopherus polyphemus	gopher tortoise	G3	S3	N	ST
Elanoides forficatus	swallow-tailed kite	G5	S2	N	N
Pandion haliaetus	osprey	G5	S3S4	N	N
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N

The Florida Forever Measures Evaluation (FFME) at the end of this memo is based on the Florida Forever Conservation Needs Assessment developed by FNAI. The data used in that analysis represent a standardized, statewide perspective of natural resources; the statewide scope of this analysis accounts for any differences in natural community acreages between Table 1 and the FFME. According to the FFME, most or all (>90%) of the property would support the following Florida Forever Measures: Strategic Habitat Conservation Areas (mostly priority 2), FNAI Habitat Conservation Priorities (priorities 1 through 6), Surface Water Protection (mostly priority 4 and 3), and Aquifer Recharge (mainly priority 3). A significant amount of the property also contributes to Sustainable Forestry (72%, mostly priority 2) and Forestland for Recharge (66%). Less than a quarter of the site would protect Natural Floodplain Function and Functional Wetlands. The FFME suggests that a small amount of mesic or wet flatwoods (both Under-represented Natural Communities) are present. If so, they are likely as small remnants at the edges of other communities, as no flatwoods stands were evident in a more detailed examination of the site.

#### St. Marks Timberland & Springs: Florida Forever Measures Evaluation 20241024

4,711

GIS ACRES =

GIS ACRES = 4,711	Resource	% of
MEASURES	Acres <sup>a</sup>	project
B1: Strategic Habitat Conservation		p. 0 j 0 0 0
Priority 1	0	0%
Priority 2	0	0%
Priority 3	4,316	92%
Priority 4	4,510	92 % 0%
Priority 5	232	0% 5%
Total Acres	4,548	97%
B2: FNAI Habitat Conservation Pri		3770
Priority 1	102	2%
Priority 2	1,188	25%
Priority 3	70	1%
Priority 4	67	1%
Priority 5	874	19%
Priority 6	1,980	42%
Total Acres	4,282	91%
B3: Ecological Greenways	r,202	5170
Priority 1	1,848	39%
Priority 2	2,862	61%
Priority 3	2,002	0%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	4,710	100%
B4: Under-represented Natural Co		10070
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (G2)	0	0%
Rockland Hammock (G2)	0	0%
Dry Prairie (G2)	0	0%
Seepage Slope (G2)	0	0%
Sandhill (G3)	5	< 1%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	13	< 1%
Upland Hardwood Forest (G5)	16	< 1%
Total Acres	33	1%
B6: Occurrences of FNAI Tracked		170
G1	0	
G2	1	
G3	0	
G4	1	
G5	Ö	
Total	2	
C4: Natural Floodplain Function	_	
Priority 1	0	0%
Priority 2	1	< 1%
Priority 3	262	6%
Priority 4	812	17%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	1,075	23%

	Resource	% of
MEASURES (continued)	Acres <sup>a</sup>	project
C5: Surface Water Protection	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,
Priority 1	1,688	36%
Priority 2	, 75	2%
Priority 3	0	0%
Priority 4	2,363	50%
Priority 5	42	< 1%
Priority 6	487	10%
Priority 7	0	0%
Total Acres	4,655	99%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	1	< 1%
Priority 3	284	6%
Priority 4	775	16%
Priority 5	0	0%
Priority 6	0	0%
Total Acres D3: Aquifer Recharge	1,059	22%
Priority 1	0	0%
Priority 2	164	3%
Priority 3	3,956	84%
Priority 4	314	7%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	4,434	94%
E2: Recreational Trails (miles)	.,	
(prioritized trail opportunities from Office of Greenway	s and Trails & U	niv. Florida)
Land Trail Priorities	0.9	
Land Trail Opportunities	2.7	
Total Miles	3.6	
F2: Arch. & Historical Sites (number)	11	sites
G1: Sustainable Forestry		
Priority 1	352	7%
Priority 2	2,671	57%
Priority 3	284	6%
Priority 4	97	2%
Priority 5 - Potential Pinelands	1	< 1%
Total Acres	3,405	72%
G3: Forestland for Recharge	3,098	66%

<sup>a</sup>Acres of each resource in the project and percentage of project represented by each resource are listed except where noted. This analysis converts site boundary into pixels, which causes slight differences from GIS acres; this effect is most noticeable on small sites.



# St. Marks Timberland & Springs Florida Forever Proposal



FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF OCTOBER 2024

Map Produced by: FL Natural Areas Inventory, N. Pasco, October 2024









## TEAL TIMBER (CALHOUN, LIBERTY, AND WALTON COUNTY)

Acquisition Type: Fee Simple

### **Preliminary Evaluation**

The Teal Timber proposal includes 3 tracts totaling ca. 18,552.6 acres in Calhoun, Liberty, and Gulf Counties. The property is proposed for fee simple acquisition, with the anticipation that the south tract would be managed by the Florida Fish and wildlife Conservation Commission (FFWCC). Management of the north and central tracts remains to be determined.

This evaluation is based on information gathered from the proposal, aerial photography, U.S. Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FFWCC and FNAI, Florida Cooperative Land Cover Map, version 3.7), the FNAI Natural Heritage database, and other publicly available GIS data sources.

The north tract (ca. 1,347 acres) is located in northeastern Calhoun County, ca. 3 miles south of Interstate 10. This tract is mostly set back from the west bank of the Apalachicola River, but its northernmost eastern edge fronts the river for about 0.4 mile, directly south of the Ocheesee Landing. Near the landing, the north tract is directly across the river from Torreya State Park; it also borders the Trammell Conservation Easement along its south boundary. Other than the portion that fronts the river, the eastern edge of this tract is completely contiguous with the western boundary of the Apalachicola River FFBOT project.

The central tract (at 578 acres, the smallest of the 3) is in the east bank of the Apalachicola River in Liberty County. It lies across the river from Blountstown and about 2 miles west of Bristol, and does not have frontage on any public roads. The central tract occupies a bend in the river, with the river defining its north, west, and south sides—about 2.4 miles of river frontage in total. The central tract is not adjacent to any conservation lands, but its eastern boundary abuts unacquired lands of the Apalachicola River FFBOT project, and additional portions of the project are also across the river from the southern half of this tract.

The south tract (16,627 acres) makes up the bulk of the proposal, spanning a ca. 11-mile stretch along the eastern edge of southern Calhoun and northern Gulf County extending south to near the convergence of the Apalachicola and Chipola Rivers. This portion of the proposal has about 4 miles of frontage on the Chipola. There are no conservation lands abutting this tract, but the eastern boundary is contiguous for its entire length with unacquired parts of the Apalachicola River FFBOT project. There are a few small parcels on the west side of this tract that are currently not connected to the rest of the FFBOT project, and the current project would bridge this gap. The Apalachicola River Water Management Area lies just to the east of this property, separated by <1 mile by unacquired FFBOT lands.

#### **Natural Resources Description:**

Topography the western edge of the north tract varies topographically from higher ridges of 80-110 feet along its western half, to more level areas at 50-60 feet above mean sea level near the river and where Ocheesee Creek flows southeast across the midpoint of the property.

The central tract lies within the floodplain of the Apalachicola and its topography is shaped by riverine dynamics; there is only slight variation in elevation, with alternating ridges and swales parallel to the river that vary between about 40 and 50 feet above mean sea level.

The south tract is relatively leve, and also shows signs of being shaped by the river, with swales representing old oxbows. The elevations vary from about 20 to 40 feet above sea level over most of the tract, with the exception of small areas at the tract's north end where higher uplands (to about 70 feet elevation) extend onto the property from the north.

Although 2 of the 3 tracts consist mostly of higher elevations set back from the most extensive areas of floodplain, the properties nonetheless do include some edges of the floodplain communities that fringe the Apalachicola and the Chipola. Floodplain swamps occur where the properties are closest to the river, often interspersed with stands of bottomland forest or alluvial forest on slight elevations in the floodplain. Floodplain swamps are also abundant on the tracts surrounding better-defined creek drainages through the pine plantations. They also are found in oxbow depressions that may be set back from the river, but are low and close enough to experience river flooding on a regular basis. On intermediate elevations between the floodplain and adjacent uplands, mixed-canopy forests (likely a mix of bottomland forest and baygall) are also found.

Within the pine plantations of the uplands, various types of wetlands occur. Small and large basin swamps, dominated by cypress, are found throughout; these grade into floodplain swamps where small drainages become better defined. In many cases these forested wetlands are directly adjacent to pine plantations, but some of them are buffered by areas of bottomland forest or small fringes of remnant wet or mesic flatwoods. Dome swamps are also frequent within the pine plantations. These are small, isolated cypress swamps occurring in shallow depressions. These vary in condition, with some having been impacted by past silvicultural operations and others severely hurricane damaged, whereas others appear to be relatively intact. Together dome swamps make up less than 1% of the property. Baygalls is another forested wetland type that occurs to a limited extent on the proposal. Baygalls are found on the northern tract along the flanks of ridges, and at the base of the slopes below the highest elevations in the southern tract.

Different types of forested wetlands can be difficult to distinguish based on aerial signatures alone, and on this proposal, this is compounded by disturbances due to forestry activities and hurricane impacts. Many of the site's wetlands are here classified as freshwater forested wetlands; this category likely contains a combination of basin swamps, bottomland forests, baygall, and possibly hardwoodencroached wet flatwoods. Collectively these make up an additional 3% of the property. Many of the forested wetlands on higher elevations of the proposal were subject to severe wind damage from Hurricane Michael and are now undergoing succession after losing much of their tree canopy. These recovering wet forests, along with swamps that have been logged in the past, as well as marshes, wet flatwoods, and wet prairies that have been invaded by hardwoods, are classified as successional hydric forest/shrublands. Depending on the level of disturbance, these may or may not recover a similar composition to the original wetland community they were derived from. These altered wetlands make up an estimated 5% of the proposal's acreage.

On the west side of the southern tract, there is a significant elevational difference between uplands and the Chipola River floodplain below. It is possible that a narrow fringe of upland hardwood forest may occur along this edge, which if present, would occupy less than 1% of the proposal.

Marshes and open-water communities are relatively uncommon in this proposal, although a handful of depression marshes, along with a few small depressions in the river floodplain (river floodplain lake) and one deep depression in the pine plantations (which, presuming it is a natural depression, is considered a flatwoods lake). Together these habitats make up <1% of the proposal.

The predominant land use on upland portions of the property, over 14,000 acres or about 77% of the proposal, is timber production. Pine plantations make up the majority of each of the 2 largest tracts, and occur to a lesser extent on the central tract. According to the proposal, these are mainly slash and loblolly pine plantations ranging in age from newly planted to over 40 years old. One area on the southern tract is reported to be planted with longleaf pine.

A network of unpaved roads (primarily on the southern tract) makes up about 3% of the proposal acreage. Other minor land uses that make up small amounts of the proposal include wildlife openings, small borrow areas, and ditches.

Community or Landsover	A	Percent of	
Community or Landcover	Acres	Proposal	
floodplain swamp	1,079	6	
freshwater forested wetlands	607	3	
basin swamp	507	3	
Dome swamp	182	<1	
bottomland forest	115	<1	
wet flatwoods	95	<1	
baygall	47	<1	
mesic flatwoods	36	<1	
alluvial stream	18	<1	
upland hardwood forest	15	<1	
depression marsh	3	<1	
river floodplain lake	5	<1	
shrub bog	1	<1	
flatwoods pond	<1	<1	
wet prairie	<1	<1	
pine plantation	14,265	77	
successional hydric forest/shrubland	867	5	
road	602	3	
clearing	47	<1	
successional hardwood forest	42	<1	
old field	6	<1	
canal/ditch	3	<1	
Total	18,553	100	

Table 1. Natural communities and landcover types within the Teal Timber Florida Forever proposal.

There is historic documentation of a wide variety of rare or imperiled species on the proposal (Table 2). The importance of the Apalachicola River as a hotspot for aquatic biodiversity is well known, and 2 federally listed species associated with the river are documented on the proposal.

However, several species in Table 2 occur in intact flatwoods, and sightings of these species are ca. 30 years old. The specific onsite locations where mock pennyroyal, wiregrass gentian, pinewoods aster, water cowbane, and Godfrey's dragonhead were historically recorded have been heavily disturbed in recent years, and the past history of soil disturbance is likely to have greatly reduced or eliminated these populations. Similarly, although the breeding ponds used by reticulated flatwoods salamander have

likely had less direct impact from forestry operations, adults of this species depend on intact flatwoods and do not typically persist in pine plantations; it is therefore likely that this population has likely been eliminated. Other rare species associated with wetlands or riverine habitats may remain to be documented, and additional as-yet unreported species (including various bird species) may also use the sites.

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
Eurybia spinulosa	pinewoods aster	G1?	S1?	N	E
Gentiana pennelliana	wiregrass gentian	G3	S3	N	E
Justicia crassifolia	thick-leaved water-willow	G3	\$3	N	E
Physostegia godfreyi	Apalachicola dragonhead	G3	S3	N	Т
Platanthera integra	yellow fringeless orchid	G3G4	S2	N	E
Rhexia parviflora	small-flowered	G2G3	S2	UR	E
	meadowbeauty				
Stachydeoma graveolens	mock pennyroyal	G2G3	S2S3	N	E
Tiedmannia filiformis ssp. greenmanii	giant water cowbane	G3	S3	N	E
Additional rare plants reported on					
site by applicant					
none					
Rare animals documented on site					
Pleurobema pyriforme	oval pigtoe	G2	S1	E	FE
Ambystoma bishopi	reticulated flatwoods	G2	S1	E	FE
	salamander				
Amphuima pholeter	one-toed amphiuma	G3	S3	E	FE
Graptemys barbouri	Barbour's map turtle	G2	S2	SAT	ST
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on					
site by applicant					
None					

Table 2. Rare plants and animals documented or reported to occur within the Teal Timber Florida Forever proposal.\*

\*Rank explanations attached.

The Florida Forever Measures Evaluation (FFME) at the end of this memo is based on the Florida Forever Conservation Needs Assessment developed by FNAI. The data used in that analysis represent a standardized, statewide perspective of natural resources; the statewide scope of this analysis accounts for any differences in natural community acreages between Table 1 and the FFME. According to the FFME, all or nearly all (>90%) of the proposal would contribute to Strategic Habitat Conservation Areas (mainly priority 3), FNAI Habitat Conservation Priorities (priorities 1 through 6), Ecological Greenways (mainly priority 1), Surface Water Protection (mainly priorities 2-5), and Aquifer Recharge (mostly priority 6). The majority of the proposal would also contribute to Sustainable Forestry (79%, largely priority 1), and Natural Floodplain Function (84%, mainly priority 4). About a quarter of the proposal would contribute to protection of Functional Wetlands (mostly priority 4). The FFME analysis suggests that a small amount of sandhill (an Under-represented Natural Community) occurs; however, the areas formerly mapped as sandhill have been cleared and bedded, according to the most recent aerial photos.

#### Teal Timber: Florida Forever Measures Evaluation 20241024

GIS ACRES = 18,553

GIS ACRES =	18,553 Bassures	I
	Resource	% of project
MEASURES	Acres <sup>a</sup>	project
B1: Strategic Habitat Conser		001
Priority 1	0	0%
Priority 2	263	1%
Priority 3	13,123	71%
Priority 4	0	0%
Priority 5	4,359	23%
Total Acres B2: FNAI Habitat Conservation	17,746	96%
Priority 1		35%
Priority 2	6,434 3,778	35% 20%
Priority 3	977	20% 5%
Priority 4	1,385	5% 7%
Priority 5	2,859	15%
5		9%
Priority 6 Total Acres	<u>1,607</u> 17,040	9% 92%
B3: Ecological Greenways	17,040	32/0
Priority 1	16,108	87%
Priority 2	2,444	13%
Priority 3	2,444	0%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	18,552	100%
B4: Under-represented Natur		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods	678	0%
Rockland Hammock (G2)	(02) 0	0%
Dry Prairie (G2)	0	0%
Seepage Slope (G2)	0	0%
Sandhill (G3)	13	< 1%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	288	2%
Upland Hardwood Forest (G5)	7	< 1%
Total Acres	308	2%
B6: Occurrences of FNAI Tra		_,,,
G1	8	
G2	8	
G3	14	
G4	1	
G5	0	
Total	31	
C4: Natural Floodplain Func	tion	
Priority 1	164	< 1%
Priority 2	662	4%
Priority 3	2,136	12%
Priority 4	12,616	68%
Priority 5	8	< 1%
Priority 6	0	0%
2.2.8 (5) (4)		0.00 0.000
Total Acres	15,587	84%

	Resource	% of
MEASURES (continued)	Acres <sup>a</sup>	project
C5: Surface Water Protection		
Priority 1	199	1%
Priority 2	5,789	31%
Priority 3	3,239	17%
Priority 4	7,210	39%
Priority 5	2,082	11%
Priority 6	0	< 1%
Priority 7	0	0%
Total Acres	18,519	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	154	< 1%
Priority 2	449	2%
Priority 3	1,113	6%
Priority 4	3,081	17%
Priority 5	7	< 1%
Priority 6	0	0%
Total Acres	4,803	26%
D3: Aquifer Recharge	0	001
Priority 1	0	0%
Priority 2 Priority 3	124 452	< 1% 2%
Priority 4	1,218	2% 7%
Priority 5	3,358	18%
Priority 6	12,404	67%
Total Acres	17,556	95%
E2: Recreational Trails (miles)	17,000	0070
(prioritized trail opportunities from Office of Greenway	s and Trails & U	niv Florida)
Land Trail Priorities	0.0	,
Land Trail Opportunities	0.0	
Total Miles	0.0	
F2: Arch. & Historical Sites (number)		sites
G1: Sustainable Forestry		
Priority 1	9,649	52%
Priority 2	3,047	16%
Priority 3	1,109	6%
Priority 4	802	4%
Priority 5 - Potential Pinelands	138	< 1%
Total Acres	14,745	79%
G3: Forestland for Recharge	435	2%

<sup>a</sup>Acres of each resource in the project and percentage of project represented by each resource are listed except where noted. This analysis converts site boundary into pixels, which causes slight differences from GIS acres; this effect is most noticeable on small sites.





FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF OCTOBER 2024

Map Produced by: FL Natural Areas Inventory, N. Pasco, October 2024











Map Produced by: FL Natural Areas Inventory, N. Pasco, October 2024

Background: USDA NAIP Imagery Resolution = 1.0 meter









FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF OCTOBER 2024

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FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF OCTOBER 2024

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