ITEM 16:

Consider project evaluation reports for the Baker County Timberlands, Bowlegs Creek Watershed, Fair Bluff, Highlands Hammock Corridor, Lettuce Creek Cattle Company, Little Orange Creek Corridor, Rock Bend Ranch, and Waccasassa Flatwoods 2024 Cycle 2 Florida Forever proposals.

DSL STAFF REMARKS:

On June 7, 2024, ARC voted to move the Baker County Timberlands, Bowlegs Creek Watershed, Fair Bluff, Highlands Hammock Corridor, Lettuce Creek Cattle Company, Little Orange Creek Corridor, Rock Bend Ranch and Waccasassa Flatwoods 2024 Cycle 2 Florida Forever proposals on for more detailed review. The Division of State Lands (DSL), with input from partner agencies, has prepared evaluation reports. These reports are included as backup to this item.

DSL held regional public hearings on August 26, 2024, in Gainesville and August 29, 2024, in Sebring. DSL posted public meeting notices in the Florida Administrative Register.

Proposal	GIS Acres	Acquisition Type	County
Baker County Timberlands	1,154	Less-Than-Fee	Baker
Bowlegs Creek Watershed	1,015	Less-Than-Fee	Polk
Fair Bluff	639	Less-Than-Fee	Martin
Highlands Hammock Corridor	960	Less-Than-Fee	Highlands
Lettuce Creek Cattle Company	377	Less-Than-Fee	Highlands
Little Orange Creek Corridor	3,925	Less-Than-Fee & Fee Simple	Alachua/Putnam
Rock Bend Ranch	658	Less-Than-Fee	DeSoto
Waccasassa Flatwoods	21,664	Fee Simple	Levy

DSL STAFF RECOMMENDATION:

Approve the project evaluation reports.

ARC RECOMMENDATION:

(X) APPROVE
( ) APPROVE WITH MODIFICATIONS: _____
( ) DEFER
( ) WITHDRAW
( ) NOT APPROVE
( ) OTHER:_____

Florida Forever Project Evaluation Report

Baker County Timberlands

Baker County



Cypress dome on property.

Acquisition Type: Less-Than-Fee
GIS Acres: 1,154.69
Just Value: $1,485,530
Application Date: April 15, 2024
Project Sponsors: SVN Saunders Ralston Dantzler Real Estate

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 11, 2024

Executive Summary

The proposed Baker County Timberlands Florida Forever project contains 5 parcels owned by Olin Wooten, totaling approximately 1,154 acres in Baker County. This property is directly adjacent on its western border to the Osceola National Forest and is located within 3 miles of both the St. Mary's Shoals Park and John M. Bethea State Forest. The project is currently proposed for less-than-fee acquisition. The property could also be acquired in fee, however, a commitment from a managing agency has not been obtained at this time. The tax assessed value of the proposal is $1,485,530.

This property is currently a working timber operation and used for hunting and recreation. Pine plantation (clearcut) is the most extensive landcover on the property, covering nearly 80 percent of the area and essentially all the uplands. The timber was last harvested in 2021 and has not been replanted since. The Florida Natural Areas Inventory estimates that approximately 10% of the property is in natural condition, most of which is wetlands. The landowner does not currently use prescribed fire for restoration purposes nor herbicide management for treating invasive and exotic plant species.

Approximately 2 miles of Bluff Creek, a tributary of the St. Marys River, runs through the eastern portion of the property. As such, acquisition of the property would provide surface and groundwater protection for the tributary and the greater St. Marys River Basin.

The proposal lies within Priorities 1 and 2 of the Florida Ecological Greenways Network (FEGN), and the Ocala to Osceola (O2O) Wildlife Corridor, which aims to conserve a 100 mile long, 1.6-million-acre landscape of public and private lands to connect the Ocala National Forest to the Osceola National Forests. In doing so, the O2O provides habitat for long-ranging imperiled species such as the Florida black bear, which has been reported onsite by the property manager.

The property has high potential for sustainable forestry and would be improved by active management including the regular use of prescribed fire, invasive plant management, and reestablishing timber stands, particularly of longleaf pine (*Pinus palustris*). Less-than-fee acquisition will be of limited benefit if the property is not actively managed.

If approved for addition to the 2025 Florida Forever Priority List, the project should be considered as a standalone project in the Less-than-Fee category. All 1,154 acres proposed for acquisition are considered essential due to the resources documented on the property (see Appendix C). An interagency team conducted a site visit to the project site on July 16, 2024. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The Baker County Timberlands project will provide ecological connectivity and serve as a strategic buffer for the adjacent Osceola National Forest. This project will also help to conserve habitat for long-ranging species such as the Florida black bear that utilize the property as a travel corridor and contribute to the protection of water resources of Bluff Creek and the greater St. Marys River Basin.

Acquisition of this project would serve to:

- Enhance the coordination and completion of land acquisition projects.
- Increase the protection of Florida's biodiversity at the species, natural community, and landscape levels.
- Provide surface and groundwater protection and protect natural floodplain functions.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Baker County Timberlands Florida Forever proposal comprises approximately 1,154 acres situated along the eastern border of the Osceola National Forest. The tract is chiefly a single block of land but excludes a nearly 400-acre developed inholding (buildings and clearings) in its south-central portion. The site includes frontage along Noah Raulerson Road (a north-south road bisecting the tract), CR-127 (on its eastern boundary), and CR-125 (on its southwestern boundary). The St. Marys River lies approximately 1.5 miles to the east; intervening lands are primarily rural residential. The proposal is submitted for less-than-fee simple protection without public access.

St. Mary's Shoals Park (Baker County) lies 1.9 miles to the southeast, and John M. Bethea State Forest 2.6 miles to the north. The nearest unprotected land within a Florida Forever project is an isolated parcel of Pinhook Swamp, 3.6 miles to the northwest.

This evaluation is based on information gathered from the proposal, aerial photography, US Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.6), the FNAI Natural Heritage database, and other public GIS data. A field survey was conducted on July 16, 2024, by the Acquisition and Restoration Council (ARC) liaison staff, including FNAI ecologists Dan Hipes and Kim Alexander.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

The Baker County Timberlands property is situated on the Ocean Pond Plain Province of the Okefenokee Basin District, a broad east-sloping terrace characterized by extensive flatwoods and basin swamp (Florida Geographic Survey, 2022). Elevations on the proposal property range from 118 feet above mean sea level (msl) to 100 feet above msl where Bluff Creek exits the property along its eastern border. Predominant soils are Sapelo fine sands (mesic flatwoods), Olustee-Pelham complex (wet flatwoods and baygall), and Pantego-Pamlico complex (basin swamps). A series of sluggish branches coalesce on the property to form Bluff Creek, a small tributary of the St. Mary's River.

Land use on the property is primarily plantation forestry, which covers approximately 80 percent of the site. Most of the plantations have been cut recently and not yet replanted (see below). Cypress was selectively removed from at least half of the swamps more than 30 years ago. Approximately 10 percent of the area remains in natural condition; most of this acreage is wetlands that were not included in tree harvest operations. Prescribed fire is not used on the property. Each of the landcover types are further described below.

Bottomland forest occurs on the property along with floodplain swamp as a narrow band along the headwaters of Bluff Creek. There is a nearly closed canopy dominated by swamp laurel oak (*Quercus laurifolia*). Other common canopy trees include water oak (*Quercus nigra*), slash pine (*Pinus elliottii*), and sweetgum (*Liquidambar styraciflua*). These same species are present as a moderately dense midstory. There are a few scattered tall shrubs including common buttonbush (*Cephalanthus occidentalis*), common persimmon (*Diospyros virginiana*), and American hornbeam (*Carpinus caroliniana var. caroliniana*). Herbaceous cover is sparse and patchy; false nettle (*Boehmeria cylindrica*) and flatsedge (*Cyperus sp*.) are common.

Muscadine (*Muscadinia rotundifolia*) is a common woody vine. Floodplain swamp is present in lower areas within the bottomland forest. These areas have a moderately dense canopy of pond cypress (*Taxodium ascendens*) and swamp tupelo (*Nyssa biflora*). Swamp tupelo is also present in the midstory along with sweetbay (*Magnolia virginiana var. australis*) and red maple (*Acer rubrum*). Shrubs are infrequent but include Virginia willow (*Itea virginica*) and fetterbush (*Lyonia lucida*). Herbaceous cover is patchy and occasionally dense, primarily represented by royal fern (*Osmunda spectabilis*) and Virginia chain fern (*Anchistea virginica*). No disturbances were observed in the bottomland forest/floodplain swamp system.

Approximately 14 acres of wet flatwoods was not cut during the recent harvest but was selectively cut in 2000 to leave a substantial number of seed trees, thus leaving a small, mostly intact patch of wet flatwoods. There is a dense canopy of slash pine with many large trees (the remnant seed trees). There is a dense shrub layer dominated by fetterbush, hairy highbush blueberry (*Vaccinium fuscatum*), swamp bay (*Tamala palustris*), and gallberry (*Ilex glabra*). Herbaceous cover is sparse to moderately dense and includes Virginia chain fern, Carolina redroot (*Lachnanthes caroliniana*), royal fern, cinnamon fern (*Osmundastrum cinnamomeum*), and pale meadowbeauty (*Rhexia mariana*). Woody vines are common and include laurel greenbriar (*Smilax laurifolia*), Muscadine grape, and Eastern poison ivy (*Toxicodendron radicans var. radicans*).

Basin swamp is present in some parts of the large depressional wetlands that were not cut or substantially thinned (the cutover wetlands are mapped as successional hydric forest). The remnant basin swamps have a sparse to moderately dense canopy of large pond cypress and slash pine. There is a moderately dense midstory of swamp tupelo, loblolly bay (*Gordonia lasianthus*), sweetbay, and red maple. Shrubs are moderately dense and include southern bayberry (*Morella cerifera*), Virginia willow, common buttonbush (*Cephalanthus occidentalis*), swamp bay, ogeechee tupelo (*Nyssa ogeche*), and fetterbush. Herbaceous cover is moderately dense, primarily represented by false nettle, royal fern, Virginia chain fern, and netted chain fern *(Lorinseria areolata*). Woody vines are common and include trumpet creeper (*Campsis radicans*), laurel greenbriar, and eastern poison ivy. Spanish moss (*Tillandsia usneoides*) is common.

Dome swamps are scattered throughout the property within depressions surrounded by clearcut pine plantations. There is often an open canopy of pond cypress that also may include or be replaced by swamp tupelo. Slash pine is often present. There is a variable tall shrub layer that typically includes red maple, myrtle-leaved holly (*Ilex myrtifolia*), and southern bayberry. Loblolly bay, dahoon (*Ilex cassine*), and large gallberry (*Ilex coriacea*) are occasionally present in the outer edges. Short shrubs are primarily represented by fetterbush and sweet pepperbush (*Clethra alnifolia*). Herbaceous cover is patchy but often dense. Virginia chain fern, Carolina redroot, and clustered sedge (*Carex glaucescens*) are common. Baygall is present along portions of the outer edge of the bottomland forest and some of the basin wetlands. There is a variably dense to sparse canopy of slash pine. The tall shrub layer is very dense loblolly bay, dahoon, and large gallberry, plus red maple, sweetgum, sweetbay, and southern bayberry. Short shrubs also are dense, primarily composed of gallberry, fetterbush, and sweet pepperbush. Herbaceous vegetation was not observed.

Pine plantation (clearcut) is the most extensive landcover on the property, covering nearly 80 percent of the area and essentially all the uplands. Most of the area was clearcut within the past 5 or so years and has not been replanted. Natural regeneration is present, apparently seeded in from remnant slash pines. Where present, the pines are generally less than 6 feet tall and widely spread. Bedding from any previous planting was not evident. The shrub layer height is remarkably low given the lack of prescribed fire. A mix of species from both wet and mesic flatwoods are present including gallberry, loblolly bay, dwarf dangleberry (*Gaylussacia nana*), fetterbush, saw palmetto (*Serenoa repens*), red maple, winged sumac (*Rhus copallinum var. copallinum*), and large gallberry. Herbaceous cover is sparse to moderately dense and, like the shrub layer, includes a mix of species characteristic of both wet and mesic flatwoods. Common species are Virginia chain fern, purple bluestem (*Andropogon cretaceus*), Baldwin's spikerush (*Eleocharis baldwinii*), tenangle pipewort (*Eriocaulon decangulare*), Mohr's thoroughwort (*Eupatorium mohrii*), peelbark St. John's wort (*Hypericum fasciculatum*), Carolina redroot, pale meadowbeauty, handsome harry (*Rhexia virginica*), fascicled beaksedge (*Rhynchospora fascicularis*), yellow-eyed grass (*Xyris sp.*), and reindeer lichen (*Cladonia sp*). Woody vines including muscadine grape, and cat greenbriar (*Smilax glauca*) are frequent. Southern wiregrass (*Aristida beyrichiana*) was not observed in the pine plantation, but one plant was seen along a roadside.

Successional hydric shrubland/forest is present where all or portions of the former basin swamps were harvested (presumably cypress). This covers approximately ten percent of the proposal in isolated patches of varying size. These wetlands are variable in structure but similar in species composition. There is often a low canopy or tall shrub layer dominated by red maple, swamp tupelo, dahoon, loblolly bay, slash pine, and Southern bayberry. Young pond cypress is occasionally present. There is generally a dense short shrub layer dominated by fetterbush and large gallberry. Woody vines including laurel greenbriar are abundant.

There are no major canals or ditches on the property. Shallow ditches are present along the moderate network of dirt roads. Common species in the ditches are woolly witchgrass (*Dichanthelium scabriusculum*), spikerush (*Eleocharis sp.*), maidencane (*Hymenachne hemitoma*), and starrush white-top (*Rhynchospora colorata*). The invasive exotic torpedo grass (*Panicum repens*; FISC Cat I) was observed at one location.

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

Community or Landcover		Acres	Percent of Proposal
Floodplain Swamp/Bottomland Forest		82	7
Wet Flatwoods		14	1
Basin Swamp		11	1
Dome Swamp		10	1
Baygall		5	<1
Pine Plantation		897	78
Successional Hydric Shrubland/Forest		119	10
Road		15	1
Total		**1,155**	**100**

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Baker County Timberlands (BCT) Florida Forever proposal based on field observations during the July 16, 2024, site visit and results of the GIS analysis. Aerial imagery indicates the inholding and surrounding lands are dominated by residential and agricultural land use. Osceola National Forest forms Baker County Timberlands' western boundary and the property is within the Ocala to Osceola (O2O) project boundary. The property is located within the St. Marys River Basin, with Bluff Creek flowing through the eastern portion of the property and into the St. Marys River.

During the site visit, attendees were not able to fully assess the property due to limited access via interior roads. According to the application, current and historic uses include agriculture, silviculture, and recreation. Due to a long history of intensive silviculture, fire-exclusion, and hydrologic alterations, the natural communities are altered. The property's timber stands were harvested in 2021, and canopy trees were notably absent. The midstory vegetation is dense and the groundcover lacks herbaceous vegetation. Artificial wetlands and ditches line the roadside, likely from road construction.

The floodplain and creek within the property appear to be in fair condition for fish and wildlife species, but site visit attendees were limited to accessing the waterway from the roadside. Although torpedo grass (Panicum repens) was observed along the creek, this was the only location invasive vegetation was detected throughout this visit. Construction materials such as large concrete blocks were observed within the creek bed near Noah Raulerson Road.

There is little potential for the property to support imperiled plant and animal species that depend on fire-maintained pine forests with healthy herbaceous ground cover. However, the property supports more common species, such as white-tailed deer (*Odocoileus virginianus*) and wild turkey (*Meleagris gallopavo osceola*) and is leased for hunting. Wildlife species observed during the site visit included tufted titmouse (*Baeolophus bicolor*), pileated woodpecker (*Dryocopus pileatus*), red-bellied woodpecker (*Melanerpes carolinus*), hooded warbler (*Setophaga citrina*), eastern towhee (*Pipilo erythrophthalmus*), northern cardinal (*Cardinalis cardinalis*), white-eyed vireo (*Vireo griseus*), and cricket frog (*Acris gryllus*). The proposal is within a region considered as frequent black bear (*Ursus americanus floridanus*) range and the property manager has observed bears onsite. The property provides cover for bears and other wide-ranging species moving through this region's conservation lands, which extend into Georgia.

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for this property is 6.8. Most of the property (89%) is within Priority 2 of the FEGN and 99% is Priority 3 according to the Critical Lands and Waters Identification Project Landscape Category. About 66% comprises FWC Strategic Habitat Conservation Areas for the swallow-tailed kite

(*Elanoides forficatus*). The entire property provides protection to class 3F surface waters including Bluff Creek and about 18% (202 acres) is classified as wetlands by the National Wetlands Inventory.

In conclusion, the proposed Baker County Timberlands project in its current condition provides connectivity to the Osceola National Forest and a corridor of conservation lands that extends into Georgia, buffers Osceola National Forest from any potential threats of encroaching development and protects water quality in the St. Marys River Basin. Wildlife habitat could be improved by implementing management practices to restore natural communities, including prescribed fire, treatment of invasive plants, and establishing stands of longleaf pine (*Pinus palustris*). If the proposal moves forward as a conservation easement, the landowner may find resources available through programs such as FWC's Landowner Assistance Program useful.

GOALS, MEASURES AND CRITERIA

GOAL A:
ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:
The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 1,154 acres would contribute to the enhancement of ecosystem service parcels and connecting linkage corridors.

Measure A2:
The number of acres protected through the use of alternatives to fee simple acquisition.

The entirety of the project (1,154 acres) is proposed for less-than-fee acquisition via conservation easement.

Measure A3:
The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

No funding partners have been identified for this project.

GOAL B:
INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:
The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 62 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measures Evaluation (FFME) table (Appendix B) reports the site contains approximately 1,082 acres (94% of site) of Strategic Habitat Conservation Areas. This is primarily within Priority 3 (76% of site) and Priority 2 (14%) with the remainder in Priority 5 (3%).

Measure B2:
The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 634 of Florida's rarest species were mapped and divided into six priority classes. The FFME reports the proposed project contains approximately 92 acres (8% of site) of rare species habitat. The habitat is entirely within Priority 5.
The following table lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum total of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Conservation PrioritiesScientific Name	**Common Name**	**Global Rank**	**Acres**
Antigone canadensis pratensis	Florida sandhill crane	G5T2	1
Dryobates borealis	red-cockaded woodpecker	G3	39
Mycteria americana	wood stork	G4	52
Myotis grisescens	gray bat	G3G4	5

Measure B3:
The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages.

The FFME reports approximately 1,032 acres (90%) of the proposed project contributes to protection of ecological greenways with 89% of the site falling within Priority 2 areas, and <1% in Priority 1. Prioritization is based on such factors as importance for wide-ranging species like

Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B4:
The number of acres acquired of under-represented native ecosystems.

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The FFME lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Baker County Timberlands proposal contains 14 acres of wet flatwoods (1% of site).

Measure B5:
The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

The Baker County Timberlands proposal, along with adjacent conservation lands such as the Osceola National Forest, would contribute to a contiguous landscape-sized protection area of >319,000 acres.

Measure B6:
The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

There are no records for listed or rare plant and animal species within the Baker County Timberlands Project. The property lies within an area of the state where FWC considers Florida Black Bear (G5T4, S4, N, N) to be frequent. Although no other rare species are documented for the site, Florida black bear have been observed by the property owner. The wetlands on site provide foraging habitat for wading birds.

The FFME lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. Table 3 contains species falling into any of these observational categories, species gleaned from other sources (e.g., Florida Breeding Bird

Atlas) with different degrees of locational precision, and species reported in the application or during the site visit.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

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					
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N

GOAL C:
PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:
The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

The property is offered for less-than-fee acquisition, intended to be utilized in a manner consistent with existing uses. As such there may be limited opportunities for restoration activities. Invasive plant control needs of the property appear to be relatively minor considering the low populations observed during the site visit.

Measure C4:
The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 370 acres (32%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly within Priority 4 (32% of site), with the remainder in Priorities 3 and 5 (each with < 1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:
The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 1,152 acres (100%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 4 (50% of site), Priority 6 (44%), and Priority 5 (6%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C8:
The number of acres of functional wetland systems protected.

The FFME reports approximately 237 acres (21%) of the proposed project would provide protection for functional wetland systems. This area is mostly within Priority 4 (20% of site), with less than 1% in Priorities 3 and 5. Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:
The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

There are currently no operations aimed at the maintenance or control of upland invasive, exotic plants on this property. Therefore, zero acres are being utilized for these goals at the time of acquisition.

GOAL D:
ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:
The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

Approximately 190 acres of wetlands are located on the property. The property contains approximately 2 miles of Bluff Creek, a tributary to the St. Marys River.

Measure D2:
The quantity of water made available through the water resource development component of a district water supply plan for which a water management district is responsible.

Based on the 2023 North Florida Regional Water Supply Plan, Baker County is projected to use 4.24 million gallons/day of water for the entire County in 2025. The property does have

development potential, and its protection would help reduce water use in the county by an unknown amount. The property is in an area of low Upper Floridan Aquifer recharge potential.

Measure D3:
The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

The FFME reports approximately 1,152 acres (100%) of the proposed project would provide protection for groundwater recharge areas. This area is divided between Priority 5 (58% of site), Priority 6 (29%), and Priority 4 (13%). Prioritization is based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Baker County Timberlands Florida Forever proposal

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	0
FDEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	0
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	7
FDEP Special Nutrient Impaired WBIDs	9	0
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
FDEP Springsheds or within 5 miles	10, 7	0
FDEP BMAPs	10	0
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	7

GIS Evaluation score is converted to a 1 to 5 value (low to high)

FINAL DEAR SCORE = 1, low water quality protection benefits

GOAL E:
INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measure E1:
The number of acres acquired that are available for natural resource-based public recreation or education.

The site is proposed as a conservation easement and as such, public access is not applicable; however, private sector recreation (hunting lease) will be maintained.

GOAL F:
PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

CULTURAL RESOURCES:

There are no cultural resources recorded or known to exist on this Florida Forever project. However, to date, the whole of this property has not been professionally surveyed for archaeological and/or historical sites. It is therefore likely that undocumented cultural resources exist on the property, but this cannot be determined without formal survey.

FIELD OBSERVATIONS:

During the Field Review of the proposed Baker County Timberlands Florida Forever project, staff did not observe any unrecorded cultural resources within the project area. However, based on an evaluation of the location and distribution of cultural resources in the surrounding area, there is potential for unrecorded sites to exist on the Baker County Timberlands property. Should any artifacts or other cultural resources be discovered on the property in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology Program for further evaluation.

GOAL G:
INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

Though not currently forested contiguously, the previous timber use history of the property would allow for an expansion of state timberlands. Replanting and management operations should be focused on merchantable timber growth, while also being careful to not disturb sensitive waterways or spread invasive species. If the focus of this easement however is wildlife habitat creation, a different schedule of operations should be established preferably with assistance from FWC.

Measure G1:
The number of acres acquired that are available for sustainable forest management.

The FFME reports approximately 934 acres (81% of site) could be available for sustainable forest management, divided between Priority 1 (728 acres), Priority 2 (117 acres), Priority 3 (53 acres), and Priority 5 (36 acres). Prioritization is based on 4 criteria set by the Florida Forest Service: whether trees are natural or planted, size of tract, distance to market, and hydrology. Priority 5 areas are considered "potential" pinelands; agricultural areas that could be restored to pineland.

Measure G2:
The number of acres of state-owned forestland managed for economic return in accordance with current best management practices.

None of the property is currently being managed for timber use, utilizing best management practices or otherwise. The last harvest was seen in 2021, and there have been no forestry operations since.

Measure G4:
The percentage and number of acres identified for restoration restored by reforestation.

This property, previously used as an industrial timber property, is currently mostly in a clear-cut condition with scattered wetlands. The wetlands and swamps total roughly 128 acres of land that should not be disturbed under FFS Best Management Practices. It is feasible the remaining 1,026 acres (approximately 88% of the property) could be restored with reforestation.

FLORIDA FOREVER CRITERIA

The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.):

- the project meets multiple goals described in subsection (4).
- the project may be acquired, in whole or in part, using alternatives to fee simple, including but not limited to, tax incentives, mitigation funds, or other revenues, the purchase of development rights, hunting rights, agricultural or silvicultural rights, or mineral rights or obtaining conservation easements or flowage easements.

The Acquisition and Restoration Council shall give increased priority to:

- projects that can be acquired in less than fee ownership, such as a permanent conservation easement.
- projects that contribute to improving the water quality and quantity of surface water and groundwater.
- projects located within the Florida Wildlife Corridor as defined in (§ 259.1055(4), F.S.).

MANAGEMENT

If acquired as a perpetual conservation easement, the primary management responsibility would remain with the landowner. Periodic monitoring of the site's management would occur to confirm continued compliance with the conditions of the easement. Monitoring would be coordinated by the Office of Environmental Services (OES) within the Department of Environmental Protection's (DEP) Division of State Lands (DSL).

FUNDING SOURCES

Florida Forever is the only identified funding source.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues, Jurisdictional and Sovereignty Lands, Legal Issues
Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)
The easements and encumbrances of record would be determined during the appraisal mapping. A current title commitment would be obtained, or the owner's title insurance policy would be reviewed if the policy is available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits
There are no apparent contamination sites within the project based on the application form.

Estimated Cost of Appraisal and Mapping
DEP Bureau of Appraisal estimates $10,000 to $20,000 in appraisal fees.

Acquisition Phases
Subject to funding, the Baker County Timberlands Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs

High Potential: Currently, the property is being used for historic and recreational activities. These activities include agriculture, silviculture, recreation, private use, and enjoyment. This area is also very accessible due to the four miles of road coverage.

The Baker County Timberlands project is a less-than-fee acquisition. Under a conservation easement, the state would acquire the development rights on the property while the landowner would be able to continue the current and historic activities on the property. These activities include agriculture, silviculture, recreation, and private use and enjoyment. Acquisition of the property under an easement would protect a priority area of the Florida Wildlife Corridor from future development and prevent fragmentation of sensitive habitat that supports many native species in Florida. The acquisition would also protect the water quality and quantity of the Saint Mary's River Basin.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces

Low Potential: The property has been identified as a Strategic Habitat Conservation Area, as well as a habitat for some of Florida's rarest species, including the Florida Black Bear. Under a conservation easement, which the current property owner is requesting, the area would be protected from future development and prevent fragmentation of sensitive habitats that support many native species in Florida through the connection with O20 and the Florida Ecological Greenway Network.

Potential for Being Subdivided

Low to Moderate: The property is currently not set for any development but can be considered a desirable area for development in the future due to its proximity to Jacksonville. The current proposal is the acquisition of a conservation easement on the property, which would further multiple goals and measures of the Florida Forever Program.

Zoning and Densities within the Project Boundaries

The property is currently zoned as Agriculture A and Agriculture B.

Existing Land Uses and Future Land Use Designations

Existing Land Uses: The entire property is roughly 1,164 acres and the property features about 962 Upland Acres (83%) and 202 Wetland Acres (17%). The property also contains hardwood species native to Florida that provide critical ecological services, including a mixture

of shrub/brushland, pine flatwoods, pine plantation, cypress, hydric pine flatwoods, mixed wetland forests, and mixed scrub/shrub wetland. Natural floodplain protection is prioritized in this area through the hydric pine flatwoods, mixed wetland forests, and mixed scrub/shrub wetlands, with the entire property ranked as priority for aquifer recharge.

Future Land Uses: The Baker County Timberlands area is currently designated as Agriculture (Ag A) and Agriculture (Ag B) with a maximum density of 1 dwelling unit per 10 acres and 1 dwelling unit per 7.5 acres, respectively. The property is zoned as AG 10 and AG 7.5, allowing for one unit to 10-19 acres or at any lesser density level and one unit to 7.5-9 acres.

Development Potential

Moderate Potential: There are currently no known development plans, however the parcel is located approximately 45 miles west of Jacksonville along with several miles of paved road frontage on multiple county roads and highways. The area is currently trending towards single-family development.

Transportation Planning Issues

The proposed project is in FDOT District 2 in Baker County and is contiguous with existing conservation lands. There is a FDOT Work Program project for widening and resurfacing of County Road (CR) 127 where preconstruction activities are underway, this project is located approximately a half mile south of the project area. There is an additional Work Program resurfacing project on CR127 located approximately one and a half miles north of the project area that is also in preconstruction. CR127 is adjacent to the proposed project area along its east side and is a designated evacuation route.

While the Department finds no adverse impacts to this proposed project at this time, there should be coordination with the appropriate FDOT District 2 staff during the acquisition process to ensure that issues related to the transportation system are addressed and incorporated into the management plans as appropriate.

Ongoing Governmental Efforts

The St. Johns River Water Management District is a member of the St. Marys River Management Committee, an intergovernmental advisory board of elected and appointed members that develops and implement plans and programs for the St. Marys River. The District has participated on the committee as a non-voting member, in a technical support role,

since its inception in 1991. The District is also providing cost-share for a septic to sewer project in the nearby community of Glen St. Mary as well as water meter replacements in Macclenny.

ACKNOWLEDGEMENTS

Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Meghan Lauer and Katie Briley in DSL's Office of Environmental Services were responsible for the overall coordination of this report, with contributions from the following:

- Division of Historical Resources: Brandon Ackermann, Jason O'Donoughue
- Florida Forest Service: Cat Ingram, Tristan Ross
- Department of Commerce: Yazmin Valdez, James Stansbury
- Florida Fish and Wildlife Conservation Commission: Diana Pepe, Rebecca Doane
- Florida Natural Areas Inventory: Kim Alexander, Dan Hipes
- DEP Division of Environmental Assessment and Restoration: Moira Homann, Kenneth Weaver
- Florida Department of Transportation: Allison Beaty
- St. Johns River Water Management District: Chris Kinslow

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

Baker County Timberlands: Florida Forever Measure Evaluation 20240729

GIS ACRES = 1,155

MEASURES	Resource Acres[2]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	163	14%
Priority 3	879	76%
Priority 4	0	0%
Priority 5	40	3%
Total Acres	1,082	94%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	92	8%
Total Acres	92	8%
B3: Ecological Greenways		
Priority 1	7	< 1%
Priority 2	1,025	89%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	1,032	90%
B4: Under-represented Natural Communities		
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)	0	0%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	14	1%
Upland Hardwood Forest (G5)	0	0%
Total Acres	14	1%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	0	
G3	0	
G4	1	
G5	0	
Total	1	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	5	< 1%
Priority 4	364	32%
Priority 5	1	< 1%
Priority 6	0	0%
Total Acres	370	32%

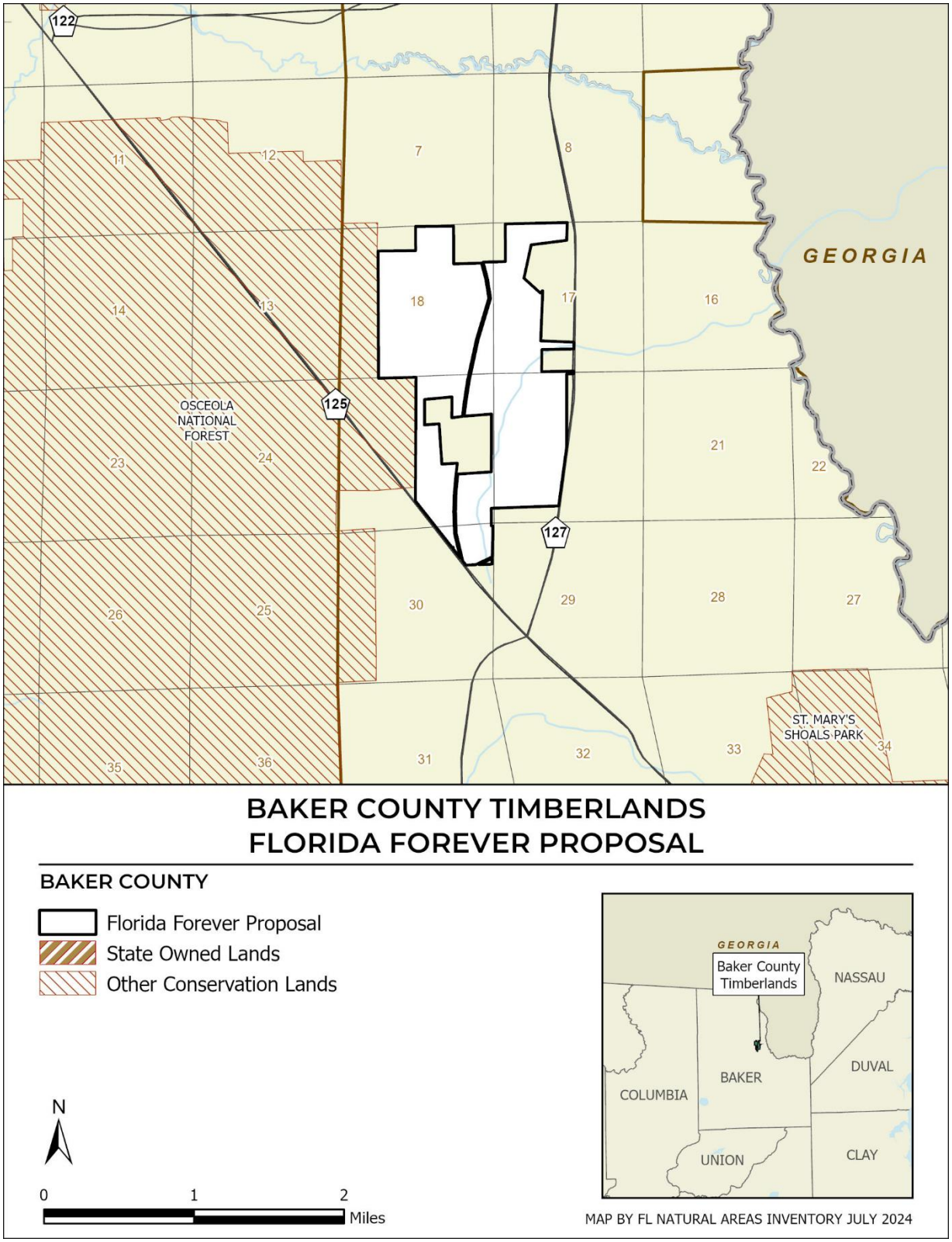
MEASURES (continued)	Resource Acres[2]	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	578	50%
Priority 5	65	6%
Priority 6	509	44%
Priority 7	0	0%
Total Acres	1,152	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	2	< 1%
Priority 4	235	20%
Priority 5	1	< 1%
Priority 6	0	0%
Total Acres	237	21%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	144	13%
Priority 5	672	58%
Priority 6	336	29%
Total Acres	1,152	100%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways and Trails & Univ. 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		
Priority 1	728	63%
Priority 2	117	10%
Priority 3	53	5%
Priority 4	0	0%
Priority 5 - Potential Pinelands	36	3%
Total Acres	934	81%
G3: Forestland for Recharge	0	0%

*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.

Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by Florida Natural Areas Inventory

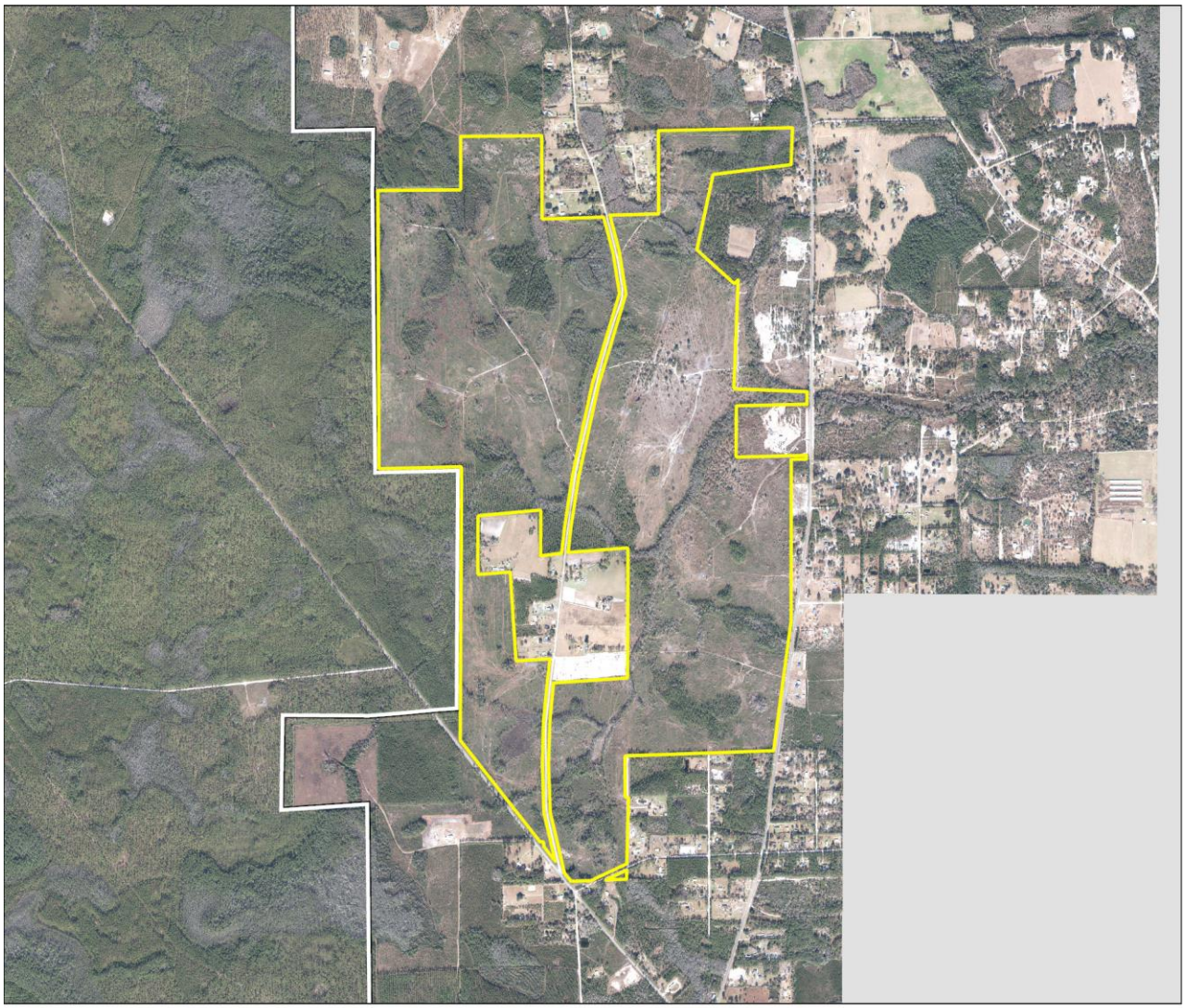
B1: Florida Forever map



B2: Aerial map

Baker County Timberlands Florida Forever Proposal

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



Map Produced by: FL Natural Areas Inventory, N. Pasco, July 2024 Background: 2023 Baker County Ortho Resolution = 0.076 meter

FNAI

Florida Forever Proposal Boundary

Existing Federal Conservation Lands

N

0 0.5 1 2

Miles

Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

County	Parcel ID	Owner	Acres	Just (Market) Value	Parcel Designation
Baker	171S21000000000070	Olin Wooten	206.95	$282,180	Essential
Baker	181S21000000000010	Olin Wooten	412.99	$520,000	Essential
Baker	191S21000000000020	Olin Wooten	216.33	$285,500	Essential
Baker	201S21000000000030	Olin Wooten	276.31	$346,600	Essential
Baker	301S21000000000013	Olin Wooten	42.11	$51,250	Essential
			1,154.69	**$1,485,530**	

Appendix D:

Imperiled Species FNAI Ranking Definitions

FNAI

Definitions of imperiled species ranks and conservation 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

FNAI
Definitions of imperiled species ranks and conservation status

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.
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 = Partial status: some but not all of the species' infraspecific taxa have federal
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.

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 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: <http://www.doacs.state.fl.us/pi/>.

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

Appendix E:

Site Visit Photos.



Photo 1. Uplands dominated by clearcut with natural regeneration following harvest in 2021.



Photo 2. Bluff Creek winds through eastern portion of property.

Florida Forever Project Evaluation Report

Bowlegs Creek Watershed
Polk County



Artificial pond on property.

Acquisition Type: Less-Than-Fee
GIS Acres: 1,015.81
Just Value: $922,106
Application Date: April 15, 2024
Project Sponsors: SVN Saunders Ralston Dantzler

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 11, 2024

Executive Summary

The proposed Bowlegs Creek Watershed Florida Forever project contains 5 parcels owned by Reclamation Trees LP, totaling 1,015 acres in Polk County. Bowlegs Creek divides the property into two tracts and is protected by an easement held by the Department of Environmental Protection's (DEP) Mining and Mitigation Program. The property lies within five miles of a variety of conservation lands including the Crooked Lake Wildlife and Environmental Area, Lake Buffam Wildlife Refuge, Lake Wales Ridge Florida Forever project, and Old Town Creek Watershed Florida Forever project, among others. The project is proposed as a less-than-fee acquisition and has a tax assessed value of $922,106.

The property has historically been mined for phosphate and is currently used by the landowners for cattle ranching. Approximately 910 acres (90%) of the property is comprised of altered landcover types; notably 257 acres (25%) of the proposal is a monoculture of invasive cogon grass. There are also about 156 acres (16%) of borrow areas on the proposal. In the lower lying borrow areas, recruited vegetation from historic wetlands can be found, making these areas superficially resemble natural wetlands.

The proposal lies within Priority 3 of the Florida Ecological Greenways Network. A variety of protected species have been reported on the property, including the roseate spoonbill, redmargin Zephyrlily, Florida panther, and tricolored heron, among others.

Bowlegs Creek is a tributary of the Peace River, and acquisition of the property could help to protect the water quality and quantity of the greater Peace River, which is the largest source of freshwater for Charlotte Harbor.

The property has been nominated to the Polk County Forever program as a less-than-fee acquisition and was approved and formally adopted into the program by the Polk County Board of County Commissioners.

If approved for addition to the 2025 Florida Forever Priority List, the project should be considered as a standalone project in the Less-Than-Fee category. All 1,015 acres of the proposal are considered non-essential for state acquisition due to the resources documented on the property (see Appendix C). An interagency team conducted a site visit to the project site

on June 20, 2024. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The proposed Bowlegs Creek Watershed project will help to protect the water resources of Bowlegs Creek, a tributary of the Peace River. This property will also protect foraging areas and potential nesting sites for wading birds and conserve open space to benefit wildlife species in an area with a high potential for development.

Acquisition of this project would serve to:

- Conserve and protect a portion of Florida's rural landscape to provide and enhance wildlife corridors for rare and imperiled species.
- Protect functional wetlands, floodplain function, groundwater recharge areas, and surface waters of the state.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Bowlegs Creek Watershed Florida Forever proposal comprises two disjunct parcels totaling approximately 1,015 acres about 3.5 miles southeast of Fort Meade in southwestern Polk County. The property is offered for less-than-fee simple protection.

The two tracts making up the proposal flank the floodplain of Bowlegs Creek, separated from the creek by the Bowlegs Creek Conservation Area, owned by the state and managed by the DEP Mining and Mitigation Program. Bowlegs Creek is a tributary of the Peace River which itself is less than 2 miles west of the proposal. In addition to the Bowlegs Creek Conservation Area, other nearby lands and conservation easements along the Peace River include South Peace River, Clear Springs, and Homeland, also managed by the Mining and Mitigation Program. Also, along the river Polk County manages IMC – Peace River Park and Peace River Hammock. Other significant conservation lands in the vicinity include several located 5 to 7 miles east of the proposal – Crooked Lake Wildlife and Environmental Area, Crooked Lake West, Lake Buffam Wildlife Refuge, and the G-3 Ranch Agricultural and Conservation Easement. The subject property is located approximately 7 miles southeast of the Lake Wales

Ridge Ecosystem and 7 miles northwest of the Old Town Creek Watershed Florida Forever projects.

A field survey was conducted on June 20, 2024, by the Acquisition and Restoration Council (ARC) liaison staff, including FNAI biologists Geoffrey Parks and Jake Travers. This evaluation is based on observations and information gathered during the site visit, as well as information from the proposal, aerial photography, US Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.6), the FNAI Natural Heritage database, and other public GIS data.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

The proposal property is situated on the Hardee Upland Province (Florida Geographic Survey, 2022), a large broad, sandy plain 30 to 90 feet in elevation that lies between the Lake Wales Ridge complex province to the low Peninsular Coastal Lowlands, which runs along the coastal portions of Charlotte, Sarasota, Manatee, and Lee counties, and the Caloosahatchee Valley to the south. Elevations on the proposal property range from 75 feet above mean sea level (msl) to 25 feet above msl along the Peace River. Soils are mostly poorly drained sands and dominated by Smyrna, Immokalee, and Myakka series. The river's upper section is highly impacted by phosphate mining operations and lands surrounding the lower river are largely converted to agricultural fields. There is very little protected land along the Peace River and none in the immediate vicinity of the proposal.

Approximately 10 percent of the subject property is in natural condition and consists of bottomland forest. Canopy composition of the bottomland forest is variable and generally includes a mixture of red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), swamp laurel oak (*Quercus laurifolia*), live oak (*Quercus virginiana*), and American elm (*Ulmus americana*). Epiphytes such as southern needleleaf (*Tilandsia setacea*) are common on canopy and subcanopy trees. The understory is moderately dense and is dominated by shrubs such as wild coffee (*Psychotria nervosa*) and bluestem palmetto (*Sabal minor*), with a lesser amount of American beautyberry (*Callicarpa americana*), cabbage palm (*Sabal palmetto*), Walter's viburnum (*Viburnum obovatum*), and hogplum (*Ximenia americana*). The groundcover layer is sparse and includes false nettle (*Boehmeria cylindrica*), variable witchgrass

(*Dichanthelium commutatum*), St. Andrew's cross (*Hypericum hypericoides*), and millet beaksedge (*Rhynchospora miliacea*). Vines are common and consist of trumpet creeper (*Campsis radicans*), muscadine (*Muscadina rotundifolia*), bristly greenbrier (*Smilax hispida*), and Eastern poison ivy (*Toxicodendron radicans var. radicans*). Invasive cover is moderately low within the bottomland forests and was limited to a single occurrence of old-world climbing fern (*Lygodium microphyllum*) (FISC Category I), scattered Caesar's weed (*Urena lobata*) (FISC Category I), and a few occurrences where cogon grass (*Imperata cylindrica*) (FISC Category I) is encroaching from adjacent uplands.

The remaining 90 percent of the subject property comprises altered land cover types, many of which are shaped from historic phosphate mining activity on the property. The largest altered land cover types, invasive exotic monoculture (25% of subject property) and improved pasture (22% of subject property) are associated with spoil areas from past mining. These areas are both actively used for cattle grazing. The invasive exotic monoculture consists of cogon grass (FISC Category I), with a near absence of native or planted forage species. Improved pastures often form a patchwork with the invasive exotic monoculture and are distinguished by a lack of cogon grass. Pastures are seeded with bahiagrass (*Paspalum notatum*) and have a low cover of spiny amaranth (*Amaranthus spinosus*), Nuttall's thistle (*Cirsium nuttallii*), dogfennel (*Eupatorium capillifolium*), and West Indian dropseed (*Sporobolus jacquemontii*) (FISC Category I). Canopy cover is nearly absent within most pastures, except for scattered live oak. Two areas of pasture within the southern parcel were observed to have a moderate canopy of younger mature slash pine (*Pinus elliottii*), which appear to be historically planted.

Borrow areas encompass a significant area (16%) of the subject property. While variable in composition, the borrow areas are well established with recruited vegetation from adjacent and historic wetlands on site. As a result, the lower lying borrow areas form a complex with superficially similar structure to that of natural marshes and swamps. The canopy, where present, consists of red maple, sweetgum, water oak (*Quercus nigra*), and bald cypress (*Taxodium distichum*). Shrubs are often dense and include saplings of canopy species alongside southern bayberry (*Morella cerifera*), Peruvian primrosewillow (*Ludwigia peruviana*) (FISC Category I), cabbage palm, coastalplain willow, elderberry (*Sambucus canadensis*), and infrequent Brazilian pepper (*Schinus terebinthifolia*) (FISC Category I). Herbaceous cover is generally sparse and consists of Virginia chain fern (*Anchistea virginica*), false nettle, West

Indian marsh grass (*Hymenachne amplexicaulis*) (FISC Category I), sword fern (*Nephrolepis sp.*), and mild waterpepper (*Persicaria hydropiperoides*). Vines are common within borrow areas and include muscadine, peppervine (*Nekemias arboria*), Virginia creeper (*Parthenocissus quinquefolia*), and summer grape (*Vitis aestivalis var. aestivalis*).

Approximately 120 acres of the borrow areas (12% of the subject property) are artificial ponds. The artificial ponds are characterized by open water areas and pronounced littoral and emergent vegetation. Artificial ponds were observed to be in use by a variety of waterfowl, wading birds (including listed and/or tracked species as listed in the table below) and several gull-billed tern (*Gelochelidon nilotica*, G5, S2, N, N). The shoreline and emergent vegetation include foxtail flatsedge (*Cyperus alopecuroides*), jointed spikerush (*Eleocharis equisetoides*), manyflower marshpennywort (*Hydrocotyle umbellata*), turkey tangle frogfruit (*Phyla nodiflora*), mock bishopweed (*Ptilimnium capillaceum*), coastalplain willow (*Salix caroliniana*), lizard's tail (*Saururus cernuus*), and cattail (*Typha sp.*). Floating vegetation is often present in dense mats around the edges of ponds and includes Water lettuce (*Pistia stratiotes*) and water hyacinth (*Oshuna crassipes*) (FISC Category I).

Agriculture encompasses a lesser extent (8%) of the subject property and consists of defunct citrus groves with an understory of bahiagrass and West Indian dropseed.

Successional hardwood forest occupies 6 percent of the subject property and comprises areas where native trees and shrubs have established following historical disturbance. This community is often present as small, disjunct stands adjacent to borrow areas and bottomland forest. The canopy is typically dense, and occupied by younger mature sweetgum, water oak, live oak, and slash pine. The understory is variable and generally comprised of saplings of canopy species with occasional American beautyberry and Brazilian pepper (FISC Category I). Herbaceous cover is generally low due to canopy density and consists of bahiagrass, common ragweed (*Ambrosia artemisiifolia*), and devil's horsewhip (*Achyranthes aspera*). Invasive cover is common and includes FISC Category I species such as Brazilian pepper, cogon grass, and Caesar's weed with infrequent occurrences of balsampear (*Momordica charantia ssp. charantia)* (FISC Category II).

Invasive plants are common on the subject property, with the most abundant and widespread species being cogon grass (FISC Category I). Cogon grass is present throughout most uplands, which have been altered by historic mining operations. Caesar's weed (FISC Category I) is common on the margins of pasture and surrounding bottomland forests on the site. Rosary pea (*Abrus precatorius*; FISC Category I), balsampear (FISC Category II), and Brazilian pepper (FISC Category I) are infrequent and typically present in similar locations to the Caesar's weed. Old world climbing fern (FISC Category I) was documented as a single occurrence within the bottomland forest during the site visit.

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

Community or Landcover	Acres	Percent of Proposal
bottomland forest	105	10
invasive exotic monoculture	257	25
pasture-improved	220	22
borrow area	156	15
artificial pond	121	12
agriculture	86	8
successional hardwood forest	58	6
road	14	1
Total	**1,016**	**100**

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Bowlegs Creek Watershed (BCW) Florida Forever proposal based on field observations during the June 20, 2024, site visit and results of the GIS analysis. The proposal is in southern Polk County, surrounded by agricultural or low residential-rural lands. The proposal is split by approximately two miles of Bowlegs Creek, a bottomland forest and perpetually protected conservation land owned by the State.

Due to soil surface mining practices that occurred on the property in the 1960s, most of the natural communities that likely existed onsite (e.g., mesic flatwoods, wet flatwoods, and sandhill) have been eliminated. Most of the proposal (51% according to Florida Natural Areas Inventory's preliminary assessment) is improved pasture. The improved pasture is somewhat degraded by grazing (currently has 50 head of cattle) and is dominated by invasive plants, particularly cogon grass. Mixed wetland hardwoods (14%) and freshwater non-forested wetlands (2%) are functional and provide valuable wildlife habitat, particularly for avian species.

The landowner conducts yearly winter burns throughout most of the pasture lands and expresses interest in learning and implementing additional management practices. The coniferous plantations and remnant communities would benefit from periodic fire, and, if possible, control of invasive plant species, particularly cogon grass.

The property's various wetlands provide foraging and potential nesting sites for wading birds. A diversity of avian species were observed, including roseate spoonbill (*Platalea ajaja*; State-designated Threatened), Florida sandhill crane (*Antigone canadensis pratensis*; State-designated Threatened), osprey (*Pandion haliaetus*), common gallinule (*Gallinula galeata*), snowy egret (*Egretta thula*), red-shouldered hawk (*Buteo lineatus*), mottled duck (*Anas fulvigula*), anhinga (*Anhinga anhinga*), black-bellied whistling-duck (*Dendrocygna autumnalis*), swallow-tailed kite (*Elanoides forficatus*; State Wildlife Action Plan), gull-billed tern (*Gelochelidon nilotica*), northern mockingbird (*Mimus polyglottos*), eastern meadowlark (*Sturnella magna*), mourning dove (*Zenaida macroura*), red-winged blackbird (*Agelauis phoeniceus*), great blue heron (*Ardea herodias*), turkey vulture (*Carthartes aura*), black vulture (*Coragyps atratus*), cattle egret (*Bubilcus ibis*), white-eyed vireo (*Vireo griseus*), little blue heron (*Egretta caerulea*; State-designated Threatened), Carolina wren (*Thryothorus ludovicianus*), red-bellied woodpecker (*Melanerpes carolinus*), northern parula (*Setophaga americana*), yellow-billed cuckoo (*Coccyzus americanus*), tricolored heron (*Egretta tricolor*; State-designated Threatened), tufted titmouse (*Baeolophus bicolor*), blue jay (*Cyanocitta cristata*), and northern cardinal (*Cardinalis cardinalis*). Additional wildlife species observed during the site visit included wild turkey (*Meleagris gallopavo*), white-tailed deer (*Odocoileus virginianus*), green treefrog (*Hyla cinerea*), and palamedes swallowtail butterfly (*Papilio palamedes*). The landowner advised they have game camera photos of a Florida panther (*Puma concolor coryi;* Federally-designated Endangered) on the property.

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for this property is 5.7. The entire property is within occasional black bear range and 63% is within Priority 3 of the FEGN. About 31% of the property comprises FWC Strategic Habitat Conservation Areas for the Florida snail kite (*Rostrhamus sociabilis plumbeus*) and 98% has an imperiled species richness for 3-8 species.

Approximately 263 acres (26%) of the property are classified as wetland based on the National Wetlands Inventory. The entire property provides protection to class 3F surface waters, including Bowlegs Creek and Sink Branch. Additionally, the property contains potentially suitable habitat for the Florida long-tailed weasel (*Mustela frenata peninsulae*; 707 acres) and Florida sandhill crane (119 acres).

Overall, this proposal is an opportunity to protect land within the Florida Wildlife Corridor that currently supports and has the potential to support a variety of rare, imperiled, and more common species. The acquisition would also benefit fish and wildlife in the greater area by protecting water quality and quantity of the region. Additionally, acceptance of this proposal would conserve contiguous land that is currently being solicited for purchase by solar companies.

GOALS, MEASURES AND CRITERIA

GOAL A:
ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:
The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 1,015 acres would contribute to ecosystem service parcels and connecting linkage corridors.

Measure A2:
The number of acres protected through the use of alternatives to fee simple acquisition.

The entirety of the project (1,015 acres) is proposed for less-than-fee acquisition via conservation easement.

Measure A3:
The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

Polk County has been identified as a potential acquisition partner for this project.

GOAL B:
INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:
The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 62 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measures Evaluation (FFME) table (Appendix B) reports the site contains approximately 741 acres (73% of site) of Strategic Habitat Conservation Areas. This is within Priority 2 (36% of site), Priority 3 (22%), and Priority 5 (15%).

Measure B2:
The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 634 of Florida's rarest species were mapped and divided into six priority classes. The FFME reports the proposed project contains approximately 751 acres (74% of site) of potential rare species habitat. The habitat is mostly divided between Priority 6 (70% of site) and Priority 5 (4%), with the remainder in Priority 4 (<1%).

The following table lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum total of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Habitat Conservation Priorities

Scientific Name	Common Name	Global Rank	Acres
Antigone canadensis pratensis	Florida sandhill crane	G5T2	92
Mycteria americana	wood stork	G4	3
Mustela frenata peninsulae	Florida long-tailed weasel	G5T3?	707

Measure B3:
The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages.

The FFME reports approximately 642 acres (63%) of the proposed project contributes to the protection of ecological greenways, entirely within Priority 3 areas. Prioritization is based on

such factors as importance for wide-ranging species like Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B5:
The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

The Bowlegs Creek Watershed proposal would not contribute to a contiguous landscape-sized protection area of at least 50,000 acres. The closest protected lands are approximately 5 miles away.

Measure B6:
The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

This site provides habitat for several species that are rare or of conservation concern. Two rare plant species, giant airplant (*Tillandsia utriculata*) and redmargin Zephyrlily (*Zephryanthes simpsonii*; G2G3, S2S3, N, T) were documented during the site visit. Three gull-billed terns (*Gelochelidon nilotica*; G5, S2, N, N) were observed foraging within one of the large artificial ponds. It is unclear if the species is breeding on the site, although it is documented nesting in the peninsula away from the coast. However, at the very least, the sighting is evidence of suitable foraging habitat on site. The artificial ponds also provide suitable habitat for rare or listed species of wading bird, several of which were seen during the site visit. Swallow-tailed kites were also observed on the tract by agency staff.

The FFME lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. Table 3 contains species falling into any of these observational categories, species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision, and species reported in the application or during the site visit.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**
Rare plants documented on site					
Tillandsia utriculata	giant airplant	G5‡	S3	N	E
Zephryanthes simpsonii	redmargin zephyrlily	G2G3	S2S3	N	T
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
Egretta caerulea	little blue heron	G5	S4	N	ST
Egretta thula	snowy egret	G5	S3	N	N
Egretta tricolor	tricolored heron	G5	S4	N	ST
Elanoides forficatus	swallow-tailed kite	G5	S2	N	N
Eudociumus albus	white ibis	G5	S4	N	N
Gelochelidon nilotica	gull-billed tern	G5	S2	N	N
Platalea ajaja	roseate spoonbill	G5	S2	N	ST
Additional rare animals reported on site by applicant					
Puma concolor coryi	Florida panther	G5T1	S1	E	FE

‡*Species not tracked by FNAI*

GOAL C:

PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:

The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

The property is offered for less-than-fee acquisition, intended to be utilized in a manner consistent with existing uses. Some effort has been given to the control of invasive plants; however considerable infestations of cogon grass are present throughout the property. Due to the extent of the infestation, eradication of cogon grass is unlikely. A baseline assessment to determine the full extent of invasive species is warranted if acquisition of an easement occurs.

Measure C4:

The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 328 acres (32%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly divided between Priority 4 (18% of site), Priority 5 (8%), and Priority 6 (6%), with the remainder in Priority 3 (< 1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:
The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 1,014 acres (100%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 4 (52% of site), Priority 2 (27%), and Priority 5 (20%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C8:
The number of acres of functional wetland systems protected.

The FFME reports approximately 395 acres (39%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 4 (37% of site), Priority 5 (1%), and Priority 3 (< 1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:
The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

Less than 20 acres of the property are in maintenance control. There is a significant amount of cogon grass across most of the property including in timbered and non-timbered natural communities. Although the issue is worse on the southern portion of the site, the landowner manages cogon grass in areas north of the creek with prescribed fire annually, as well as with new shoot consumption via cattle.

As much of the surrounding property is owned by Solar Mosaic, large quantities of untreated cogon grass exist nearby to the subject property and will continue to spread and infest to adjacent lands.

Also observed during site reconnaissance were lantana, Brazilian pepper, thick Caesar's weed in scattered pockets, lygodium, West Indian marsh grass, Peruvian primrose willow and water hyacinth.

GOAL D:
ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:
The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

The 1,016-acre Bowlegs Creek property is located within the Southwest Florida Water Management District's (SWFWMD) Heartland Planning Region for water supply and is within the Southern Water Use Caution Area. The property is not on the proposed acquisition list for the District. According to the Florida Forever Application, approximately 74% of the property is uplands and 26% is wetlands. Most of the land immediately adjacent to the creek is categorized as freshwater forested wetland, although some of the creek frontage, especially on the northern parcel, has been converted to improved pasture. The remainder of the wetlands on the property mostly consist of a series of artificial freshwater marshes that occur on the southern parcel.

SWFWMD's mission is comprised of Four main Area's of Responsibility (AOR's); Water Supply, Water Quality, Natural Systems, and Flood Protection. Each area has a goal; Water Supply: Ensure an adequate supply of water to provide for all existing and future reasonable and beneficial uses while protecting and maintaining water resources and related natural systems. Water Quality: Protect and improve water quality to sustain the water resources, environment, economy, and quality of life. Natural Systems: Preserve, protect, and restore natural systems to support their natural hydrologic and ecological functions. Flood Protection: Minimize flood damage to protect people, property, infrastructure, and investment. This property contributes to three of the four AOR's, Water Quality 78%, Natural Systems 36%, and Flood protection 33%.

Measure D3:
The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

The FFME reports approximately 1,016 acres (100%) of the proposed project would provide protection for groundwater recharge areas. This area is divided between Priority 4 (33% of site), Priority 3 (27%), Priority 5 (17%), Priority 6 (15%), and Priority 2 (8%). Prioritization is

based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Bowlegs Creek Watershed Florida Forever proposal

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	0
FDEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	4
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	7
FDEP Special Nutrient Impaired WBIDs	9	9
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
FDEP Springsheds or within 5 miles	10, 7	0
FDEP BMAPs	10	0
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	20

GIS Evaluation score is converted to a 1 to 5 value (low to high)

FINAL DEAR SCORE = 2, medium low water quality protection benefits

GOAL F:
PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

CULTURAL RESOURCES:

There are no cultural resources recorded or known to exist on this Florida Forever project. However, to date, the whole of this property has not been professionally surveyed for archaeological and/or historical sites. It is therefore likely that undocumented cultural resources exist on the property, but this cannot be determined without formal survey.

FIELD OBSERVATIONS:

During the Field Review of the proposed Bowlegs Creek Florida Forever project, staff did not observe any unrecorded cultural resources within the project area. However, based on an evaluation of the location and distribution of cultural resources in the surrounding area, there is potential for unrecorded sites to exist on the Bowlegs Creek Watershed property. Should any artifacts or other cultural resources be discovered on the property in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology Program for further evaluation.

GOAL G:
INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

This property would be unlikely to significantly increase the amount of sustainable forest management being conducted. Currently stands are unmerchantable and within streamside management zones.

Measure G4:
The percentage and number of acres identified for restoration restored by reforestation.

Approximately 100 acres of pasture, or approximately 26 % of the property, could be restored with reforestation.

FLORIDA FOREVER CRITERIA

The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.):

- the project meets multiple goals described in subsection (4).
- the project may be acquired, in whole or in part, using alternatives to fee simple, including but not limited to, tax incentives, mitigation funds, or other revenues, the purchase of development rights, hunting rights, agricultural or silvicultural rights, or mineral rights or obtaining conservation easements or flowage easements.
- the project is a joint acquisition, either among public agencies, nonprofit organizations, or private entities, or by a public-private partnership.

The Acquisition and Restoration Council shall give increased priority to:

- projects that can be acquired in less than fee ownership, such as a permanent conservation easement.
- projects that contribute to improving the quality and quantity of surface water and groundwater.
- projects located within the Florida Wildlife Corridor as defined in (§ 259.1055(4), F.S.).

MANAGEMENT

If acquired as a perpetual conservation easement, the primary management responsibility would remain with the landowner. Periodic monitoring of the site’s management would occur to

confirm continued compliance with the conditions of the easement. Monitoring would be coordinated by the Office of Environmental Services (OES) within the Department of Environmental Protection's (DEP) Division of State Lands (DSL).

FUNDING SOURCES

Polk County has been identified as a potential partner in acquisition, along with Florida Forever. A site visit to the property done on March 13, 2024, by CLASAC's TAG concluded the property scored 88 out of 118 potential points. Specifically, the site scored 28 (out of 37) for water resources, 33 (47) for natural communities and landscape, 16 (20) for plants and animals, 7 (9) for human values and 4 (5) for management. The property has been approved by the County to pursue acquisition.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues, Jurisdictional and Sovereignty Lands, Legal Issues
Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)
The easements and encumbrances of record would be determined during the appraisal mapping. A current title commitment would be obtained, or the owner's title insurance policy would be reviewed if the policy is available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits
There are no apparent contamination sites within the project based on the application form. The property was once part of a phosphate mining operation. A complete environmental assessment will be conducted at the time of acquisition.

Estimated Cost of Appraisal and Mapping
DEP Bureau of Appraisal estimates $10,000 to $20,000 in appraisal fees.

Acquisition Phases
Subject to funding, the Bowlegs Creek Watershed Florida Forever project will be phased upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs
Low Potential: The area would contribute little to recreational activities but greatly to conservation needs. The low intensity use it is currently operating under would likely continue as requested by the property owners.

Bowlegs Creek Watershed is proposed as a less-than-fee acquisition. Under a conservation easement, the state would acquire the development rights on the property while the landowner would likely continue the current and historic activities on the property. These activities include agriculture, cattle operations, recreation, and private use and enjoyment. More intensive uses of the land with higher intensity agricultural practices are likely, and with the Future Land Use designation identifying the area for phosphate mining, encumbering the land for conservation would help to protect the health of the creek.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces
Low Potential: Not many untouched natural attributes remain on the land which is currently pasture. However, the creek itself remains mostly undisturbed with and the current low intensity uses of the land being maintained would protect the creek from the contamination that might come with a more intensive use.

Potential for Being Subdivided
Low to Moderate Potential: There is some potential for being subdivided or converted to more intensive residential, office, or commercial uses. However, this is not currently the case, the property is being used for what appears to be low intensity agricultural uses.

Conversion to more intensive agricultural uses or to phosphate mining in accordance with the future land use designation is more likely and would potentially impact Bowlegs Creek beyond the immediate identified area.

Zoning and Densities within the Project Boundaries
The property is currently zoned as Pasture and Pasture with Miscellaneous Improvement.

Existing Land Uses and Future Land Use Designations
Existing Land Uses: The area surrounding the creek is sectioned into 3 large parcels with Department of Revenue codes of Pasture ±286.5 acres, Pasture ±501.4 acres, and Pasture

W/Undeveloped W/Miscellaneous Improvement ±218.3 acres. The Creek itself is split into two areas both designated as Vacant State of ±97.7 acres and ±131.4 acres. This area is unused and presumably viewed as part of the swell of the creek that is not likely to be developed.

Future Land Uses:

There is a small portion of land along the creek at the Northwest edge of this property that is Agricultural/Rural Residential, one of the lowest impact zoning/future land use designations possible. The rest of the property and most of the surrounding area is dominated by the designated future land use of Phosphate Mining. The Creek itself is flood zone A, as are large sections of the land directly to the North of the Creek in this area.

Development Potential

Low Potential: There are no known development proposals in the area currently. The proposal emphasizes the subject site is vulnerable to development and conversion to more intensive agriculture. Protection of the property under a conservation easement would keep it from future development and protect a significant area of the Florida Wildlife Corridor.

Transportation Planning Issues

The proposed project is located in FDOT District 1 in Polk County. Approximately one and a half miles north of the proposed project area, there is an active resurfacing project along State Road (SR) 17/US98. Additionally, a resurfacing project along SR35/US17, located about two and a half miles west of the project area, was recently completed. Both SR35/US17 and SR17/US98 are designated as Strategic Intermodal System (SIS) corridors and serve as evacuation routes. There is an active CSX mainline railway situated approximately three miles west of the proposed project location. The project area is within the Florida Wildlife Corridor. The Collier to Polk trail, a FDOT Shared Use Non-Motorized (SUN) trail priority corridor, is located about two miles west of the project area and is partially funded for preconstruction. Active construction projects within three miles of the project include drainage improvements on SR700/S98) and a bridge replacement on SR700/US98.

While the Department finds no adverse impacts to this proposed project at this time, coordination with FDOT District 1 staff during the acquisition process is recommended to address transportation system issues and incorporate them into management plans as appropriate.

ACKNOWLEDGEMENTS
Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Meghan Lauer and Katie Briley in DSL's Office of Environmental Services were responsible for the overall coordination of this report, with contributions from the following:

- Division of Historical Resources: Brandon Ackermann, Jason O'Donoughue
- Florida Forest Service: Cat Ingram, Nathan Bartosek, Madison Bullard
- Department of Commerce: Yazmin Valdez, James Stansbury
- Florida Fish and Wildlife Conservation Commission: Nicole DeSha, Angeline Barker
- Florida Natural Areas Inventory: Geoff Parks, Jake Travers
- DEP Division of Environmental Assessment and Restoration: Moira Homann, Kenneth Weaver
- Florida Department of Transportation: Allison Beaty
- Southwest Florida Water Management District: Carlos Santos

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

Bowlegs Creek Watershed: Florida Forever Measure Evaluation 20240724

GIS ACRES = 1,016

MEASURES	Resource Acres[a]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	362	36%
Priority 3	224	22%
Priority 4	0	0%
Priority 5	155	15%
Total Acres	741	73%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	2	< 1%
Priority 5	41	4%
Priority 6	708	70%
Total Acres	751	74%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	642	63%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	642	63%
B4: Under-represented Natural Communities		
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)	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	0	0%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	1	
G3	0	
G4	0	
G5	1	
Total	2	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	8	< 1%
Priority 4	180	18%
Priority 5	79	8%
Priority 6	61	6%
Total Acres	328	32%

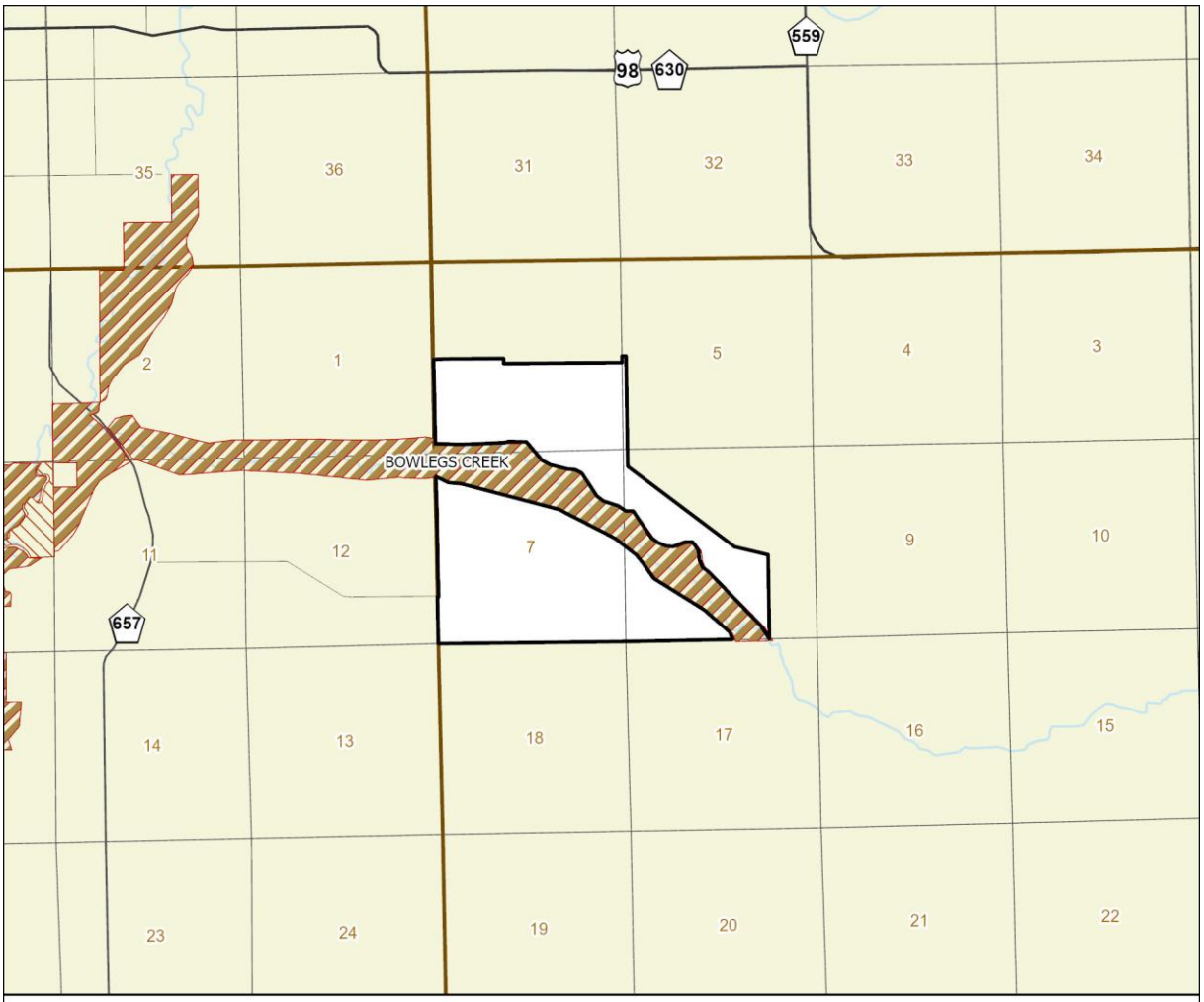
MEASURES (continued)	Resource Acres[a]	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	276	27%
Priority 3	0	0%
Priority 4	532	52%
Priority 5	206	20%
Priority 6	0	0%
Priority 7	0	0%
Total Acres	1,014	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	8	< 1%
Priority 4	373	37%
Priority 5	14	1%
Priority 6	0	0%
Total Acres	395	39%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	81	8%
Priority 3	271	27%
Priority 4	340	33%
Priority 5	168	17%
Priority 6	156	15%
Total Acres	1,016	100%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways and Trails & Univ. 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		
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%

[a]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.

Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by Florida Natural Areas Inventory

B1: Florida Forever map



BOWLEGS CREEK WATERSHED
FLORIDA FOREVER PROPOSAL

POLK COUNTY

Florida Forever Proposal
State Owned Lands
Other Conservation Lands



N

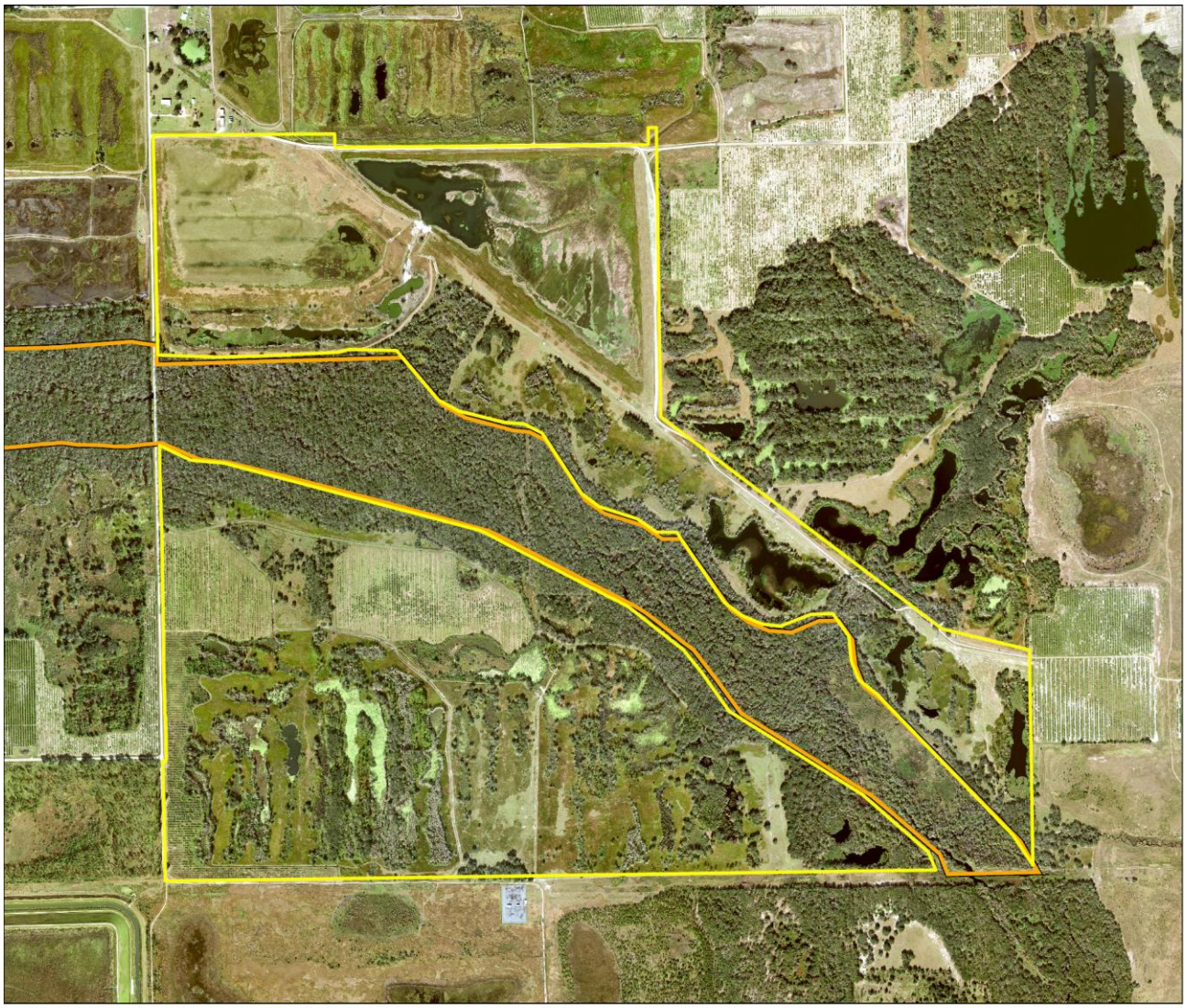
0 1 2 Miles

MAP BY FL NATURAL AREAS INVENTORY JULY 2024

B2: Aerial map

Bowlegs Creek Watershed Florida Forever Proposal

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



Map Produced by: FL Natural Areas Inventory, N. Pasco, July 2024 Background: 2023 Polk County Ortho Resolution = 0.076 meter

FNAI

Florida Forever Proposal Boundary

Existing State Conservation Lands

N

0 0.25 0.5 1

Miles

Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

County	Parcel ID	Owner	Acres	Just (Market) Value	Parcel Designation
Polk	26-32-07-000000-011030	Reclamation Trees LP	6.82	$30,866	Essential
Polk	26-32-05-700000-002131	Reclamation Trees LP	286.21	X	Essential
Polk	26-32-06-000000-021010	Reclamation Trees LP	501.49	X	Essential
Polk	26-32-08-000000-023010	Reclamation Trees LP	3.02	X	Essential
Polk	26-32-07-000000-011010	Reclamation Trees LP	218.27	$891,240	Essential
			1,015.81	**$922,106**	

Appendix D:

Imperiled Species FNAI Ranking Definitions

FNAI

Definitions of imperiled species ranks and conservation 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

FNAI
Definitions of imperiled species ranks and conservation status

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.
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 = Partial status: some but not all of the species' infraspecific taxa have federal
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.

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 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: <http://www.doacs.state.fl.us/pi/>.

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

Appendix E:

Site visit photos.



Photo 1. Pasture on property.



Photo 2. Artificial pond on property.



Photo 3. Pasture on property.



Photo 4. Cogon grass monoculture.

Florida Forever Project Evaluation Report

Fair Bluff
Martin County



Mesic flatwoods on property.

Acquisition Type: Less-Than-Fee
GIS Acres: 639.06
Just Value: $3,486,767
Application Date: April 15, 2024
Project Sponsors: Keith Fountain Law

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 11, 2024

Executive Summary

The proposed Fair Bluff Florida Forever project contains 2 parcels owned by Fair Bluff Ltd, totaling approximately 639 acres in Martin County. The property is directly adjacent on its northern boundary to the Walpole Ranch Agricultural and Conservation Easement managed by the Florida Department of Agriculture and Consumer Services (FDACS). The project is proposed for less-than-fee acquisition and has a tax assessed value of $3,486,767.

The property is currently used by the landowners for cattle ranching (approximately 40 cow/calf pairs), hunting and recreation. The most common landcover type on the property is mesic hammock. The landowner is actively managing for invasive species with both chemical and mechanical methods; prescribed fire is not currently used to manage resources.

The proposal lies within Priority 2 of the Florida Ecological Greenways Network (FEGN). Listed species documented on the property include the butterfly orchid, common wild-pine, gopher tortoise, and redmargin Zephyrlily.

The wetlands onsite form the headwaters of an unnamed tributary of Lettuce Creek, which eventually drains into Lake Okeechobee approximately 3 miles from the proposal. Acquisition of the property would help to protect water resources at both a local and regional scale. The proposal also lies within the South Florida Water Management District (SFWMD) and U.S. Army Corps of Engineers (ACOE) Comprehensive Everglades Restoration Plan (CERP). More specifically, the property is a part of the Taylor Creek/Nubbin Slough Basin of the Lake Okeechobee Watershed Restoration Project (LOWRP), which is designed to increase water storage capacity in the watershed resulting in improved water levels in Lake Okeechobee.

If approved for addition to the 2025 Florida Forever Priority List, the project should be considered as a standalone project in the Less-Than-Fee category. All 639 acres proposed for acquisition are considered essential due to the resources documented on the property (see Appendix C). An interagency team conducted a site visit to the project site on July 10, 2024. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The proposed Fair Bluff project will expand ecological greenways on the east side of Lake Okeechobee for a variety of wildlife species. The project will also aide in the ongoing CERP by helping to increase the water storage capacity of Lake Okeechobee and protect water quality of the Greater Everglades Watershed.

Acquisition of this project would serve to:

- Enhance the coordination and completion of land acquisition projects.
- Ensure that sufficient quantities of water are available to meet the current and future needs of natural systems and the citizens of the state.
- Increase the protection of Florida's biodiversity at the species, natural community, and landscape levels.
- Protect, restore, and maintain the quality and natural functions of land, water, and wetland systems

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Fair Bluff proposal encompasses approximately 639 contiguous acres (a 1-mile x 1-mile section) in northwestern Martin County, approximately twelve miles east of the town of Okeechobee. The primary use of the property is cattle ranching, hunting and passive recreation. The property is contiguous with the southern border of the Walpole Ranch Agricultural and Conservation Easement, which is contiguous with a stretch of conservation lands including Bluefield Ranch Mitigation Bank and Bluefield Ranch owned and managed by St. Lucie County. Several SFWMD properties lie within 10 miles of Fair Bluff, including Lakeside Ranch STA and Allapattah Flats. Land use surrounding Fair Bluff is predominately related to cattle or horses.

A field survey was conducted on July 10, 2024, by the Acquisition and Restoration Council (ARC) liaison staff, including FNAI biologists Jake Travers and Geoff Parks. This evaluation is based on information gathered from the proposal, aerial photography, US Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida

Cooperative Land Cover Map, version 3.6), the FNAI Natural Heritage database, and other public GIS data.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

The property lies in the Okeechobee Plain Province of the Everglades District, an area characterized by limestone overlain by a plain of shallow shelly sands and clay. Elevations on the property range from 33 ft to 30 ft above mean sea level. Water flows across this essentially flat property from the northeast to the southwest via what appears to be a ditch that follows a natural flow-way through a series of wetlands that form the headwaters of an unnamed tributary of Lettuce Creek, which flows into Lake Okeechobee approximately 3 miles from the property.

The site comprises approximately 83 percent uplands and 17 percent wetlands. Upland areas on the subject property are dominated by mesic hammock (35%) and mesic flatwoods (22%). Mesic hammock appears to have been historically limited to areas adjacent to a ditched creek that bisects the subject property. The current coverage of this community has expanded as former mesic flatwoods have undergone succession due to an absence of fire. The canopy is closed and dominated by live oak (*Quercus virginiana*) with an infrequent presence of slash pine (*Pinus elliottii*) in areas derived from historic flatwoods. Cabbage palm (*Sabal palmetto*) is common in the subcanopy and understory of the hammocks, alongside a variable shrub composition that includes beautyberry (*Callicarpa americana*), wild coffee (*Psychotria nervosa*), shortleaf wild coffee (*Psychotria tenuifolia*), and saw palmetto (*Serenoa repens*). Herbaceous groundcover is generally absent and limited to witchgrasses (*Dichanthelium* ssp.) where present. Epiphytes are common and include golden polypody (*Phlebodium aureum*), resurrection fern (*Pleopeltis michauxiana*), southern needleleaf (*Tillandsia setacea*), Spanish moss (*Tillandsia usneoides*), and shoestring fern (*Vittaria lineata*).

Mesic flatwoods on the subject property are highly variable in species composition, corresponding with the recency and frequency of fire or other disturbance. The species composition of fire-excluded mesic flatwoods overlaps significantly with mesic hammock except for at higher densities of slash pine in the canopy and an understory that includes remnant flatwoods vegetation. Shrubs are scattered under openings in the canopy and include

gallberry (*Ilex glabra*), coastalplain staggerbush (*Lyonia fruticosa*), fetterbush (*Lyonia lucida*), shiny blueberry (*Vaccinium myrsinites*), immature cabbage palm, saw palmetto, and St. Andrew's cross (*Hypericum hypericoides*). Herbaceous cover is sparse and comprises common carpetgrass (*Axonopus fissifolius*), tall elephantsfoot (*Elephantopus elatus*), tailed bracken (*Pteridium pseudocaudatum*), and chapman's goldenrod (*Solidago chapmanii*).

Mesic flatwoods in the southwestern area of the property was last timbered in 1995 and has recently undergone mechanical shrub reduction. This area is composed of a moderate canopy of slash pine over an understory dominated by short shrubs and graminoids. Short and dwarf shrubs present include netted pawpaw (*Asimina reticulata*), gallberry, coastalplain staggerbush, southern bayberry (*Morella cerifera*), dwarf live oak (*Quercus minima*), sand blackberry (*Rubus cuneifolius*), saw palmetto, and Darrow's blueberry (*Vaccinium darrowii*). Herbaceous groundcover is dense and includes Virginia chainfern (*Anchistea virginica*), savannah milkweed (*Asclepias pedicellata*), broomsedge bluestem (*Andropogon virginicus*), southern wiregrass (*Aristida beyrichiana*), witchgrasses (*Dichanthelium* spp.), Elliott's milkpea (*Galactia elliottii*), Bahiagrass (*Paspalum notatum*), blackroot (*Pterocaulon pycnostachyum*), and yellow milkwort (*Senega rugelii*).

Depression marshes are common throughout the property and vary in size from approximately 1 to 20 acres. Marshes appear to have been managed for grazing by mowing, and the species composition of the marshes is variable depending on the intensity of cattle grazing. Marshes adjacent to pastures are generally less diverse. The depression marshes are dominated by graminoids and wetland forbs, including blue maidencane (*Amphicarpum muehlenbergianum*), wetland white bluestem (*Andropogon dealbatus*), sawgrass (*Cladium jamaicense*), spikerush (*Eleocharis* sp.), mild waterpepper (*Persicaria hydropiperoides*), rosy camphorweed (*Pluchea baccharis*), and coastalplain yellow-eyed grass (*Xyris ambigua*). Several of the marshes have deeper centers dominated by maidencane (*Hymenachne hemitomum*), lanceleaf pickerelweed (*Pontederia cordata* var. *lancifolia*), and alligatorflag (*Thalia geniculata*). Shrub cover is generally low and includes peelbark St. John's wort (*Hypericum fasciculatum*), southern bayberry, coastalplain willow (*Salix caroliniana*), and water toothleaf (*Stillingia aquatica*).

Semi-improved pasture occupies approximately 14 percent of the subject property and is intermediate in composition to improved pasture and the mesic and wet flatwoods that

historically occupied the site. A low to moderate canopy of slash pine and live oak is present, with a cabbage palm midstory ranging from scattered to abundant. Shrub density is variable and includes immature canopy and subcanopy species alongside American beautyberry and saw palmetto. The understory is dominated by planted Bahiagrass with a remnant component of disturbance tolerant native groundcover, including Virginia chainfern, big carpetgrass (*Axonopus furcatus*), slender goldentop (*Euthamia caroliniana*), fourpetal St. John's Wort (*Hypericum tetrapetalum*), manyhead rush (*Juncus polycephalos*), and whitehead bogbutton (*Lachnocaulon anceps*).

Improved pastures occupy a lesser (12%) extent of the property and are planted in Bahiagrass, with low coverage of shrubby buttonweed (*Borreria verticillata*), and dogfennel (*Eupatorium capillifolium*). West Indian dropseed (*Sporobolus jacquemontii*; FISC Cateogory I) is sporadic throughout the pastures and is treated by the landowner. Tree cover is low, with live oak and cabbage palm scattered throughout the pastures.

Successional hydric shrubland/forest occupies natural wetlands that have undergone historic harvest or hydrological disturbances and have since been left to natural succession. This altered landcover type is predominantly distributed along the historic floodplain of a natural watercourse which is now ditched. An isolated example of this landcover is also present in the northeast corner of the property, where a dome swamp was historically harvested and ditched to provide water to an adjacent artificial pond.

The successional hydric shrubland/forest is dominated by subcanopy and younger canopy trees, including red maple (*Acer rubrum*), swamp laurel oak (*Quercus laurifolia*), and cabbage palm. Shrubs are sporadic and consist of immature red maple and southern bayberry. The herbaceous understory varies with apparent hydroperiod and consists of giant leather fern (*Acrostichum danaeifolium*), Virginia chainfern, sawgrass, mild waterpepper, rosy camphorweed, lanceleaf pickerelweed, and toothed midsorus fern (*Telmatoblechnum serrulatum*). In hydric forests adjacent to the ditched creek, West Indian marsh grass (*Hymenachne amplexicaulis*; FISC Category I) is present as the dominant herbaceous cover.

The remaining ruderal areas on site encompass less than two percent of the subject property and include canals/ditches, artificial ponds, and developed lands. The canals and ditches

include an unnamed tributary of Lettuce Creek, which flows from the northeast to the southeast into Lake Okeechobee approximately three miles from the property. Artificial ponds were historically excavated within the improved pastures and adjacent to the tributary of lettuce creek. Developed lands encompass less than one acre of the property and consist of one residence and several auxiliary structures.

Invasive plant cover is moderately low on the subject property and is being actively managed by the landowner. West Indian marsh grass (FISC Category I) is the most prominent invasive species and was observed within the ditched creek and adjacent successional hydric forests. Old world climbing fern (*Lygodium microphyllum*; FISC Category I) was observed in dense patches within the historically altered dome swamp, along with a low coverage of torpedo grass (Panicum repens: FISC Category I) and Brazilian pepper (*Schinus terebinthifolia*; FISC Category I). The climbing fern appeared to be regenerating from past herbicide treatment. West Indian dropseed (FISC Category I) is sporadic within the improved pastures. Caesar's weed (*Urena lobata*; FISC Category I) was linearly scattered along access trails through the mesic hammocks on site.

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

Community or Landcover	Acres	Percent of Proposal
mesic hammock	222	35
mesic flatwoods	139	22
depression marsh	74	12
pasture – semi-improved	92	14
pasture – improved	74	12
successional hydric shrubland/forest	27	4
canal/ditch	7	1
artificial pond	3	<1
developed	1	<1
Total	639	100

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Fair Bluff Florida Forever proposal based on field observations during the July 10, 2024, site visit and results of the GIS analysis. The property's northern boundary connects to the Walpole Ranch Agricultural and Conservation Easement, which is contiguous with additional conservation lands to the north. Acquisition of the proposal would contribute to the protection of a wildlife corridor on the east side of Lake Okeechobee and protect water quality of the Greater Everglades Watershed.

Current uses of the property include cattle ranching, limited silviculture, hunting, and passive recreation. The ranching is a cow/calf operation with approximately 40 cow/calf pairs. Game species harvested include deer (*Odocoileus virginianus*), turkey (*Meleagris gallopavo*), quail (*Colinus virginianus*), dove (*Zenaida macroura*), and waterfowl (various species). The landowner treats invasive plants, including Brazilian pepper, Old World climbing fern, and whitehead broom (*Spermacoce verticillate*), and traps and hunts wild hog (*Sus scrofa*). Other invasive plants such as West Indian marsh grass (*Hymenachne amplexicaulis*), Ceaser's weed (*Urena lobata*), and balsam apple (*Momordica charantia*) were also observed, however infestation level for all invasive plant species was low due to the landowner's management.

Fair Bluff contains a diversity of habitat types, including mixed-hardwood coniferous (47%), oak-cabbage palm forests (10%), improved pasture (9%), mesic flatwoods (8%), mesic hammock (4%), and wetlands (23%). The landowner maintains an area of mesic flatwoods that was observed during the site visit by mowing vegetation annually, and sometimes twice per year. The unit is in good condition, with natural slash pine (*Pinus elliottii*) regeneration occurring. Several active gopher tortoise (*Gopherus polyphemus*; State-designated Threatened) burrows were observed in this location and other areas on the property, and the flatwoods unit is used for quail hunting. The landowner is undertaking further management efforts to restore additional mesic flatwoods units from oak hammock expansion. Other wildlife species observed during the site visit included black-bellied whistling duck (*Dendrocygna autumnalis*), great crested flycatcher (*Myiarchus crinitus*), northern cardinal (*Cardinalis cardinalis*), red-bellied woodpecker (*Melanerpes carolinus*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), and otter (*Lontra canadensis*). The landowner reported observing barred owl (*Strix varia*), great-horned owl (*Bubo virginianus*), coral snake (*Micrurus fulvius*), eastern indigo snake (*Drymarchon couperi;* Federally-designated Endangered), crested caracara (*Caracara cheriway*; Federally-designated Threatened), and Florida black bear (*Ursus americanus floridanus*).

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for Fair Bluff is 5.8. Most of the property (94%) is within Priority 2 of the FEGN and about 63% is modeled as

Priority 3 FWC Strategic Habitat Conservation Areas. According to the Critical Lands and Waters Identification Project, 81% of Fair Bluff is Priority 1 and 2 in terrestrial, 100% is Priority 2 in the landscape category, and 90% is Priority 2 and 3 in the biodiversity category. The property could potentially support imperiled species including crested caracara, eastern indigo snake, Florida sandhill crane (*Grus canadensis pratensis*), and wood stork (*Mycteria americana*). The entire property provides protection to class 3F surface waters including Myrtle Slough.

In conclusion, Fair Bluff is a quality property with managed natural and altered communities and would be a good addition to the conservation lands protected through Florida Forever. Acquisition of the property under an easement would protect an area of the Florida Wildlife Corridor from future development, prevent fragmentation of sensitive habitat that supports many native species in Florida, and protect the water quality and quantity of the region.

GOALS, MEASURES AND CRITERIA

GOAL A:

ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:

The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 639 would contribute to the enhancement of essential natural resources, ecosystem service parcels and connecting linkage corridors.

Measure A2:

The number of acres protected through the use of alternatives to fee simple acquisition.

The entirety of the project (639 acres) is proposed for less-than-fee acquisition via conservation easement.

Measure A3:

The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

No funding partners have been identified for this project.

GOAL B:

INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:
The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 62 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measures Evaluation (FFME) table (Appendix B) reports the site contains approximately 566 acres (89% of site) of Strategic Habitat Conservation Areas. This is divided between Priority 3 (58% of site) and Priority 5 (31%).

Measure B2:
The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 634 of Florida's rarest species were mapped and divided into six priority classes. The FFME reports the proposed project contains approximately 593 acres (93% of site) of rare species habitat. The habitat is mostly divided between Priority 6 (63% of site) and Priority 5 (26%), with the remainder in Priority 4 (4%).

The following table lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Habitat Conservation Priorities

Scientific Name	Common Name	Global Rank	Acres
Drymarchon couperi	eastern indigo snake	G3	524
Antigone canadensis pratensis	Florida sandhill crane	G5T2	200
Caracara plancus	crested caracara	G5	152
Mycteria americana	wood stork	G4	133

Measure B3:
The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages.

The FFME reports approximately 599 acres (94%) of the proposed project contributes to protection of ecological greenways entirely within Priority 2 areas. Prioritization is based on such factors as importance for wide-ranging species like Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B4:
The number of acres acquired of under-represented native ecosystems.

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The Florida Forever Measures table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Fair Bluff proposal contains 139 acres of mesic flatwoods (22% of site).

Measure B5:
The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

Although it is adjacent to an approximately 7800-acre cluster of lands with some protections, like Walpole Ranch Agricultural and Conservation Easement and Bluefield Ranch Mitigation Bank, the Fair Bluff proposal would not currently contribute to a contiguous landscape-sized protection area of at least 50,000 acres.

Measure B6:
The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

This site supports habitat for several rare species of conservation concern. Gopher tortoise burrows were observed in low densities within the mesic flatwoods, semi-improved pasture, and improved pastures on site. Redmargin Zephyrlily (*Zephyranthes simpsonii*) was observed within the improved pasture along the northern boundary of the property. Common wild-pine (*Tillandsia fasciculata*) was observed within the mesic hammock along the northern boundary. Butterfly orchid (*Encyclia tampensis*) was also present within the mesic hammock along the northern boundary. More extensive surveys may reveal the occurrence of additional species of rare plant.

No additional rare species have been documented for the site in the FNAI database or reported in the proposal application.

The FFME lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. The table below contains species falling into any of these observational categories, species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision, and species reported in the application or during the site visit.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**
Rare plants documented on site					
Encyclia tampensis	butterfly orchid	G4‡	S3S4	N	CE
Tillandsia fasciculata	common wild-pine	G5‡	S4?	N	E
Zephyranthes simpsonii	redmargin zephyrlily	G2G3	S2S3	N	T
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
Gopherus polyphemus	gopher tortoise	G3	S3	N	ST
Additional rare animals reported on site by applicant					
none					

***Explanations of species ranks and conservation status are found at:** https://www.fnai.org/PDFs/Rank_and_Status_Explanation.pdf.*

‡*Species not tracked by FNAI*

GOAL C:
PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:
The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

The property is offered for less-than-fee acquisition, intended to be utilized in a manner consistent with the existing uses of cattle grazing and passive recreation. The approximately 139 acres of natural mesic flatwoods on site are in variable ecological condition. Historic fire exclusion has resulted in the succession of most mesic flatwoods on site to a closed canopy, hammock-like structure. The reintroduction of prescribed fire would provide an ecological

benefit to all mesic flatwoods on site, but it would require a considerable long-term commitment to rehabilitate areas with a lengthy time since fire.

Invasive plant control needs of the property are moderate, and the landowner is actively treating Brazilian peppertree, old-world climbing fern, and West Indian dropseed. Continued management of these species is recommended to further reduce their coverage on the subject property. West Indian marshgrass was noted to be present as dominant cover within the ditches on site but appears not to have yet spread to depression marshes. Chemical treatment options for this species may be limited due to the risk of impacting susceptible native plant species within the same waterways.

Measure C4:
The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 144 acres (23%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly within Priority 3 (22% of site), with the remainder in Priority 4 (< 1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:
The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 639 acres (100%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 6 (58% of site) and Priority 5 (42%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C8:
The number of acres of functional wetland systems protected.

The FFME reports approximately 138 acres (22%) of the proposed project would provide protection for functional wetland systems. This area is mostly within Priority 3 (22% of site), with the remainder in Priority 4(< 1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:
The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

600 acres are monitored and managed for invasive plant and animal species as needed. Species noted during time of site reconnaissance include Japanese climbing fern, cogongrass, bahiagrass, Caesar's weed, smut grass, tropical soda apple, and Brazilian pepper. Herbicides used include 24D, Velpar and Glyphosate.

GOAL D:
ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:
The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

The Fair Bluff property is located within the SFWMD's Upper East Coast Water Supply Planning Area. The property is not specifically included in any water resource development project listed in the water supply plan. However, the property contains approximately 148 acres of wetland plant communities or water features that provide hydrologic benefits through surface water storage and retention and groundwater recharge. Retaining these features would be consistent with the District's water supply plan.

Measure D2:
The quantity of water made available through the water resource development component of a district water supply plan for which a water management district is responsible.

The Fair Bluff property is located within the Taylor Creek/Nubbin Slough Basin of the Lake Okeechobee Watershed Restoration Project (LOWRP). LOWRP is listed as a water resource development project in the Lower Kissimmee Basin Water Supply Plan. The purpose of this project is to increase water storage capacity in the watershed, resulting in improved Lake Okeechobee water levels, improved quantity, timing, and distribution of water to the Northern Estuaries, improved water supply for existing legal Lake Okeechobee Service Area (LOSA) users, and to restore wetlands within the project area. The Fair Bluff property is not specifically identified in the project plan, however, ensuring that the wetland plant communities remain intact, this property would be expected to retain somewhere between 100 to 200 acre-feet of water storage.

Measure D3:
The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

The FFME reports approximately 639 acres (100%) of the proposed project would provide protection for groundwater recharge areas. This area is divided between Priority 4 (60% of site), Priority 3 (21%), and Priority 5(19%). Prioritization is based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells. Recharge of the Surficial Aquifer System is primarily rain driven and protecting the Fair Bluff property from development would provide 639 acres of potential recharge area.

Table 4. Spatial Analysis for Potential Water Quality Benefits for Fair Bluff Florida Forever proposal

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	0
FDEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	4
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	4
FDEP Special Nutrient Impaired WBIDs	9	9
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
FDEP Springsheds or within 5 miles	10, 7	0
FDEP BMAPs	10	10
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	27

GIS Evaluation score is converted to a 1 to 5 value (low to high)

FINAL DEAR SCORE = 2, medium low water quality protection benefits

GOAL E:
INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measure E1:
The number of acres acquired that are available for natural resource-based public recreation or education.

As this site is proposed as a conservation easement, the current landowners are only interested in limited public access on the entirety of the site. They may be amenable to hosting Operation Outdoor Freedom hunt events, administered by the Florida Forest Service, as several species are currently recreationally hunted by the family, including quail.

GOAL F:
PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

CULTURAL RESOURCES:

There are no cultural resources recorded or known to exist on this Florida Forever project. However, to date, the whole of this property has not been professionally surveyed for archaeological and/or historical sites. It is therefore likely that undocumented cultural resources exist on the property, but this cannot be determined without formal survey.

FIELD OBSERVATIONS:

During the Field Review of the proposed Fair Bluff Florida Forever project, staff did not observe any unrecorded cultural resources within the project area. However, based on an evaluation of the location and distribution of cultural resources in the surrounding area, there is potential for unrecorded sites to exist on the Fair Bluff property. Should any artifacts or other cultural resources be discovered on the property in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology Program for further evaluation.

GOAL G:
INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

There is room to increases and enhance the forestland for sustainable natural resource management. Between 55-100 acres of pasture could potentially be restored to the associated forest type, such as mesic flatwoods, and become more productive. There are about 60 acres of successional hardwood hammock that could additionally be restored.

Measure G1:
The number of acres acquired that are available for sustainable forest management.

The FFME reports approximately 181 acres (28% of site) could be available for sustainable forest management, divided between Priority 5 (133 acres) and Priority 3 (48 acres). Prioritization is based on 4 criteria set by the Florida Forest Service: whether trees are natural or planted, size of tract, distance to market, and hydrology. Priority 5 areas are considered "potential" pinelands; agricultural areas that could be restored to pineland.

Measure G2:
The number of acres of state-owned forestland managed for economic return in accordance with current best management practices.

The state could manage and see economic return on all 640 acres of this property through diverse forest products such as timber, cabbage palms, palmetto berry, ferns and cypress; however, this property is site is proposed as less-than-fee.

Measure G4:
The percentage and number of acres identified for restoration restored by reforestation.

Approximately 160 acres (25%) of the property could be restored to mesic flatwoods.

FLORIDA FOREVER CRITERIA

The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.):

- the project meets multiple goals described in subsection (4).
- the project contributes to the solution of water resource problems on a regional basis.
- the project is one of the components of the Everglades restoration effort.
- the project may be acquired, in whole or in part, using alternatives to fee simple, including but not limited to, tax incentives, mitigation funds, or other revenues, the purchase of development rights, hunting rights, agricultural or silvicultural rights, or mineral rights or obtaining conservation easements or flowage easements.

The Acquisition and Restoration Council shall give increased priority to:

- projects that can be acquired in less than fee ownership, such as a permanent conservation easement.
- projects that contribute to improving the quality and quantity of surface water and groundwater.
- projects located within the Florida Wildlife Corridor as defined in (§ 259.1055(4), F.S.).

MANAGEMENT

If acquired as a perpetual conservation easement, the primary management responsibility would remain with the landowner. Periodic monitoring of the site's management would occur to confirm continued compliance with the conditions of the easement. Monitoring would be

coordinated by the Office of Environmental Services (OES) within the Department of Environmental Protection's (DEP) Division of State Lands (DSL).

FUNDING SOURCES

Florida Forever is the only identified funding source.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues, Jurisdictional and Sovereignty Lands, Legal Issues

Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)

The easements and encumbrances of record would be determined during the appraisal mapping. A current title commitment would be obtained, or the owner's title insurance policy would be reviewed if the policy is available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits

There are no apparent contamination sites within the project based on the application form.

Estimated Cost of Appraisal and Mapping

DEP Bureau of Appraisal estimates $10,000 to $20,000 in appraisal fees.

Acquisition Phases

Subject to funding, the Fair Bluff Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs

Low to Moderate Potential: Fair Bluff is identified for Less-than-Fee acquisition. Public recreational opportunities are anticipated to be limited to ecotourism, agritourism, or hunting leases managed by the landowner. The subject site does contain wetlands and diverse woodlands which could be beneficial for aquifer recharge.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces

Low to Moderate Potential: The subject site has been identified as Priority 2 of the FEGN. FWC has identified strategic habitat conservation areas within the subject site for American swallow-tailed kites, Cooper's hawks, and Florida burrowing owls. The subject site also contains suitable habitats for Crested Caracara, Eastern Indigo Snake, Florida Sandhill Crane, and Wood Stork populations known to occur in the area.

Potential for Being Subdivided

Low Potential: Fair Bluff is surrounded by agricultural lands. The former dairy to the east has ceased operations and is now used for cattle grazing and ATV recreation. According to the Statewide 2070 Trend map prepared by 1000 Friends of Florida, the subject site is projected to be within an area that will be subjected to significant development pressure in the coming decades. The surrounding agricultural lands permit the landowner to continue management of the agricultural operations and natural resource values of the project. The nearest urban area is the City of Okeechobee, and the nearest developments are predominately communities along the northern edge of Lake Okeechobee.

Zoning and Densities within the Project Boundaries

The subject property is zoned as Agriculture.

Existing Land Uses and Future Land Use Designations

Existing Land Uses: The subject site is currently designated as Agricultural, the same as much of the surrounding area. The permissible density for this land use designation is 1 dwelling unit per 20 acres. This would allow for a current potential maximum of 32 dwelling units.
Future Land Uses: Considering the current rural/agricultural nature of the subject site and surrounding area - and its distance from population centers - it is unlikely that the land use designation will be altered in the immediate future.

Development Potential

Low Potential: The application did not indicate any immediate development pressure on the subject site aside from the abutting dairy farm which was closed and repurposed for recreational All-Terrain Vehicle (ATV) usage.

Transportation Planning Issues

The proposed project is in FDOT District 4 in Martin County. Approximately 1.5 miles southwest of the project area is a CSX mainline railway, which is a Strategic Intermodal System (SIS) corridor. Additionally, an active FEC rail mainline is situated approximately 1.5 miles southeast of the project area.

The FDOT Work Program includes a resurfacing project under construction along CR714, approximately 1 mile south of the project area. There is also planned pavement resurfacing and construction along SR710, located about one mile southwest of the project area. SR710 is a SIS corridor and serves as an evacuation route, as does US98/SR15, which is approximately 3 miles southwest of the project area.

The project area is within the Florida Wildlife Corridor. The existing Lake Okeechobee Scenic Trail, part of the SUN trail network, is located approximately 3 miles southwest of the project area. Additionally, the Martin Grade Scenic Highway (CR714) runs through the area.
While the Department finds no adverse impacts to this proposed project currently, coordination with FDOT District 4 staff during the acquisition process is recommended to address transportation system issues and incorporate them into management plans as appropriate.

Ongoing Governmental Efforts

The United States Army Corps of Engineers (USACE), Jacksonville District, in partnership with the South Florida Water Management District (SFWMD), prepared the Third Revised Draft Integrated Project Implementation Report (PIR) and Supplemental Environmental Impact Statement (EIS) to evaluate the federal and non-federal interest in implementing the Lake Okeechobee Watershed Restoration Project (LOWRP), a component of the Comprehensive Everglades Restoration Plan (CERP) that achieves restoration in the heart of the Everglades ecosystem. CERP was approved as a framework for restoring the south Florida ecosystem while providing for other water-related needs of the region in the Water Resources Development Act of 2000 (WRDA 2000). The LOWRP Third Revised Draft PIR and Supplemental EIS presents a description of existing and expected future conditions in the south Florida Everglades ecosystem, formulation, and evaluation of plans considered to

address ecosystem restoration needs in the region, analysis of environmental effects of the Recommended Plan, project costs, and implementation issues.

ACKNOWLEDGEMENTS
Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Meghan Lauer and Katie Briley in DSL's Office of Environmental Services were responsible for the overall coordination of this report, with contributions from the following:

- Division of Historical Resources: Brandon Ackermann, Jason O'Donoughue
- Florida Forest Service: Richard Larsen, Michelle Danielson, Cat Ingram
- Department of Commerce: Yazmin Valdez, James Stansbury
- Florida Fish and Wildlife Conservation Commission: Diana Pepe, Josiah Freese
- Florida Natural Areas Inventory: Geoff Parks, Jake Travers
- DEP Division of Environmental Assessment and Restoration: Moira Homann, Kenneth Weaver
- Florida Department of Transportation: Ann Broadwell, Fernando Ascanio, Alex Marks, Allison Beaty
- South Florida Water Management District: Justin Nolte

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

Fair Bluff: Florida Forever Measure Evaluation 20240729

GIS ACRES = 640

MEASURES	Resource Acres[a]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	371	58%
Priority 4	0	0%
Priority 5	195	31%
Total Acres	566	89%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	29	4%
Priority 5	164	26%
Priority 6	401	63%
Total Acres	593	93%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	599	94%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	599	94%
B4: Under-represented Natural Communities		
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)	0	0%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	139	22%
Upland Hardwood Forest (G5)	0	0%
Total Acres	139	22%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	1	
G3	1	
G4	0	
G5	0	
Total	2	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	141	22%
Priority 4	3	< 1%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	144	23%

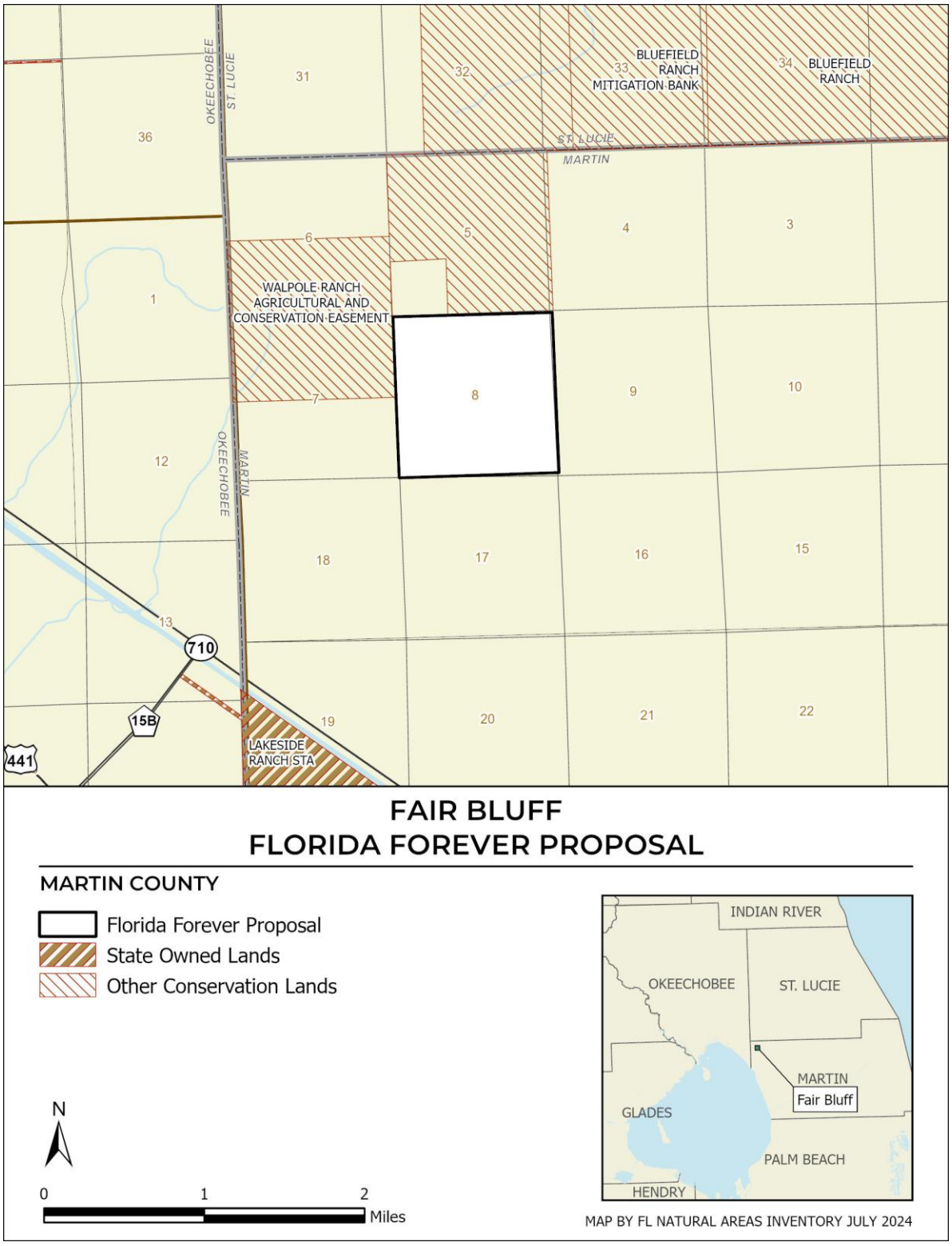
MEASURES (continued)	Resource Acres[a]	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	267	42%
Priority 6	372	58%
Priority 7	0	0%
Total Acres	639	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	137	22%
Priority 4	1	< 1%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	138	22%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	136	21%
Priority 4	385	60%
Priority 5	118	19%
Priority 6	0	0%
Total Acres	639	100%
E2: Recreational Trails (miles) (prioritized trail opportunities from Office of Greenways and Trails & Univ. 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		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	48	7%
Priority 4	0	0%
Priority 5 - Potential Pinelands	133	21%
Total Acres	181	28%
G3: Forestland for Recharge	27	4%

[a]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.

Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by Florida Natural Areas Inventory

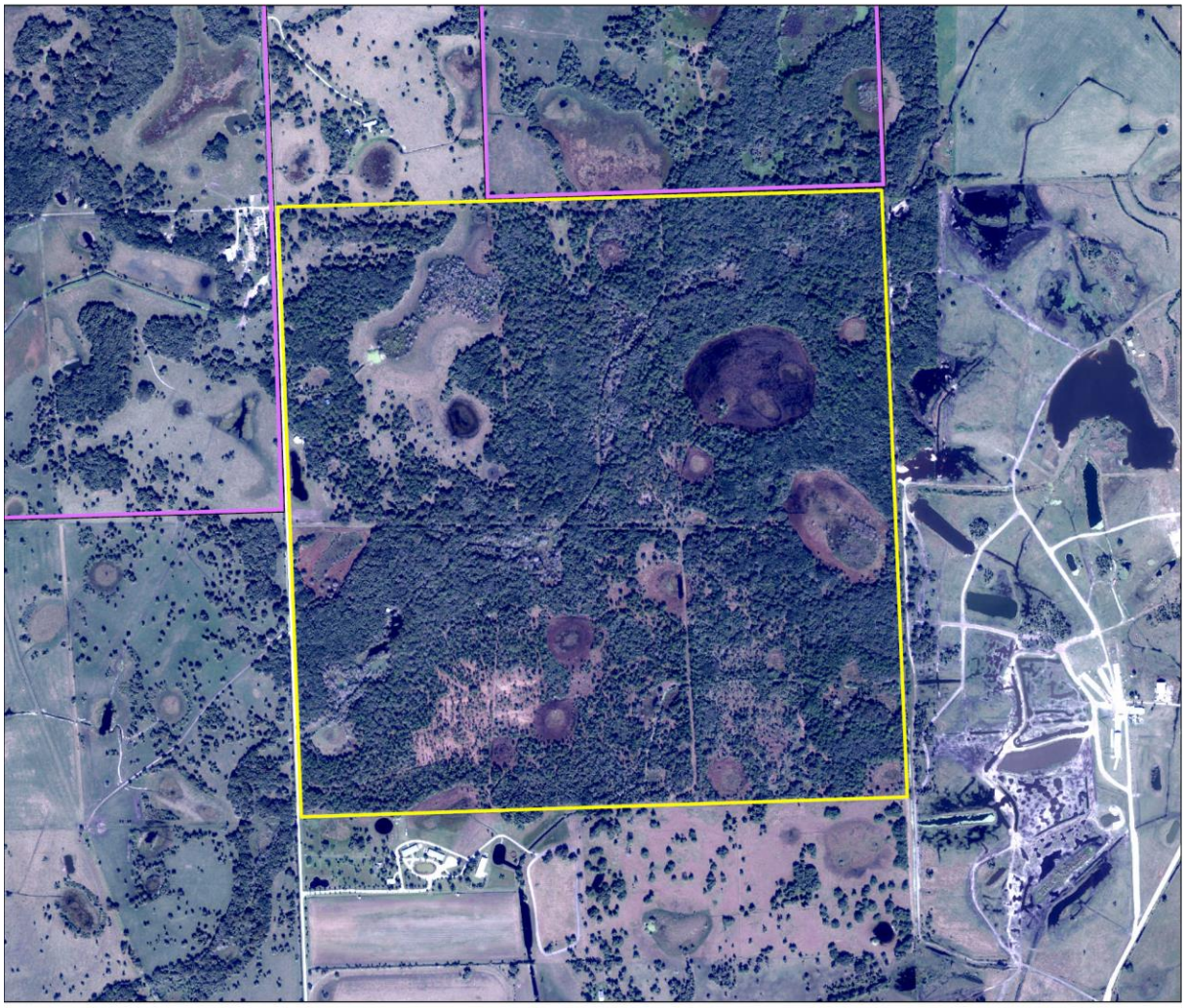
B1: Florida Forever map



B2: Aerial map

Fair Bluff Florida Forever Proposal

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



Map Produced by: FL Natural Areas Inventory, N. Pasco, July 2024 Background: 2021 Martin County Ortho Resolution = 0.076 meter

FNAI

Florida Forever Proposal Boundary

Existing Private Conservation Lands

N

0 0.25 0.5 1 Miles

Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

County	Parcel ID	Owner	Acres	Just (Market) Value	Parcel Designation
Martin	08-38-37-000-000-00010-3	Fair Bluff Ltd	618.97	$3,246,170	Essential
Martin	08-38-37-000-000-00020-1	Fair Bluff Ltd	20.09	$240,597	Essential
			639.06	**$3,486,767**	

Appendix D:

Imperiled Species FNAI Ranking Definitions

FNAI
Definitions of imperiled species ranks and conservation 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

FNAI
Definitions of imperiled species ranks and conservation status

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.
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 = Partial status: some but not all of the species' infraspecific taxa have federal
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.

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 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: <http://www.doacs.state.fl.us/pi/>.

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

Appendix E:

Site visit photos.



Photo 1. Active gopher tortoise burrow.



Photo 2. Mesic flatwoods.



Photo 3. Semi-improved pasture.



Photo 4. Mesic hammock.

Florida Forever Project Evaluation Report

Highlands Hammock Corridor
Highlands County



Mesic hammock on property.

Acquisition Type: Less-Than-Fee
GIS Acres: 959.82
Just Value: $7,024,289
Application Date: April 15, 2024
Project Sponsors: Keith Fountain Law

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 11, 2024

Executive Summary

The proposed Highlands Hammock Corridor Florida Forever project contains 11 parcels totaling approximately 960 acres in western Highlands County.10 parcels are owned by the Livingston family and 1 parcel is owned by Martin McKenna. The proposal provides an important ecological corridor to existing state conservation lands as it shares its northern and southern boundaries with Highlands Hammock State Park. The proposal also borders the Heartland Wildlife Corridor Florida Forever project on its western edge. The project is proposed for less-than-fee acquisition and has a total tax assessed value of $7,024,289.

The property is currently used by the landowners for cattle ranching. As such, most of the property is made up of improved and semi-improved pasture. The most notable natural feature found on the property is a large wetland feature in the northern portion of the proposal that extends into the State Park. This wetland was likely once a basin marsh or basin swamp. It is dominated by a mosaic of open water, emergent and floating aquatic plants and areas of shrubs and trees. Almost 100 acres of the property contains several under-represented natural communities in Florida, including mesic flatwoods, scrub and scrubby flatwoods. The Livingston landowner has begun to restore a small portion of the property containing former citrus groves to historic landcover with the planting of longleaf pine.

The Highlands Hammock Corridor proposal provides habitat for a number of imperiled species including the Florida panther, Florida black bear, gopher frog, gopher tortoise, butterfly orchid and eastern indigo snake. This proposal mostly lies within Priority 1 of the Florida Ecological Greenways Network (FEGN). The landowners report seeing both species, in addition to other rare animals including southeastern fox squirrel, roseate spoonbill, crested caracara and bald eagle on site. Just after the site visit, the landowner of the Livingston parcels caught footage of a Florida panther (*Puma concolor coryi)* on the property via a game camera and there have been multiple sightings of Florida panther at the adjacent Highlands Hammock State Park.

This proposal contains 3 recorded archaeological sites, the most notable of which is a Pre-Columbian mound in the northeast corner of the property. This mound is largely made up of sand and likely contains human remains. The Division of Historical Resources notes that there may be numerous unrecorded archaeological sites on the property.

If approved for addition to the 2025 Florida Forever Priority List, the project should be considered as an amendment to the Heartland Wildlife Corridor Florida Forever project boundary in the Less-Than-Fee category. All 960 acres proposed for acquisition are considered essential due to the resources documented on the property (see Appendix C). An interagency team conducted a site visit to the project site on July 11, 2024. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The proposed Highlands Hammock Corridor project will extend a contiguous landscape of working lands and conservation areas that provides critical habitat for rare and imperiled species along the western edge of the Lake Wales Ridge. This project will provide an important land use buffer for Highlands Hammock State Park and protect significant cultural resources in an area with a high potential for development.

Acquisition of this property would serve to:

- Conserve and protect a portion of Florida's rural landscape to provide and enhance wildlife corridors for rare and imperiled species.
- Enhance the coordination and completion of land acquisition projects.
- Increase the protection of Florida's biodiversity at the species, natural community, and landscape levels.
- Preserve significant archaeological sites.
- Protect a significant portion of land area in imminent danger of development, in imminent danger of losing its significant natural attributes or recreational open space, or in imminent danger of subdivision which would result in multiple ownership and make acquisition of the property costly or less likely to be accomplished.
- Protect, restore and maintain the quality and natural functions of land, water and wetland systems of the state.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Highlands Hammock Corridor proposal includes approximately 960 acres in western Highlands County about 6.5 miles southwest of Sebring. The property is proposed by the owners for less-than-fee acquisition.

The proposal serves as a connector between the two noncontiguous portions of Highlands Hammock State Park. The park's 2 main tracts are separated by 0.5 to 0.75 miles except for a narrow corridor that extends south from the northern tract; even this corridor only connects corner-to-corner with the park's southern tract. The current proposal is the most significant remaining natural and agricultural land within this gap and shares extensive borders with Highlands Hammock State Park to both the north and south.

The tract is irregularly shaped, approximately 3 miles wide (east to west) and 1.4 miles north to south. A small inholding containing a cemetery is excluded. Vaughn Road extends along and into the property from the east, fronting a southern protrusion of the park for about 0.5 miles; west of that the tract fronts the westernmost 0.25 mile of the public portion of Vaughn Road to both the north and south.

A field survey was conducted on July 11, 2024, by the Acquisition and Restoration Council (ARC) liaison staff, including FNAI biologists Geoffrey Parks and Jake Travers. This evaluation is based on information gathered from the proposal, the field survey, available GIS data including aerial photography, US Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.6), and the FNAI Natural Heritage database.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

The property is located at the eastern edge of the Hardy Upland Province, a moderately hilly region in the Peace River District that is underlain by clastic, largely impervious deposits of the Hawthorn layer, which leads to the development of well-defined stream drainages and few karstic land features. The central portion of the tract is on an area of relatively well-drained soils on what is basically a westerly projection of the Lake Wales Ridge. Elevations rise to about 105' above Mean Sea Level (MSL) in this section. South of the higher central portions of the tract is a more poorly drained area of wet flatwoods and baygall (now including improved pasture), hydrated by groundwater seepage from the Lake Wales ridge to the east and the proposal's uplands to the north. This area slopes gently to the south. To the west of the dry uplands are mainly woodlands that slope down into a portion of an expansive forested wetland which feeds Little Charlie Bowlegs Creek. The lowest elevations on the tract are in this western swamp, which lies below about 80' MSL.

The most notable natural feature on the property—27% of the proposal acreage—is a large wetland on the western edge of the northern part of the property, which continues onto adjacent lands including the state park, where it is mapped as a basin swamp. Although this area is dominated by a variety of native plants, it does not correspond well to any defined

natural community classification. It possibly represents a former large basin marsh that is undergoing succession due to hydrological changes; it has here been mapped as successional hydric forest/shrubland. As observed during the site visit, this wetland consists of a mosaic of open water areas dominated by emergent and floating aquatic plants and areas of shrubs and trees. Treed areas consist of scattered patches of red maple (*Acer rubrum*) with occasional loblolly bay (*Gordonia lasianthus*), some cabbage palm (*Sabal palmetto*) on berms and hummocks, and rarely, pond cypress (*Taxodium ascendens*). More open areas have dense growth of Virginia chain fern (*Anchistea virginica*), false nettle (*Boehmeria cylindrica*), spadeleaf (*Centella erecta*), flatsedge (*Cyperus* sp.), manyflower marshpennywort (*Hydrocotyle umbellata*), maidencane (*Hymenachne hemitoma*), soft rush (*Juncus effusus* ssp. *solutus*), broadleaf pondlily (*Nuphar advena*), pickerelweed (*Pontederia cordata*), toothed midsorus fern (*Telmatoblechnum serrulatum*), and Virginia marsh St. John's wort (*Triadenum virginicum*). Interspersed in the open areas are dense shrubby patches with southern bayberry (*Morella cerifera*) and buttonbush (*Cephalanthus occidentalis*). Invasive plants—Cuban bulrush (*Cyperus blepharoleptos*, FISC-1), West Indian marsh grass (*Hymenachne amplexicaulis*, FISC-1), Peruvian primrosewillow (*Ludwigia peruviana*, FISC-1), and old-world climbing fern (*Lygodium microphyllum*, FISC-1) are present but were not observed to be dominant.

The most abundant natural community remaining in upland areas of the tract is mesic flatwoods, which account for about 9% of the site. Mesic flatwoods on the property have a moderately open canopy of slash pine (*Pinus elliottii*) or longleaf pine (*Pinus palustris*). An understory of live oak (*Quercus virginiana*) and cabbage palm, or in some places sand live oak (*Quercus geminata*), not typical of this community type, is common in flatwoods in this tract, likely due to a relative lack of fire. Tall shrubs include southern bayberry and hog plum (*Ximenia americana*) interspersed with an often-dense layer of saw palmetto (*Serenoa repens*). Groundcover diversity varies; the ground layer in some stands are dominated by a very few disturbance-tolerant species—mainly witchgrasses, *Dichanthelium* spp.—while others retain a good amount of groundcover diversity, including purple bluestem (*Andropogon cretaceus*), Southern wiregrass (*Aristida beyrichiana*), netted pawpaw (*Asimina reticulata*), coastalplain chaffhead (*Carphephorus corymbosus*), goldenaster (*Chrysopsis* sp.), Florida Alicia (*Chapmannia floridana*), Elliott's milkpea (*Galactia elliottii*), blackroot (*Pterocaulon pycnostachyum*), and shiny blueberry (*Vaccinium myrsinites*).

The tract occurs at an elevational transition where soils along slopes are often saturated by groundwater seepage from adjacent well-drained uplands; baygalls typically occur in such areas, which are found in several parts of the tract. loblolly bay and sweetbay (*Magnolia virginiana* var. *australis*) are the dominant canopy species, with some red maple, and swamp laurel oak (*Quercus laurifolia*) occurring occasionally. The understory consists mainly of saplings of the canopy species along with swamp bay (*Tamala palustris*). Dense patches of ferns, mainly Virginia chain fern and toothed midsorus fern, with occasional manyflower marshpennywort, lizard's tail (*Saururus cernuus*) occur in pools of standing water and in gaps between shrubs. Overall, the baygalls appear to be in good condition with no hog activity evident, although some old-world climbing fern sprouts were seen.

Basin marsh occurs in the western portion of the proposal in association with the large wetland discussed above. It is similar in composition to the successional hydric forest/shrubland, although generally more herb-dominated. Bald cypress (*Taxodium distichum*) has been planted in a portion of this community along the southern property boundary.

Areas of scrub and scrubby flatwoods are in two distinct areas of the tract, totaling 15 acres (less than 2% of the site). One stand had a scattered overstory of longleaf pine, while the other had occasional sand pine (*Pinus clausa*); these relatively fire excluded stands had a dense 6- to 8 ft high shrub layer with Chapman's oak (*Quercus chapmanii*), sand live oak, and myrtle oak (*Quercus myrtifolia*) dominant. A variety of other shrubs and small trees are also present, including scrub palmetto (*Sabal etonia*), saw palmetto, staggerbush (*Lyonia ferruginea*), winged sumac (*Rhus copallinum* var. *copallinum*), and fringetree (*Chionanthus* sp.). In gaps between shrubs and along trail edges, numerous smaller plants and herbs are present, including bluestem (*Andropogon sp.*), southern wiregrass and other threeawns (*Aristida* spp.), capillary hairsedge (*Bulbostylis ciliatifolia*), Florida alicia, prickly pear (*Opuntia* sp.), scrub goldenaster (*Pityopsis aequilifolia*), Elliott’s milkpea, sarsaparilla vine (*Smilax pumila*), tailed bracken (*Pteridium pseudocaudatum*), coastalplain chaffhead (*Carphephorus corymbosus*), tall elephantsfoot (*Elephantopus elatus*), Feay’s Palafox (*Palafoxia feayi*) sandyfield beaksedge (*Rhychospora megalocarpa*), sandhill tippytoes (*Tephrosia mysteriosa*), and Adam's needle (*Yucca filamentosa*).

At the intergrade between the baygall and the large wetland at the west end of the property is a zone of wet forest with a deciduous hardwood canopy. it has been mapped as bottomland forest, but because it was not observed during the site visit, this has not been verified. Mesic hammock occurs in a few areas; these are forests of mature live oak with cabbage palm. A relatively dense shrub layer of young cabbage palm and saw palmetto with occasional American beautyberry (*Callicarpa americana*) is present. The hammocks show evidence of grazing and have relatively little groundcover.

Improved pastures make up the largest proportion of the property, at about 30% of the proposal acreage. Pastures on the tract vary greatly based on their use and site conditions. Dry pasture in the eastern part of the tract is a near-monoculture of bahiagrass (*Paspalum notatum*); however, evidence of the sandhill that once occurred persists in the form of scattered large turkey oaks *(Quercus laevis)* and single individuals of sandhill milkweed *(Asclepias humistrata)* and butterflyweed *(Asclepias tuberosa)*, that were noted during the site assessment. Improved pastures on less well-drained soils elsewhere on the tract are generally a mix of big carpetgrass (*Axonopus furcatus*) and bahiagrass. Other species occasionally intermixed include West Indian dropseed (*Sporobolus jacquemontii,* FISC-1) and yellow milkwort (*Polygala rugelii*). A sparse tree cover of slash pine, laurel oak (*Quercus hemisphaerica*), live oak, and cabbage palm often occurs.

In addition to improved pastures, semi-improved pastures also occur. These have a moderate to nearly closed tree canopy but are generally open and grassy below. Some areas that were partially converted to pasture are clearly flatwoods-derived, with some mature longleaf pine, scattered patches of saw palmetto, and occasional flatwoods herbs such as blackroot. Others are more hammock-like (though perhaps still derived from flatwoods), with a midstory of live oak. A wetter semi-improved pasture had a sparse slash pine canopy with the grass layer dominated by carpetgrass rather than bahiagrass, and areas of soft rush.

Former citrus groves occupy about 8% of the property. These now are covered with a tall, grassy growth consisting of a mix of pasture species such as bermudagrass (*Cynodon dactylon*) and bahiagrass, invasive grasses such as Guineagrass (*Megathyrsus maximus*, FISC-2) and Natalgrass (*Melinis repens*, FISC-1), and ruderal species. Some of the former

groves have been recently planted with longleaf pine. About 7% of the proposal is an active citrus grove.

Various invasive plants occur sporadically on the site, although they appear to be more common and widespread in disturbed areas such as pastures than in natural communities. West Indian dropseed is abundant in some improved pastures, and a patch of Cogongrass (*Imperata cylindrica*, FISC-1) was also noted there. Rosary pea (*Abrus precatorius*, FISC-1) was noted on fencelines at the property edge, Guineagrass and Natalgrass are well-established in the former citrus groves. Camphortree (*Camphora officinarum*, FISC-1) was observed in the flatwoods. Other invasive plants—Cuban bulrush, West Indian marshgrass, Peruvian primrosewillow, and old-world climbing fern—were seen sporadically in the wetlands.

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

Community or Landcover	Acres	Percent of Proposal
mesic flatwoods	82	9
baygall	51	5
mesic hammock	42	4
basin marsh	10	1
basin swamp	9	1
bottomland forest	9	1
scrubby flatwoods	8	1
scrub	7	1
pasture - improved	289	30
successional hydric forest/shrubland	254	27
abandoned field/pasture	77	8
Agriculture	63	7
pasture - semi-improved	37	4
artificial pond	8	1
developed	6	1
road	5	<1
successional hardwood forest	<1	<1
Total	958	100

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Highlands Hammock Corridor (HHC) Florida Forever proposal based on field observations during the July 11, 2024, site visit and results of the GIS analysis. The proposal shares boundaries with Highlands Hammock State Park to the north, east, and south. The western boundary adjoins the Heartland Wildlife Corridor Florida Forever project. Acquisition of the Highlands Hammock Corridor proposal as a

conservation easement would provide significant connectivity between the noncontiguous tracts of the State Park.

Cattle ranching is the primary agricultural activity on the property, and improved pasture comprises 28% of the property. Major habitat types include basin swamp (24%), mixed hardwood-coniferous (12%), baygall (9%), mesic flatwoods (6%), and former citrus grove (9%) that the Livingston landowner is replanting with longleaf pine (*Pinus palustris*). The Livingston landowner treats invasive plants, including cogon grass (*Imperata cylindrica*) and climbing fern (*Lygodium spp*.). Additionally, the landowner of the Livingston parcels retains snags for wildlife species, such as woodpeckers. Prescribed fire was used historically on the property but has not been used in recent years. However, there have been recent fires caused by lightning strikes.

The property supports a diversity of wildlife species. Imperiled and rare species observations from the site visit included gopher tortoise (*Gopherus polyphemus*) burrows, pocket gopher (*Geomys pinetis*) mounds, tricolored heron (*Egretta tricolor*), swallow-tailed kite (E*lanoides forficatus*), and southern fox squirrel (*Sciurus niger niger*). Imperiled and rare species reported on the property by the landowner and staff from the adjacent State Park included crested caracara (*Polyborus plancus audubonii*), Florida sandhill crane (A*ntigone canadensis pratensis*), roseate spoonbill (*Platalea ajaja*), wood stork (Mycteria americana), eastern indigo snake (*Drymarchon couperi*), and older observations of Florida panther. Additionally, southeastern American kestrels (*Falco sparverius paulus*) nest on the adjacent State Park and likely use the property.

Other wildlife observations from the site visit included white-tailed deer (*Odocoileus virginianus)*, signs of turkey (*Meleagris gallopavo*), oak toad (*Anaxyrus quercicus*), and ground skink (*Scincella lateralis*). The landowner reported frequently observing black bears (*Ursus americanus floridanus*). Other observations reported by the landowner included flying squirrel (*Glaucomys volans*) and eastern diamond-backed rattlesnake (*Crotalus adamanteus*).

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for HHC is 8.4.

The entire property is within Priority 1 of the FEGN and considered frequent bear range. About 86% is modeled as FWC Strategic Habitat Conservation Areas. According to the Critical Lands and Waters Identification Project, all the property is Priority 1 in terrestrial. The entire property provides protection to class 3F surface waters (Little Charlie Bowlegs), about 43% is Priority 2-4 floodplain resources, and 41% (361 acres) of the proposal contains wetlands.

In conclusion, the proposal supports many imperiled wildlife species and is an important connector between the main tracts of Highlands Hammock State Park. Acquisition of the property under an easement would protect Priority 1 areas of the FEGN. A habitat management program that incorporates routine prescribed fire on the property would further improve and maintain conditions in native habitat and benefit many imperiled wildlife species.

GOALS, MEASURES AND CRITERIA

GOAL A:
ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:
The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 960 acres would contribute to the enhancement of essential natural resources, ecosystem service parcels and connecting linkage corridors.

Measure A2:
The number of acres protected through the use of alternatives to fee simple acquisition.

The entirety of the project (960 acres) is proposed for less-than-fee acquisition via a conservation easement.

Measure A3:
The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

No funding partners have been identified.

GOAL B:
INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:

The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 62 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measures Evaluation (FFME) table (Appendix B) reports the site contains approximately 859 acres (90% of site) of Strategic Habitat Conservation Areas. This is primarily within Priority 1 (82% of site) and Priority 2 (7%) with the remainder in Priorities 3 and 5 (each with <1%).

Measure B2:

The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 634 of Florida's rarest species were mapped and divided into six priority classes. The FFME reports the proposed project contains approximately 911 acres (95% of site) of rare species habitat. The habitat is divided between Priority 3 (33% of site), Priority 2 (32%), Priority 4 (12%), Priority 6 (8%), Priority 1 (5%), and Priority 5 (4%).
Table 2 lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum total of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Habitat Conservation Priorities

Scientific Name	Common Name	Global Rank	Acres
Chionanthus pygmaeus	pygmy fringe tree	G2G3	48
Hartwrightia floridana	hartwrightia	G2	260
Polygala lewtonii	Lewton's polygala	G2	264
Ceratocanthus aeneus	shining ball scarab beetle	G2G3	72
Haroldiataenius saramari	sand pine scrub ataenius beetle	G3G4	8
Romulus globosus	round-necked romulus long-horned beetle	G1G2	206
Trigonopeltastes floridana	scrub palmetto flower scarab beetle	G2G3	59
Typocerus fulvocinctus	yellow-banded typocerus long-horned beetle	G2G3	48
Drymarchon couperi	eastern indigo snake	G3	269
Lithobates capito	gopher frog	G2G3	108
Antigone canadensis pratensis	Florida sandhill crane	G5T2	299
Caracara plancus	crested caracara	G5	353
Mycteria americana	wood stork	G4	59
Mustela frenata peninsulae	Florida long-tailed weasel	G5T3?	743
Puma concolor coryi	Florida panther	G5T1	864

Measure B3:
The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages.

The FFME reports approximately 956 acres (100%) of the proposed project contributes to protection of ecological greenways with 99% of the site falling within Priority 1 areas, and <1% in Priority 5. Prioritization is based on such factors as importance for wide-ranging species like Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B4:
The number of acres acquired of under-represented native ecosystems.

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The Florida Forever Measures table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Highlands Hammock Corridor proposal contains 82 acres of mesic flatwoods (9% of site) and 15 acres of scrub/scrubby flatwoods (2%).

Measure B5:
The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

Although the Highlands Hammock Corridor proposal would connect the northern and southern tracts of Highlands Hammock State Park which is in turn contiguous with several conservation easements held by the State, it would not currently contribute to a contiguous landscape-sized protection area of at least 50,000 acres.

Measure B6:
The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

This property provides habitat or potential habitat for a variety of imperiled species. Active burrows of gopher tortoise (*Gopherus polyphemus*) and a pair of southeastern American kestrels (*Falco sparverius paulus*) with a juvenile were seen during the site visit, and the tract is in an area where the Florida black bear is classified as Frequent. Four rare plant species were also seen during the site visit, as listed in the table below. A Florida panther (*Puma*

concolor coryi) was recently documented by a game camera onsite. Numerous additional rare wildlife species have been reported by the landowner, and other rare species may be documented with further survey efforts.

The FFME lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. Table 3 contains species falling into any of these observational categories, species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision, and species reported in the application or during the site visit.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**
Rare plants documented on site					
Coleataenia abscissa	cutthroatgrass	G3	S3	N	E
Encyclia tampensis	butterfly orchid	G4‡	S3S4	N	CE
Tillandsia balbisiana	Balbis' airplant	G4G5‡	S3	N	T
Tillandsia utriculata	giant airplant	G4‡	S4	N	E
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
Gopherus polyphemus	gopher tortoise	G3	S3	N	ST
Falco sparverius paulus	southeastern American kestrel	G5T4	S3	N	ST
Puma concolor coryi	Florida panther	G5T1	S1	E	FE
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on site by applicant					
Crotalus adamateus	eastern diamondback rattlesnake	G3	S3	UR	N
Drymarchon couperi	eastern indigo snake	G3	S2?	T	FT
Caracara plancus	crested caracara	G5	S2	T	FT
Elanoides forficatus	swallow-tailed kite	G5	S2	N	N
Haliaeetus leucocephalus	bald eagle	G5	S3	N	N
Platalea ajaja	roseate spoonbill	G5	S2	N	ST
Puma concolor coryi	Florida panther	G5T1	S1	E	FE
Sciurus niger niger	southeastern fox squirrel	G5T5	S3	N	N

‡*Species not tracked by FNAI*

GOAL C:
PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:
The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

The property is offered for less-than-fee acquisition, intended to be utilized in a manner consistent with existing uses. The approximately 82 acres of natural mesic flatwoods and 15 acres of scrub and scrubby flatwoods on the Highlands Hammock Corridor are in fair ecological condition. These would benefit from prescribed fire; although the Livingston family has used fire in the past, it is not being used currently. The wetlands on the property are in good condition. The roughly 429 acres of pasture and former or current agricultural lands would require considerable long-term commitment to restore to native species. Although longleaf pine has been planted in some of the former citrus groves, full restoration of natural communities is likely outside the scope of restoration commitment for a working cattle ranch. Invasive plant control needs of the property appear to be moderate, based on observations made during the site visit. Most invasive species appear to be present in low numbers, although the entire site was not assessed. A baseline assessment to determine the full extent of invasive species is warranted if acquisition of an easement occurs.

Measure C4:
The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 425 acres (44%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly divided between Priority 2 (32% of site), Priority 3 (10%), and Priority 4 (3%), with the remainder in Priority 5 (<1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:
The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 959 acres (100%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 4 (76% of site) and Priority 2 (24%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C8:
The number of acres of functional wetland systems protected.

The FFME reports approximately 353 acres (37%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 2 (29% of site), Priority 3 (7%), and Priority 4 (<1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:
The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

This property has minimal invasive species management. The landowners have worked with NRCS in the past. The Livingston landowner would like to enhance and continue to manage these populations, including cogongrass, Japanese climbing fern, rosary pea, and Caesar's weed.

Furthermore, reportedly, the site surrounds a citrus grove (outparcel in northeastern portion of proposal) utilized in the state's research to find a cure for citrus greening. It is imperative the citrus grove be kept isolated to maintain elements that make the research endeavor successful.

GOAL D:
ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:
The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

The property is located within the Southwest Florida Water Management District's (SWFWMD) Heartland Planning Region for water supply and is within the Southern Water Use Caution Area. The property is within the proposed acquisition list for SWFWMD. The property is bounded by Highlands Hammock State Park on the North, South, and Southeast boundaries, which is owned by the Florida Department of Environmental Protection. Approximately 40% of the property is categorized as varying wetlands which could provide flood storage.

SWFWMD's mission is comprised of Four main Area's of Responsibility (AOR's); Water Supply, Water Quality, Natural Systems, and Flood Protection. Each area has a goal; Water Supply: Ensure an adequate supply of water to provide for all existing and future reasonable and beneficial uses while protecting and maintaining water resources and related natural systems. Water Quality: Protect and improve water quality to sustain the water resources, environment, economy, and quality of life. Natural Systems: Preserve, protect, and restore natural systems to support their natural hydrologic and ecological functions. Flood Protection: Minimize flood damage to protect people, property, infrastructure, and investment. This property contributes to all of the four AOR's, Water Quality 73.7%, Natural Systems 58.9%, Flood protection 48.2%, and Water Supply 1.8%.

Measure D3:
The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

The FFME reports approximately 959 acres (100%) of the proposed project would provide protection for groundwater recharge areas. This area is divided between Priority 3 (49% of site), Priority 4 (44%), Priority 5 (6%), and Priority 2 (1%). Prioritization is based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Highlands Hammock Corridor Florida Forever proposal

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	0
DEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	8
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	7
FDEP Special Nutrient Impaired WBIDs	9	0
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
FDEP Springsheds or within 5 miles	10, 7	0
FDEP BMAPs	10	0
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	15

GIS Evaluation score is converted to a 1 to 5 value (low to high)

FINAL DEAR SCORE = 2, medium low water quality protection benefits

GOAL E:
INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measure E1:
The number of acres acquired that are available for natural resource-based public recreation or education.

The site is proposed as a conservation easement and as such, public access is not applicable. Current landowners may consider hosting Operation Outdoor Freedom hunt events, administered through the Florida Forest Service, as family deer and turkey hunts occur.

GOAL F:
PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

Measure F1:
The increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

The proposed Highlands Hammock Corridor Florida Forever Project would meet Measure F1, as acquisition would result in an increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

CULTURAL RESOURCES:

According to the Division of Historical Resource's Florida Master Site File, there are currently three archaeological sites located within or intersecting the boundary of the proposal. All three recorded archaeological sites are Pre-Columbian in origin with R/W GREEN MOUND (HG00710) particularly notable. HG00710 is a large sand mound likely marking the core of the Pre-Columbian cultural landscape present on the property. Importantly, HG00710 is flagged in the Florida Master Site File as containing human remains, and extreme care should be taken to avoid any ground disturbance at the location of this site.

FIELD OBSERVATIONS:

During the Field Review of the proposed Highlands Hammock Corridor Florida Forever project, staff observed all three sites in good condition. There is notably a high likelihood for numerous unrecorded sites to exist on the Highlands Hammock Corridor property. Should any artifacts or other cultural resources be discovered on the property in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology Program for further evaluation.

GOAL G:
INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

There is good potential for increased forestland. The Livingston landowner has already started to restore 40 acres of sandhill (citrus restored to Longleaf pine). There are about 200 acres of pasture that could be reforested. Noted during site tour was the current landowner's interest in expanding knowledge and opportunity to collaborate with the Florida Forest Service to increase prescribed burning, tree planting, and even stewardship programs and potential champion tree nominations.

Measure G1:
The number of acres acquired that are available for sustainable forest management.

The FFME reports approximately 406 acres (42% of site) could be available for sustainable forest management, divided between Priority 5 (344 acres) and Priority 3 (62 acres). Prioritization is based on 4 criteria set by the Florida Forest Service: whether trees are natural or planted, size of tract, distance to market, and hydrology. Priority 5 areas are considered "potential" pinelands; agricultural areas that could be restored to pineland.

Measure G4:
The percentage and number of acres identified for restoration restored by reforestation.

Restoration is possible on 200 acres of pasture, or approximately 23% of the site, as it could be restored to the associated forest type. There are additional opportunities to reintroduce prescribed fire into the ecosystem.

FLORIDA FOREVER CRITERIA
The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.)

- the project meets multiple goals described in subsection (4).
- the project enhances or facilitates management of properties already under public ownership.
- the project has significant archaeological value.
- the project has a significant portion of its land area in imminent danger of development, in imminent danger of losing its significant natural attributes or recreational open space,

and in imminent danger of subdivision which would result in multiple ownership and make acquisition of the project costly or less likely to be accomplished.

- the project may be acquired, in whole or in part, using alternatives to fee simple, including but not limited to, tax incentives, mitigation funds, or other revenues, the purchase of development rights, hunting rights, agricultural or silvicultural rights, or mineral rights or obtaining conservation easements or flowage easements.

The Acquisition and Restoration Council shall give increased priority to:

- projects that can be acquired in less than fee ownership, such as a permanent conservation easement.
- projects that contribute to improving the quality and quantity of surface water and groundwater.
- projects located within the Florida Wildlife Corridor as defined in (§ 259.1055(4), F.S.).

MANAGEMENT

If acquired as a perpetual conservation easement, the primary management responsibility would remain with the landowner. Periodic monitoring of the site's management would occur to confirm continued compliance with the conditions of the easement. Monitoring would be coordinated by the Office of Environmental Services (OES) within the Department of Environmental Protection's (DEP) Division of State Lands (DSL).

FUNDING SOURCES

Florida Forever is the only identified funding source.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues, Jurisdictional and Sovereignty Lands, Legal Issues
Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)
The easements and encumbrances of record would be determined during the appraisal mapping. A current title commitment would be obtained, or the owner's title insurance policy

would be reviewed if the policy is available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits
There are no apparent contamination sites within the project based on the application form.

Estimated Cost of Appraisal and Mapping
DEP Bureau of Appraisal estimates $10,000 to $20,000 in appraisal fees.

Acquisition Phases
Subject to funding, the Highlands Hammock Corridor Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs
Moderate Potential: The proposal has a moderate potential for contributing to recreation and open space needs based on continued use of the property for ecotourism, agritourism, or hunting leases managed by the landowners.

The application states that the subject property is proposed for a less-than-fee acquisition, so public recreational opportunities are anticipated to be limited to ecotourism, agritourism, or hunting leases managed by the landowners. There is low potential for the loss of economic activity because the property will continue its current management practices under the guidance of a conservation easement.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces
Moderate to High Potential: According to the FWC, the property contains approximately 758.31 (86%) acres of FWC Strategic Habitat Conservation Areas. Additionally, the Critical Lands and Waters Identification Project (CLIP) identifies 100% as Priority 1 in the Terrestrial and Waters category, 99.18% as Priority 5 in the Landscape category, and 75.82% in Priority 4 in the Biodiversity category.

According to the application, animal species observed by the landowners include Florida panther, Florida black bear, Eastern indigo snake, wood stork, deer, turkey, otters, Sherman's fox squirrel, bobwhite quail, gopher tortoise, crested caracara, Eastern diamondback rattlesnake, bobcat, coyote, alligator, barred owl, barn owl, red-shouldered hawk, roseate

spoonbill, sandhill crane, ibis, bald eagle, kingfisher, great blue heron, swallow-tail kite, and pileated woodpecker.

The potential for losing significant natural attributes located on the property due to urban development is moderate to high due to large rural residential communities becoming increasingly common and possibly encroaching on the proposed project area.

Potential for Being Subdivided
Moderate to High Potential: The application states that development or subdivision of the subject site on a significant portion of the property is imminent, resulting in the loss of significant natural attributes and recreational open space. This would result in multiple ownership and make acquisition of the property costly or less likely to be accomplished as outlined in this application. In conclusion, the subject has moderate to high potential for being subdivided due to encroaching development.

Zoning and Densities within the Project Boundaries
The subject property is zoned as Agriculture.

Existing Land Uses and Future Land Use Designations
Existing Land Uses: The subject property is classified with the following land use/land cover with a variety of natural communities: improved pasture (250.82 acres); basin swamp (208.00 acres); mixed hardwood-coniferous (107.37 acres); orchards/groves (77.31 acres); baygall (76.93 acres); dry flatwoods (57.00 acres); freshwater forested wetlands (25.48 acres); rural (18.92 acres); hydric hammock (17.04 acres); prairies and bogs (9.36 acres); marshes (8.66 acres); cypress (7.98 acres); cultural/lacustrine (7.05 acres); transportation (4.53 acres); low intensity urban (1.48 acres); cropland/pasture (1.02 acres); high intensity urban (0.04 acres); isolated freshwater marsh (0.02 acres); and tree plantations (0.02 acres).

Future Land Uses: The subject property is designated as “Agriculture” on the Highlands County Comprehensive Plan Future Land Use Map (FLUM). Based on the Highlands County future land use designation, Agriculture (one dwelling unit per five acres), the subject property has a residential development potential of 176 dwelling units.

Development Potential

Moderate to High Potential: Based on the Highlands County Comprehensive Plan future land use designation, Agriculture (one dwelling unit per five acres), the subject property has a residential development potential of 176 dwelling units.

According to the application, without protection by conservation easements, the property is likely to transition to residential development in the future, essentially isolating the north unit of the state park from the south unit. Despite the neighboring residences to the east, the landowners remain able to manage the agricultural operations and natural resource values of the property.

Transportation Planning Issues

The proposed project is in FDOT District 1 in Highlands County adjacent to Highlands Hammock State Park. The FDOT Work Program includes a new bridge construction project on State Road (SR) 66, located approximately one and a half miles south of the proposed project area and a resurfacing project on SR 66 approximately two miles southwest of the project area that is currently in the Project Development and Environmental (PD&E) phase. Along SR 66, the Collier-to-Polk Shared Use Non-Motorized (SUN) Trail corridor is partially funded for preconstruction and located approximately one and a half miles south of the project area. SR66 is also a designated evacuation route. US27/SR25 is a FDOT Strategic Intermodal System (SIS) corridor and is located approximately four miles northeast of the proposed project area.

While the Department finds no adverse impacts to this proposed project at this time, there should be coordination with the appropriate FDOT District 1 staff during the acquisition process to ensure that issues related to the transportation system are addressed and incorporated into the management plans as appropriate.

ACKNOWLEDGEMENTS

Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Meghan Lauer and Katie Briley in DSL's Office of Environmental Services were responsible for the overall coordination of this report, with contributions from the following:

- Division of Historical Resources: Brandon Ackermann, Jason O'Donoughue
- Florida Forest Service: Cat Ingram, Richard Larsen, Michelle Danielson
- Department of Commerce: Yazmin Valdez, James Stansbury
- Florida Fish and Wildlife Conservation Commission: Diana Pepe, Ethan Noel
- Florida Natural Areas Inventory: Geoff Parks, Jake Travers
- DEP Division of Environmental Assessment and Restoration: Moira Homann, Kenneth Weaver
- Florida Department of Transportation: Allison Beaty
- Southwest Florida Water Management District: Mike Singer
- DEP Division of Recreation and Parks: James Gaddis, Chris Becker

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

Highlands Hammock: Florida Forever Measures Evaluation 20240910

GIS ACRES = 958

MEASURES	Resource Acres[2]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	789	82%
Priority 2	65	7%
Priority 3	4	< 1%
Priority 4	0	0%
Priority 5	1	< 1%
Total Acres	859	90%
B2: FNAI Habitat Conservation Priorities		
Priority 1	48	5%
Priority 2	310	32%
Priority 3	314	33%
Priority 4	119	12%
Priority 5	42	4%
Priority 6	78	8%
Total Acres	911	95%
B3: Ecological Greenways		
Priority 1	951	99%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	5	< 1%
Total Acres	956	100%
B4: Under-represented Natural Communities		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (G2)	15	2%
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)	82	9%
Upland Hardwood Forest (G5)	0	0%
Total Acres	97	10%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	0	
G3	2	
G4	2	
G5	0	
Total	4	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	305	32%
Priority 3	92	10%
Priority 4	26	3%
Priority 5	1	< 1%
Priority 6	0	0%
Total Acres	425	44%

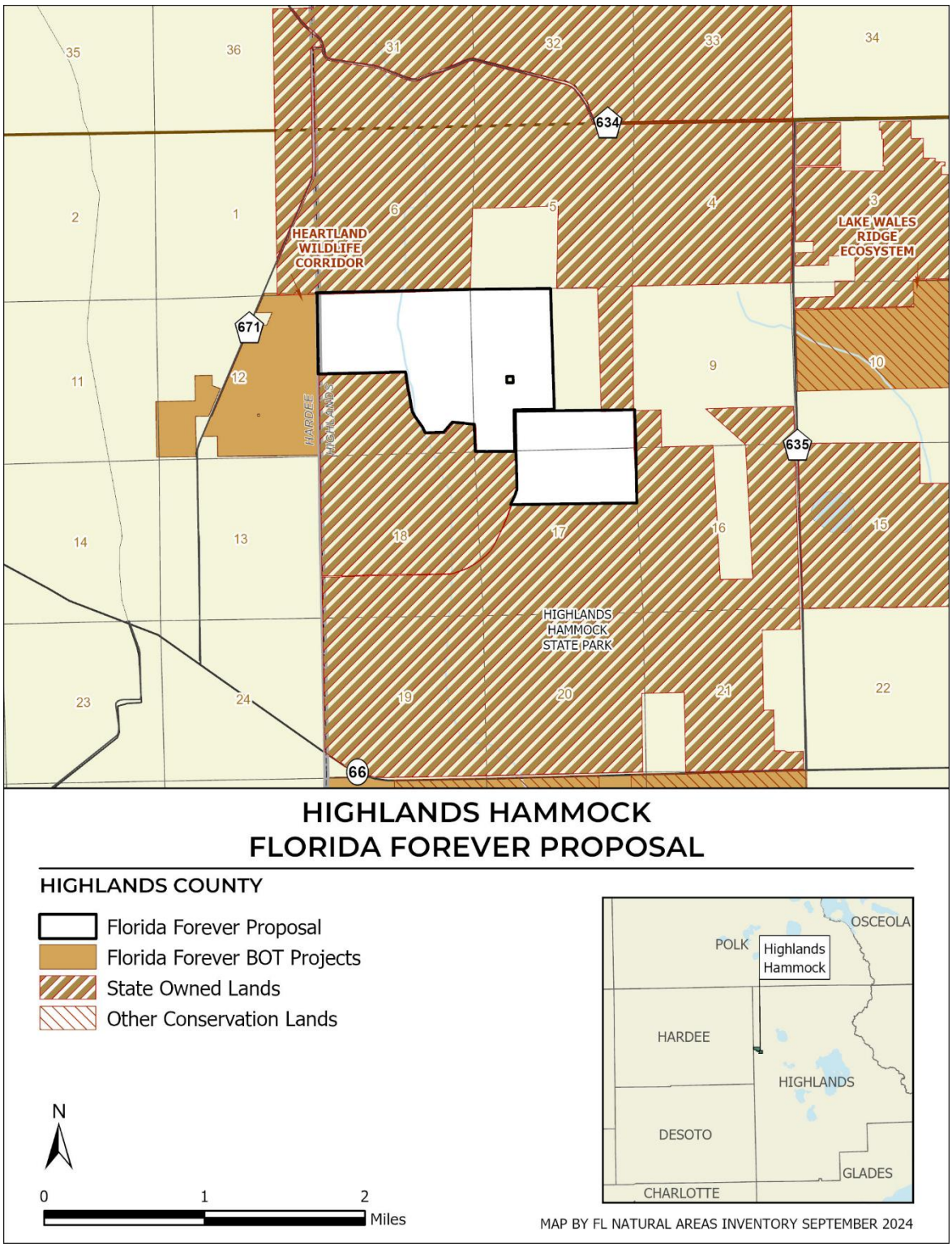
MEASURES (continued)	Resource Acres[2]	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	232	24%
Priority 3	0	0%
Priority 4	727	76%
Priority 5	0	0%
Priority 6	0	0%
Priority 7	0	0%
Total Acres	959	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	283	29%
Priority 3	67	7%
Priority 4	3	< 1%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	353	37%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	13	1%
Priority 3	469	49%
Priority 4	424	44%
Priority 5	53	6%
Priority 6	0	0%
Total Acres	959	100%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways and Trails & Univ. Florida)		
Land Trail Priorities	0.0	
Land Trail Opportunities	0.0	
Total Miles	0.0	
F2: Arch. & Historical Sites (number)	3 sites	
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	62	6%
Priority 4	0	0%
Priority 5 - Potential Pinelands	344	36%
Total Acres	406	42%
G3: Forestland for Recharge	28	3%

*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.

Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by Florida Natural Areas Inventory

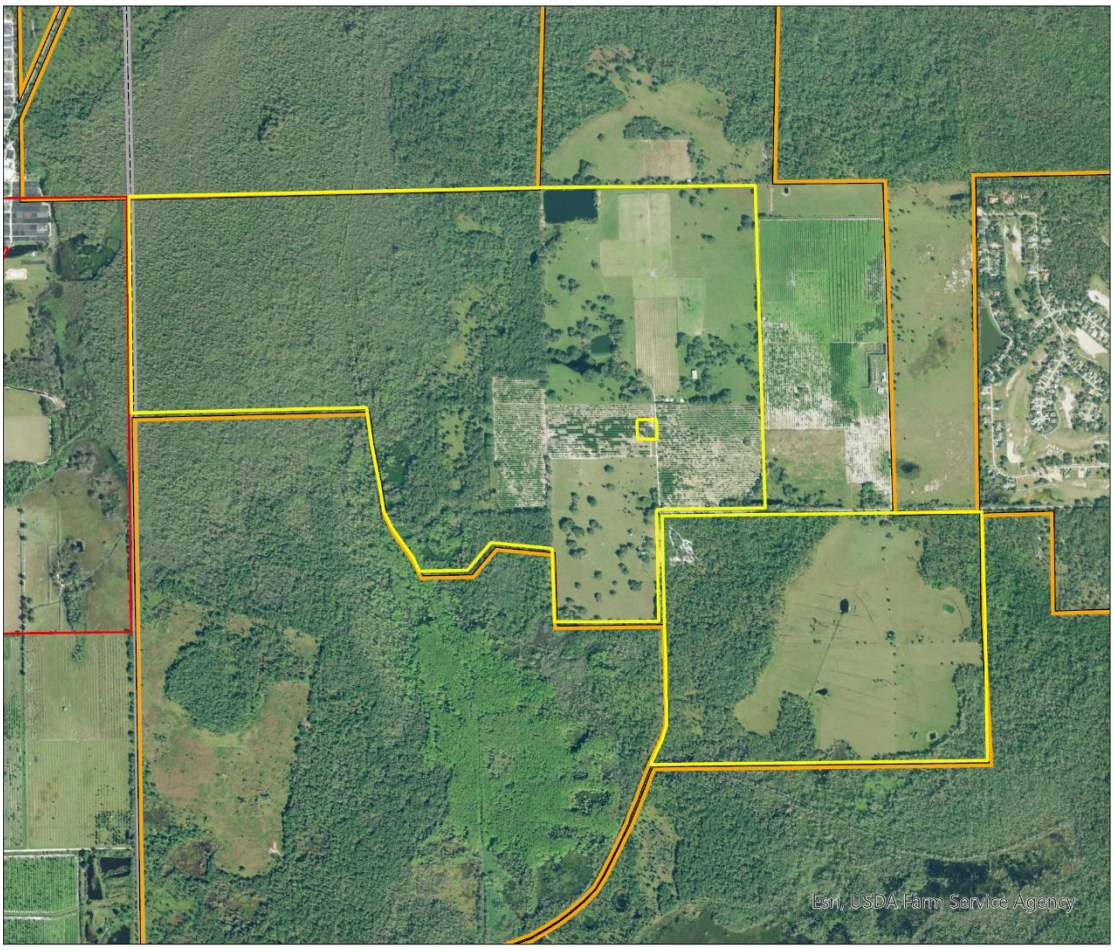
B1: Florida Forever map



B2: Aerial map

Highlands Hammock Florida Forever Proposal

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



Map Produced by: FL Natural Areas Inventory, N. Pasco, September 2024 Background: USDA NAIP Imagery Resolution = 1.0 meter

FNAI

Florida Forever Proposal Boundary
Florida Forever BOT Projects
Existing State Conservation Lands

N

0 0.25 0.5 1 Miles

Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

County	Parcel ID	Owner	Acres	Just (Market) Value	Parcel Designation
Highlands	C073528A0000200000	Livingston J L + Barbara D Trs	44.13	$284,732	Essential
Highlands	C073528A0000300000	Barbara D + James L Livingston	355.79	$2,455,749	Essential
Highlands	C083528A0000200000	Barbara D + James L Livingston	1.44	$106,253	Essential
Highlands	C083528A0000300000	Robert E Livingston	39.80	$354,163	Essential
Highlands	C083528A0000400000	Livingston J L + Barbara D Trs	117.85	$814,250	Essential
Highlands	C083528A0000500000	Barbara D + James L Livingston	80.93	$517,343	Essential
Highlands	C083528A0000700000	Livingston J L + Barbara D Trs	19.22	$134,593	Essential
Highlands	C083528A0000900000	James L Livingston	21.23	$144,835	Essential
Highlands	C083528A0001100000	Livingston J L + Barbara D Trs	37.64	$260,324	Essential
Highlands	C173528A0000200000	Livingston J L + Barbara D Trs	160.99	$1,106,676	Essential
Highlands	C083528A0000510000	McKenna Martin J	80.79	$845,371	Essential
			959.82	**$7,024,289**	

Appendix D:

Imperiled Species FNAI Ranking Definitions

FNAI

Definitions of imperiled species ranks and conservation 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

FNAI
Definitions of imperiled species ranks and conservation status

---

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.
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 = Partial status: some but not all of the species' infraspecific taxa have federal
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.

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.

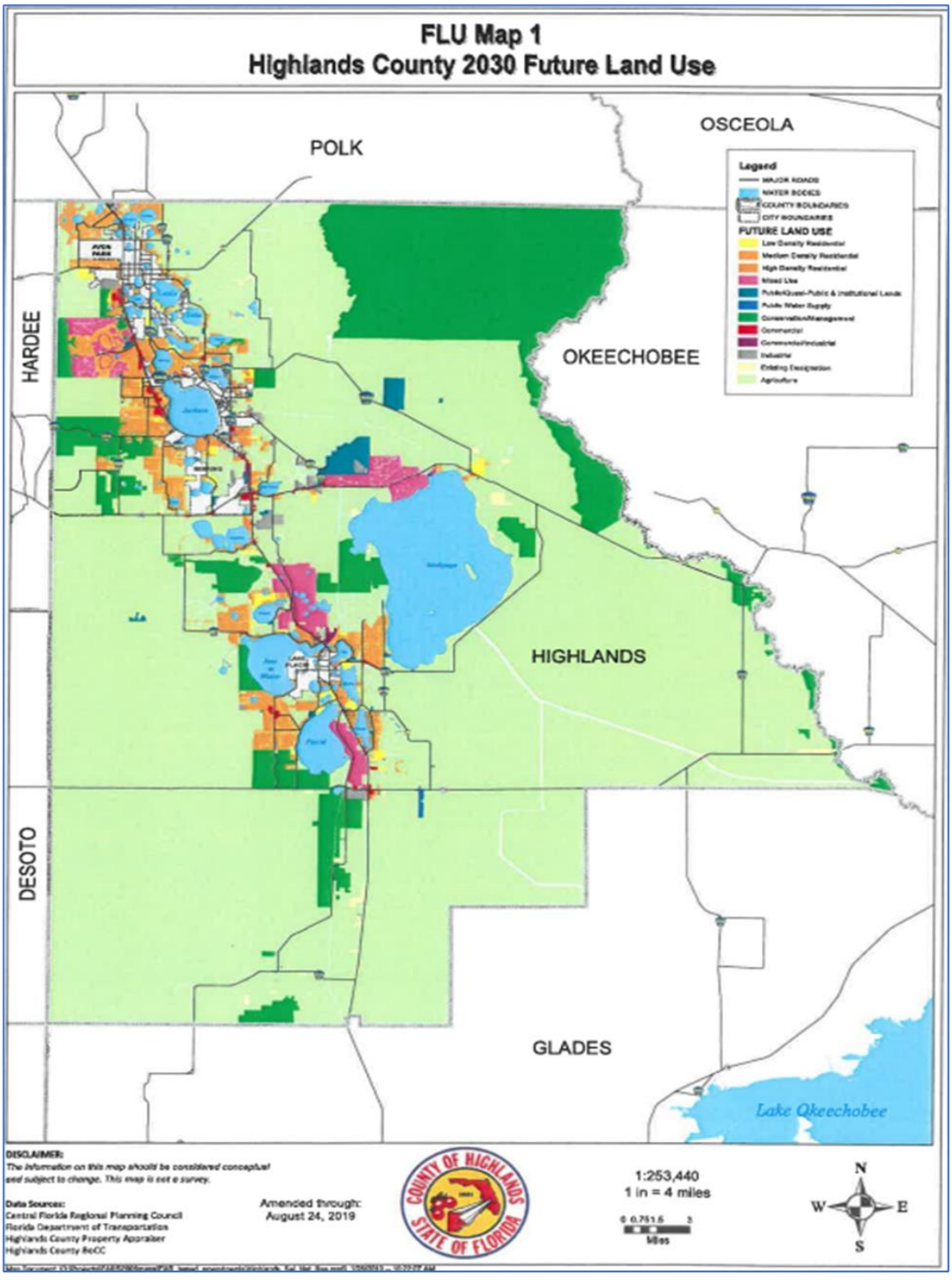
C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service
FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
FXN = Federal listed as an 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 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: <http://www.doacs.state.fl.us/pi/>.

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

Appendix E:

Highlands County Future Land Use Map



Appendix F:

Site visit photos.



Photo 1. Scrub



Photo 2. Mesic Flatwoods



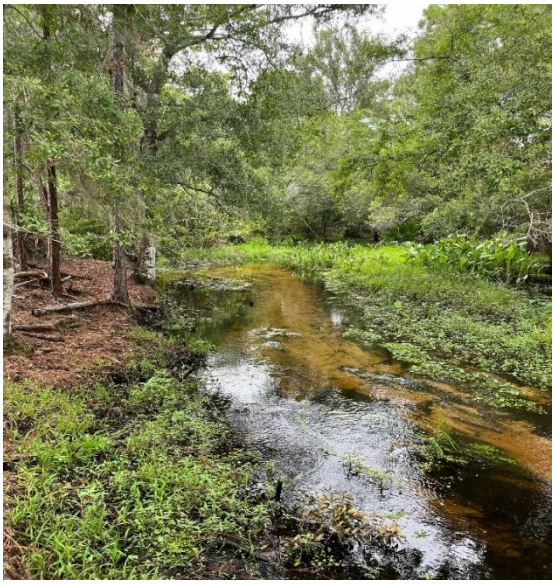
Photo 3. Mesic hammock



Photo 4. Large wetland feature (historic basin marsh or swamp) in northern portion of property adjacent to Highlands Hammock State Park.

Florida Forever Project Evaluation Report

Lettuce Creek Cattle Company
Highlands County



Yellow Bluff Creek winds through property.

Acquisition Type: Less-Than-Fee
GIS Acres: 377.36
Just Value: $2,611,447
Application Date: April 15, 2024
Project Sponsors: Terraventures

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 11, 2024

Executive Summary

The proposed Lettuce Creek Cattle Company Florida Forever project contains 2 parcels owned by Lettuce Creek Cattle Company, totaling approximately 377 acres in Highlands County. The proposal is directly adjacent to an unacquired portion of the Lake Wales Ridge Florida Forever project and is within 2 miles of a myriad of conservation lands including the Lake Wales Ridge Wildlife and Environmental Area, a tract of Lake Wales Ridge National Wildlife Refuge, and Sebring Scrub Conservation Bank, among others. The project is proposed for less-than-fee acquisition and has a tax assessed value of $2,611,447.

The property is a working cattle operation with approximately 92 acres (25%) of the property being described as improved or semi-improved pasture. The groundcover found throughout the more pasture-like flatwoods is made up of a variety of plants, notably, the imperiled cutthroat grass. The most widespread natural community type found on the property is baygall, making up approximately 46% of the proposal. The western edge of the property contains scrub habitat featuring a diversity of native herbs.

The property is situated in the Yellow Bluff Creek floodplain and features a portion of Yellow Bluff Creek, which converges into Josephine Creek and flows into Lake Istokpoga about 2 miles from the property. Acquisition of the property and other unacquired Florida Forever lands nearby would leave only 0.9 miles of Yellow Bluff Creek unprotected.

This proposal lies within Priority 2 of the Florida Ecological Greenways Network (FEGN. A number of protected species have been documented on site including giant airplant, Florida jointweed, Florida black bear, and scrub buckwheat, among others.

If approved for addition to the 2025 Florida Forever Priority List, the project should be considered as a standalone project in the Less-Than-Fee category. All 377 acres proposed for acquisition are considered essential due to the resources documented on the property (see Appendix C). An interagency team conducted a site visit to the project site on July 11, 2024. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The proposed Lettuce Creek Cattle Company project will contribute to the protection of water resources within the Yellow Bluff Creek floodplain which drains into Lake Istokpoga. The project will also protect rare natural communities and enhance ecological connectivity for a variety of imperiled wildlife species.

Acquisition of this project would serve to:

- Enhance the coordination and completion of land acquisition projects.
- Conserve and protect a portion of Florida's rural landscape in order to provide and enhance wildlife corridors for rare and imperiled species.
- Increase the protection of Florida's biodiversity at the species and natural community levels.
- Protect, restore, and maintain the quality and natural functions of land, water and wetland systems of the state.
- Provide surface and groundwater protection and protect natural floodplain functions.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Lettuce Creek Cattle Company proposal is a nearly square tract of approximately 377 acres in Highlands County. The proposal is situated 1.5 miles west of Lake Istokpoga and about 2.5 miles southeast of the junction of highways US-27/SR-25 and US-98/SR-700 just southwest of DeSoto City. The property is offered for less-than-fee simple protection.

Josephine Creek flows 2 miles further before emptying into Lake Istokpoga. Several conservation lands are connected or nearly connected to the proposal along the creek, including a tract of Lake Wales Ridge National Wildlife Refuge 1.2 miles upstream on Yellow Bluff Creek; and Grassland Reserve Program Easement #105, Lake Istokpoga Conservation Area, Lake Wales Ridge Wildlife and Environmental Area, and Sebring Scrub Conservation Bank, all downstream from 0.7 mile below the site along Josephine Creek to the shore of Lake Istokpoga. Gaps between the proposed site and these conservation lands are partially filled by Lake Wales Ridge Ecosystem Florida Forever BOT Project – Ridgeland (downstream) and Lake Wales Ridge Ecosystem Florida Forever BOT Project - Flamingo Villas (upstream). If the proposed site and current project lands are protected, only an unprotected gap of 0.9 mile

immediately upstream of the site will remain along Yellow Bluff Creek. The tract has no frontage on public roads and is adjoined by intensive agricultural lands to the west and cattle ranches to the north, east, and south.

A field survey was conducted on July 11, 2024, by the Acquisition and Restoration Council (ARC) liaison staff, including FNAI biologists Geoffrey Parks and Jake Travers. This evaluation is based on information gathered from the proposal, the field survey, and available GIS data including aerial photography, US Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.6), and the FNAI Natural Heritage database.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

The proposal property is situated on the eastern edge of the Lake Wales Ridge, where the high, sandy ridge gives way to the Osceola Plain to the east and is approximately equally split between the rolling sand ridge to the west and the poorly drained lower elevation plain to the east. Elevations on the proposal property range from about 75 feet above mean sea level (msl) on western portions of the tract, where the excessively drained soils of the Lake Wales Ridge predominate, to 25 feet above msl at the tract's southeastern corner. Lower elevations are generally underlain by mucky soils and associated with Yellow Bluff Creek, which enters the tract from the north and flows southeastward ca 0.3-0.4 mile through the site. The creek becomes poorly defined once it enters a large, forested wetland on the east side of the property. This wetland drains southeastward, and Yellow Bluff Creek converges with Josephine Creek ca. 0.25 miles east of the proposal. The most widespread natural community on the site is baygall, which dominates the large wetland area in the eastern portion of the property. This forested wetland has a canopy dominated by loblolly bay (*Gordonia lasianthus*) along with lesser amounts of slash pine (*Pinus elliottii*), swamp bay (*Tamala palustris*), and sweetbay (*Magnolia virginiana* var*. australis*). There is a dense, shrubby understory of gallberry (*Ilex glabra*), Peruvian primrosewillow (*Ludwigia peruviana,* FISC-1), fetterbush (*Lyonia lucida*), Southern bayberry (*Morella cerifera*), and often heavy growth of vines, mainly muscadine (*Muscadinia rotundifolia*) and climbing hempvine (*Mikania scandens*). Herbaceous species include Virginia chain fern (*Anchistea virginica*), bluestem (*Andropogon sp.*) and cinnamon fern (*Osmundastrum cinnamomeum*).

Scrub makes up about 12% of the tract, in a single area at the western edge of the tract. This community is characterized by a fairly dense shrub/small tree layer dominated by scrub oaks--Chapman's oak (*Quercus chapmanii*), sand live oak (*Quercus geminata*), and myrtle oak (*Quercus myrtifolia*)—along with garberia (*Garberia heterophylla*), rusty staggerbush (*Lyonia ferruginea*), tough bully (*Sideroxylon tenax*), and hog plum (*Ximenia americana*). A sparse overstory of slash pine is present in some areas, including some inclusions with heavy pine that resemble scrubby flatwoods. Although the patch of scrub found on the proposal shows evidence of grazing and is somewhat overgrown from a lack of fire, a diversity of herbs is present between shrub patches. These include Florida alicia (*Chapmannia floridana*), Feay's prairie clover (*Dalea feayi*), milkpea (*Galactia* sp.), garberia, gopher apple (*Geobalanus oblongifolius*), Feay's palafox (*Palafoxia feayi*), paper nailwort (*Paronychia chartacea*), slenderleaf clammyweed (*Polanisia tenuifolia*), October flower (*Polygonella polygama*), sandyfield beaksedge (*Rhynchospora megalocarpa*), blue-eyed grass (*Sisyrinchium* sp.), and hairyflower spiderwort (*Tradescantia hirsutiflora*). Natalgrass (*Melinis repens* ssp*. repens,* FISC-1), was also noted.

Wet flatwoods make up an additional 12% of the proposal, generally at intermediate elevations between the xeric uplands and the large eastern wetland. Canopy of this community consists of dense to widely scattered slash pine; few other trees occur although swamp bay is sometimes present. The flatwoods on the proposal vary in their composition and structure. Some have a fairly well-developed pine canopy and a diversity of groundcover species such as blue maidencane (*Amphicarpum muehlenbergianum*), Virginia chain fern, big carpetgrass (*Axonopus furcatus*), witchgrass (*Dichanthelium* sp.), and spikerush (*Eleocharis* sp.); others superficially appear pasture-like, with only occasional pines but a groundcover consisting of a continuous layer of state-endangered cutthroatgrass (*Coleataenia abscissa*) kept short by grazing. Bark beetles have caused significant pine mortality in one stand, and impacts from grazing are evident throughout the proposal’s wet flatwoods, though more so where cutthroatgrass is absent.

Mesic flatwoods intergrade with wet flatwoods on the proposal site, occurring on very slightly higher elevations, and also is the predominant vegetation on the elevated banks above Yellow Bluff Creek. Like the wet flatwoods, these have a slash pine canopy but are distinguished by

the increased dominance of saw palmetto (*Serenoa repens*). In the absence of fire, a midstory hardwood layer has developed, including sweetbay, laurel oak (*Quercus hemisphaerica*), live oak (*Quercus virginiana*), and swamp bay. In addition to the saw palmetto, shrubs include American beautyberry (*Callicarpa americana*), gallberry, and Southern bayberry. Vines are common and consist of groundnut (*Apios americana*), Elliott's milkpea (*Galactia elliottii*), muscadine, Virginia creeper (*Parthenocissus quinquefolia*), and Eastern poison ivy (*Toxicodendron radicans var. radicans*). Groundcover is mostly lacking.

Bottomland forest makes up about 1% of the proposal. It occurs primarily where Yellow Bluff Creek enters the large, forested wetland on the east side of the property, but other areas of bottomland may occur in the area mapped as baygall. This forested wetland has a sparse canopy of mostly red maple (*Acer rubrum*), with a lesser amount of sweetbay. Shrubs are dense and include buttonbush (*Cephalanthus occidentalis*), Southern bayberry, and some saw palmetto. Groundcover is dominated by Virginia chain fern, with occasional grasses. Peruvian primrosewillow, was documented here, and Caesar's weed (*Urena lobata,* FISC-1) is common. Depression marshes on the property vary in their condition. One that straddles the boundary of the tract was noted to be heavily shrub-encroached off the property, while the portion on the proposal was dominated by herbaceous species. Another that was observed during the field visit showed strong influences of grazing and had scattered but dense shrubby inclusions. Plants found in depression marshes include bluestem, Virginia buttonweed (*Diodia virginiana*), hairsedge, lesser creeping rush (*Juncus repens*), mild waterpepper (*Persicaria hydropiperoides*), meadowbeauty (*Rhexia* sp.), beaksedge (*Rhynchospora* sp.), sand cordgrass (*Spartina bakeri*), and yellow-eyed grass (*Xyris* sp.). Woody hummocks in the shrubby marsh contained loblolly bay, fetterbush, Southern bayberry, slash pine, and saw palmetto.

Yellow Bluff Creek is classified as a blackwater stream. Before entering the eastern baygall, the creek is in a well-defined (probably ditched) channel; banks are steep but low, and little riparian zone exists. Plants in the edges or banks of the creek include spadeleaf (*Centella erecta*), maidencane (*Hymenachne hemitoma*), Southern bayberry, slash pine, swamp laurel oak (*Quercus laurifolia*), water spangles (*Salvinia minima*), and hairypod cowpea (*Vigna luteola*).

Improved pastures make up 20% of the tract, primarily at higher elevations on the proposal's western half. Pastures consist mainly of Bermudagrass (*Cynodon dactylon*) and/or bahiagrass (*Paspalum notatum*). Small shrubs that persist or have colonized the pastures occasionally include American pokeweed (*Phytolacca rigida*) and bigflower pawpaw (*Asimina obovata*).

Areas of semi-improved pasture occur at the southwest corner of the proposal and in a few other areas, making up 5% of the proposal. The southwestern semi-improved pasture contains numerous scrub-associated species intermixed with pasture grasses, ruderal species, and bare-ground areas from livestock trampling. There is a sporadic canopy of sand live oak. Occasional shrubs include bigflower pawpaw, garberia, American pokeweed, myrtle oak, scrub palmetto (*Sabal etonia*), saw palmetto, and tough bully. Other species observed include rosary pea (*Abrus precatorius,* FISC-1), pinewoods milkweed (*Asclepias humistrata*), cottonweed (*Froelichia floridana*), lupine (*Lupinus* sp.), sensitive plant (*Mimosa* sp.), paper nailwort, earleaf greenbriar (*Smilax auriculata*), queen's delight (*Stillingia sylvatica*), pineland scalypink (*Stipulicida setacea*), and scurf hoary-pea (*Tephrosia chrysophylla*). Several species of airplants--ballmoss (*Tillandsia recurvata*), Southern needleleaf (*Tillandsia setacea*), Spanish moss (*Tillandsia usneoides*)—are common on the oaks.

A few invasive plant species were noted on the property during the site visit. As is often the case, Caesar's weed was dense at the edges of the baygall. Natalgrass is also scattered in the scrub. Other than these, the only invasive plants noted were a few camphortree (*Camphora officinarum*) in the wet flatwoods.

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

Community or Landcover	Acres	Percent of Proposal
Baygall	173	46
Scrub	47	12
Wet Flatwoods	44	12
Mesic Flatwoods	10	3
Bottomland Forest	4	1
Depression Marsh	3	<1
Xeric Hammock	<1	<1
Pasture - Improved	74	20
Pasture - Semi-improved	18	5
Utility Corridor	5	1
Developed	1	<1
Total	377	100

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Lettuce Creek Cattle Company (LCCC) Florida Forever proposal based on field observations during the July 11, 2024, site visit and results of the GIS analysis. Most of the property is within the Yellow Bluff Creek floodplain, with Yellow Bluff Creek flowing southeastward through the property to Josephine Creek and Lake Istokpoga. The property is located within a complex of conservation lands and Florida Forever projects, and its southern boundary adjoins the Lake Wales Ridge Ecosystem Florida Forever BOT Project – Ridgeland. Acquisition of the property and the lands currently within project boundaries would expand a corridor of conservation lands that extends to the south and east along the western side of Lake Istokpoga and leave only a 0.9-mile gap of Yellow Bluff Creek unprotected.

The property is mainly used for cattle ranching and as such 21% is improved pasture. Other habitat types include mixed hardwood-coniferous swamps (57%), scrub (13%), marshes (7%), and mesic flatwoods (2%). Upland habitats are maintained by some mowing and grazing. Patches of cogon grass (*Imperata cylindrica*) were observed during the site assessment. The landowner may find information and resources available through programs such as FWC's Landowner Assistance Program useful for treating invasive plants.

The diversity of habitat types and mix of open habitats with cover supports many species of rare and more common wildlife. Additionally, there are many snags on the property that benefit wildlife by providing perches, foraging sites, and roosts. Several active gopher tortoise (*Gopherus polyphemus*; State-designated Threatened) burrows were observed during the site visit. The landowner frequently observes bears (*Ursus americanus floridanus*) and stated that a Florida panther (*Puma concolor coryi;* Federally-designated Endangered) was observed near the property. Other species observations reported by the landowner include eastern indigo snake (*Drymarchon couperi*; Federally-designated Endangered), sand skink (*Plestiodon reynolds*i; Federally-designated Threatened), bald eagle (*Haliaeetus leucocephalus*), osprey (*Pandion haliaetus*), and southern fox squirrel (*Sciurus niger niger*). The property's marshes and wetlands potentially support species of imperiled wading birds. Other imperiled species that potentially use the property include Florida sandhill crane (*Antigone canadensis pratensis*; State-designated Threatened) and crested caracara (*Polyborus plancus audubonii*; Federally-

designated Threatened). The property also provides habitat for game species such as deer (*Odocoileus virginianus*) and turkey (*Meleagris gallopavo*).

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for Lettuce Creek Cattle Company is 7.8. The entire property is within Priority 2 of the FEGN and considered frequent bear range. According to the Critical Lands and Waters Identification Project, 56% is Priority 1 in terrestrial, 94% is Priority 2 in the landscape category, and 63% is Priority 3 in the biodiversity category. About 49% is modeled as FWC Strategic Habitat Conservation Areas. The entire property protects class 3F surface waters (Yellow Bluff Creek) and 64% of the proposal contains wetlands.

In conclusion, the proposed Lettuce Creek Cattle Company project contains a diversity of habitat types that support imperiled and common wildlife species. Acquisition as an easement would protect a portion of the Florida Wildlife Corridor and the water quality and quantity of the region. Conservation of the property would increase the amount of protected area and connectivity between established conservation lands in the greater landscape and protect existing native lands from development. A habitat management program that incorporates routine prescribed fire, particularly within native habitats onsite, would further improve and maintain conditions in native habitat and benefit many imperiled wildlife species.

GOALS, MEASURES AND CRITERIA

GOAL A:
ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:
The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 377 acres would contribute to the enhancement of essential natural resources, ecosystem service parcels and connecting linkage corridors.

Measure A2:
The number of acres protected through the use of alternatives to fee simple acquisition.

The entirety of the project (377 acres) is proposed for less-than-fee acquisition via conservation easement.

Measure A3:
The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

No funding partners have been identified for this project.

GOAL B:
INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:
The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 62 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measures Evaluation (FFME) table (Appendix B) reports the site contains approximately 375 acres (100% of site) of Strategic Habitat Conservation Areas. This is primarily within Priority 1 (95% of site) with the remainder in Priority 2 (4%).

Measure B2:
The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 634 of Florida's rarest species were mapped and divided into six priority classes. The FFME reports the proposed project contains approximately 376 acres (100% of site) of rare species habitat. The habitat is mostly divided between Priority 6 (72% of site) and Priorities 5 and 4 (each with 13%), with the remainder in Priority 3 (<1%).
The following table lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum total of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Habitat Conservation Priorities

Scientific Name	Common Name	Global Rank	Acres
Sceloporus woodi	Florida scrub lizard	G2G3	3
Antigone canadensis pratensis	Florida sandhill crane	G5T2	72
Caracara plancus	crested caracara	G5	114
Mustela frenata peninsulae	Florida long-tailed weasel	G5T3?	347

Measure B3:
The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages.

The FFME reports approximately 377 acres (100%) of the proposed project contributes to protection of ecological greenways, entirely within Priority 2 areas. Prioritization is based on such factors as importance for wide-ranging species like Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B4:
The number of acres acquired of under-represented native ecosystems.

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The Florida Forever Measures table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Lettuce Creek Cattle Company proposal contains 53 acres of mesic/wet flatwoods (14% of site), and 47 acres of scrub (12%).

Measure B5:
The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

The Lettuce Creek Cattle Company proposal would not currently contribute to a contiguous landscape-sized protection area of at least 50,000 acres. The closest protected area, Sebring Scrub Conservation Bank, is 0.75 miles to the south.

Measure B6:
The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

This proposal site supports habitat for several imperiled species, a number of which were seen during the site visit. Active gopher tortoise burrows were observed in several locations, and the site is within a region where the Florida Fish and Wildlife Conservation Commission classifies Florida black bear as Frequent. In addition to wildlife species, 6 imperiled plant species were noted onsite during the site visit, 4 of which were found in scrub/scrubby flatwoods. Particularly given the location of the site in a region that is a hotspot for endemic and rare species, additional imperiled plants and animals are possible with additional survey effort.

The FFME lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. The table below contains species falling into any of these observational categories, species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision, and species reported in the application or during the site visit.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**
Rare plants documented on site					
Coleataenia abscissa	cutthroatgrass	G3	S3	N	E
Eriogonum floridanum	scrub buckwheat	G4T2?	S2	T	E
Garberia heterophylla	garberia	G4‡	S4	N	T
Paronychia chartacea	paper nailwort	G3	S3	T	E
Polygonella basiramia	Florida jointweed	G3	S3	E	E
Tillandsia utriculata	giant airplant	G5‡	S3	N	E
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
Gopherus polyphemus	gopher tortoise	G3	S3	N	ST
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on site by applicant					
none					

‡Species not tracked by FNAI

GOAL C:
PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:
The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

The property is offered for less-than-fee acquisition, intended to be utilized in a manner consistent with existing uses. The 47 acres of scrub/scrubby flatwoods and the 44 acres of wet

flatwoods are mostly in good ecological condition, and the mesic flatwoods are in fair condition; they would benefit from prescribed fire, which is not currently practiced on the property. Some of the semi-improved pastures provide habitat for rare plants and may well continue to do so under the present management. The wetlands are in fair to good condition and would benefit from invasive plant control. The 74 acres of improved pasture would require sustained long-term commitment to restore to native species. While this may be attainable given the relatively small acreage, this is likely not compatible with continued intended use of the property as a cattle ranch.

Invasive plant control needs of the property appear to be fairly minor considering in the upland areas, although the invasive species present could impact the site's value for rare species if they are not controlled. Natalgrass in the scrub is the largest concern; expansion of this species could affect the diverse scrub flora that is present, but management would need to be done with care so as to not directly impact rare species through control efforts. Caesar's weed is abundant in some locations in the baygall/bottomland areas and is likely to be a continuing issue, given the challenges inherent to managing this species. A baseline assessment to determine the full extent of invasive species is warranted if acquisition of an easement occurs.

Measure C4:
The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 199 acres (53%) of the proposed project may contribute to the protection of natural floodplain function. This area is divided between Priority 3 (31% of site), Priority 4 (15%), and Priority 5 (7%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:
The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 377 acres (100%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 2 (81% of site) and Priority 4 (19%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C8:
The number of acres of functional wetland systems protected.

The FFME reports approximately 243 acres (64%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 3 (32% of site), Priority 4 (21%), Priority 5 (10%), and Priority 6 (<1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:
The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

Approximately 280 acres are currently under management for upland invasive species, including lygodium. This excludes the bay swamp areas where access is difficult. Other species observed during site reconnaissance are rattle box and tropical soda apple.

GOAL D:
ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:
The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

The 377-acre property is located within the Southwest Florida Water Management District's (SWFWMD) Heartland Planning Region for water supply and is within the Southern Water Use Caution Area. The property is mostly within the proposed acquisition list for SWFWMD. Approximately 64% of the property is categorized as varying wetlands which could provide flood storage.

SWFWMD's mission is comprised of Four main Area's of Responsibility (AOR's); Water Supply, Water Quality, Natural Systems, and Flood Protection. Each area has a goal; Water Supply: Ensure an adequate supply of water to provide for all existing and future reasonable and beneficial uses while protecting and maintaining water resources and related natural systems. Water Quality: Protect and improve water quality to sustain the water resources, environment, economy, and quality of life. Natural Systems: Preserve, protect, and restore natural systems to support their natural hydrologic and ecological functions. Flood Protection: Minimize flood damage to protect people, property, infrastructure, and investment. This

property contributes to three of the four AOR's, Water Quality 100%, Natural Systems 78.7%, and Flood protection 53.1%.

Measure D3:
The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

The FFME reports approximately 377 acres (100%) of the proposed project would provide protection for groundwater recharge areas. This area is divided between Priority 3 (71% of site), Priority 4 (17%), and Priority 2 (12%). Prioritization is based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Lettuce Creek Cattle Company Florida Forever proposal

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	0
FDEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	4
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	7
FDEP Special Nutrient Impaired WBIDs	9	0
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
FDEP Springsheds or within 5 miles	10, 7	0
FDEP BMAPs	10	10
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	21

GIS Evaluation score is converted to a 1 to 5 value (low to high)

FINAL DEAR SCORE = 2, medium low water quality protection benefits

GOAL E:
INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measure E1:
The number of acres acquired that are available for natural resource-based public recreation or education.

The site is proposed as a conservation easement and as such, public access is not applicable. The current landowners are willing to consider hosting Operation Outdoor Freedom hunt events, administered through the Florida Forest Service.

GOAL F:
PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

CULTURAL RESOURCES:

There are no cultural resources recorded or known to exist on the proposed Lettuce Creek Cattle Company Florida Forever project. However, to date, the whole of this property has not been professionally surveyed for archaeological and/or historical sites. It is therefore likely that undocumented cultural resources exist on the property, but this cannot be determined without formal survey.

FIELD OBSERVATIONS:

During the Field Review of the proposed Lettuce Creek Cattle Company Florida Forever project, staff did not observe any unrecorded cultural resources within the project area. However, based on an evaluation of the location and distribution of cultural resources in the surrounding area, there is potential for unrecorded sites to exist on the Lettuce Creek Cattle Company property. Should any artifacts or other cultural resources be discovered on the property in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology Program for further evaluation.

GOAL G:
INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

There is high potential on this property for sustainable natural resource management. The forests currently only need minimal silvicultural techniques to enhance the sustainable natural resource management production. There is at least 100 acres onsite that could be used as a silvopasture operation, however, the current landowners are not interested in forest management.

Measure G1:
The number of acres acquired that are available for sustainable forest management.

The FFME reports approximately 107 acres (28% of site) could be available for sustainable forest management, divided between Priority 5 (101 acres) and Priority 3 (6 acres). Prioritization is based on 4 criteria set by the Florida Forest Service: whether trees are natural or planted, size of tract, distance to market, and hydrology. Priority 5 areas are considered "potential" pinelands; agricultural areas that could be restored to pineland.

Measure G2:
The number of acres of state-owned forestland managed for economic return in accordance with current best management practices.

All 377 acres on what is proposed as conservation easement could be economically profitable through multiple-use sustainable natural resource management, however, the site is proposed as less-than-fee.

Measure G4:
The percentage and number of acres identified for restoration restored by reforestation.

Approximately 100 acres of pasture, or approximately 26% of the property, could be restored with reforestation.

FLORIDA FOREVER CRITERIA
The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.)

- the project meets multiple goals described in subsection (4).
- the project has a significant portion of its land area in imminent danger of losing its significant natural attributes.
- the project contributes to the solution of water resource problems on a regional basis.
- the project may be acquired, in whole or in part, using alternatives to fee simple, including but not limited to, tax incentives, mitigation funds, or other revenues, the purchase of development rights, hunting rights, agricultural or silvicultural rights, or mineral rights or obtaining conservation easements or flowage easements.

The Acquisition and Restoration Council shall give increased priority to:

- projects that can be acquired in less than fee ownership, such as a permanent conservation easement.
- projects that contribute to improving the quality and quantity of surface water and groundwater.
- projects located within the Florida Wildlife Corridor as defined in (§ 259.1055(4), F.S.).

MANAGEMENT

If acquired as a perpetual conservation easement, the primary management responsibility would remain with the landowner. Periodic monitoring of the site's management would occur to confirm continued compliance with the conditions of the easement. Monitoring would be coordinated by the Office of Environmental Services (OES) within the Department of Environmental Protection's (DEP) Division of State Lands (DSL).

FUNDING SOURCES

Florida Forever is the only identified funding source.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues, Jurisdictional and Sovereignty Lands, Legal Issues
Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)
The easements and encumbrances of record would be determined during the appraisal mapping. A current title commitment would be obtained, or the owner's title insurance policy would be reviewed if the policy is available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits
There are no apparent contamination sites within the project based on the application form.

Estimated Cost of Appraisal and Mapping
DEP Bureau of Appraisal estimates $10,000 to $20,000 in appraisal fees.

Acquisition Phases
Subject to funding, the Lettuce Creek Cattle Company Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs
The proposal has a low potential for contributing to recreation and open space needs based on the owner's intent to continue with the current management practices associated with a working cattle ranch.

There is low potential for the loss of economic activity because the property mainly operates as a cattle ranch, and it is the intent of the owner is to continue current management practices under the guidance of a conservation easement.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces
Low to Moderate Potential: According to the FWC, the property contains approximately 181.83 (48%) acres of FWC Strategic Habitat Conservation Areas. Additionally, the Critical Lands and Waters Identification Project (CLIP) identifies 56% as Priority 1 in the Terrestrial and Waters category, 94% as Priority 2 in the Landscape category, and 83% in Priorities 2 and 3 in the Biodiversity category.

Based on habitat models, the property has habitat that could support imperiled species known to occur in the vicinity including the Florida mouse, Florida scrub jay, crested caracara, Florida longtailed weasel, Florida sandhill crane, and Florida scrub lizard. Species documentations reported by the owner include gopher tortoise, Eastern indigo snake, Florida panther, sand skink, bald eagle, osprey, and southern fox squirrel. The entire property is within Priority 2 of the FEGN and is considered frequent black bear range.

The potential for losing significant natural attributes located on the property due to urban development is low to moderate due to the property containing a higher percentage of wetlands/marshes. However, large rural residential communities are becoming increasingly common and could encroach on the proposed project area.

Potential for Being Subdivided
Low Potential: The future land use designation is Agriculture, which would allow for up to 75 dwelling units on site. The subject property has a low potential for being subdivided due to the property containing a higher percentage of wetlands/marshes.

Zoning and Densities within the Project Boundaries
The subject property is zoned as Agriculture.

Existing Land Uses and Future Land Use Designations
Existing Land Uses: The subject property is classified with the following land use/land cover with a variety of natural communities: freshwater forested wetlands (215.74 acres); improved pasture (79.23 acres); scrub (47.18 acres); marshes (27.51 acres); dry flatwoods (6.58 acres); rural (0.94 acres); orchards/groves (0.13 acres); low intensity urban (0.03 acres); and transportation (0.02 acres).

Future Land Uses: The subject property is designated as “Agriculture” on the Highlands County Comprehensive Plan Future Land Use Map (FLUM) (see Map B). Based on the Highlands County future land use designation, Agriculture (one dwelling unit per five acres), the subject property has a residential development potential of 75 dwelling units.

Development Potential

Low Potential: Based on the Highlands County Comprehensive Plan future land use designation, Agriculture (one dwelling unit per five acres), the subject property has a residential development potential of 75 dwelling units.

According to the application, there are no known imminent development projects, but the property is located in a part of the State with significant development pressures.

Transportation Planning Issues

The proposed project is in FDOT District 1 in Highlands County approximately one mile west of a CFX mainline rail corridor which is also a FDOT Strategic Intermodal System (SIS) Facility. US27/SR25 is also a SIS road corridor located approximately two miles west of the project area. This road is also a designated evacuation route. Within one and a half miles north of the project area, there are FDOT Work Program projects underway to add lanes, resurface, and reconstruction portions of SR700/US98. These projects are currently in the Project Development & Environmental (PD&E) phase. Approximately one and a half miles north of the project area is also a potential Shared Use Non-Motorized (SUN) Trail corridor. This section of trail is currently an unfunded gap in the greater regional Heartland trail. The Lake Placid Loop trail is also nearby, with another unfunded gap of trail corridor approximately one mile east of the proposed project.

While the Department finds no adverse impacts to this proposed project at this time, there should be coordination with the appropriate FDOT District 1 staff during the acquisition process to ensure that issues related to the transportation system are addressed and incorporated into the management plans as appropriate.

ACKNOWLEDGEMENTS
Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Meghan Lauer and Katie Briley in DSL's Office of Environmental Services were responsible for the overall coordination of this report, with contributions from the following:

- Division of Historical Resources: Brandon Ackermann, Jason O'Donoughue
- Florida Forest Service: Richard Larsen, Michelle Danielson, Cat Ingram
- Department of Commerce: Yazmin Valdez, James Stansbury
- Florida Fish and Wildlife Conservation Commission: Diana Pepe, Ethan Noel
- Florida Natural Areas Inventory: Geoff Parks, Jake Travers
- DEP Division of Environmental Assessment and Restoration: Moira Homann, Kenneth Weaver
- Florida Department of Transportation: Allison Beaty
- Southwest Florida Water Management District: Mike Singer

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

Lettuce Creek Cattle Company: Florida Forever Measure Evaluation 20240726

GIS ACRES = 377

MEASURES	Resource Acres[a]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	359	95%
Priority 2	16	4%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	375	100%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	2	< 1%
Priority 4	51	13%
Priority 5	51	13%
Priority 6	272	72%
Total Acres	376	100%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	377	100%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	377	100%
B4: Under-represented Natural Communities		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (G2)	47	12%
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)	53	14%
Upland Hardwood Forest (G5)	0	0%
Total Acres	100	26%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	1	
G3	4	
G4	1	
G5	0	
Total	6	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	116	31%
Priority 4	57	15%
Priority 5	26	7%
Priority 6	0	0%
Total Acres	199	53%

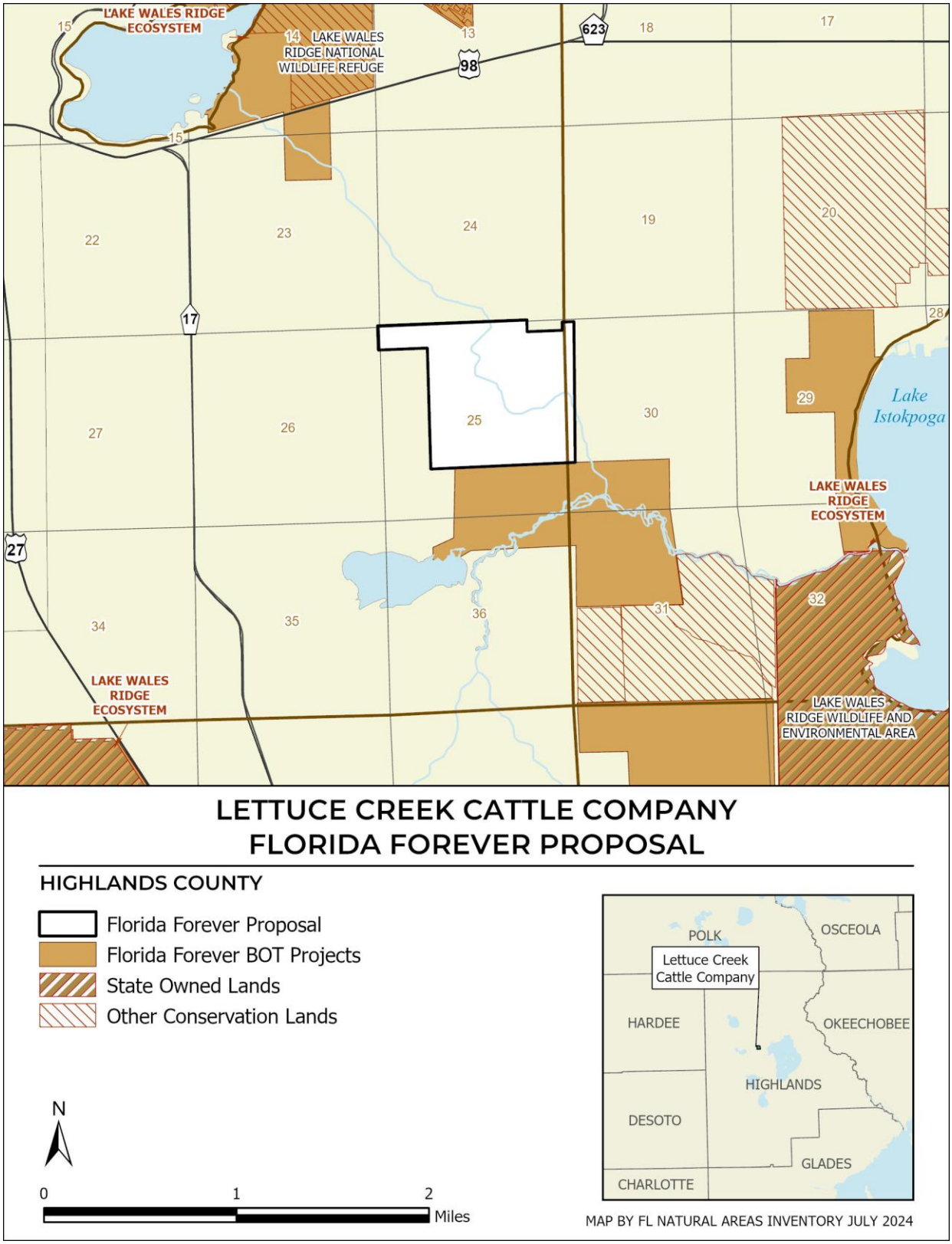
MEASURES (continued)	Resource Acres[a]	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	305	81%
Priority 3	0	0%
Priority 4	71	19%
Priority 5	0	0%
Priority 6	0	0%
Priority 7	0	0%
Total Acres	377	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	122	32%
Priority 4	81	21%
Priority 5	39	10%
Priority 6	2	< 1%
Total Acres	243	64%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	45	12%
Priority 3	267	71%
Priority 4	65	17%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	377	100%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways and Trails & Univ. 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		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	6	2%
Priority 4	0	0%
Priority 5 - Potential Pinelands	101	27%
Total Acres	107	28%
G3: Forestland for Recharge	6	2%

[a]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.

Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by Florida Natural Areas Inventory

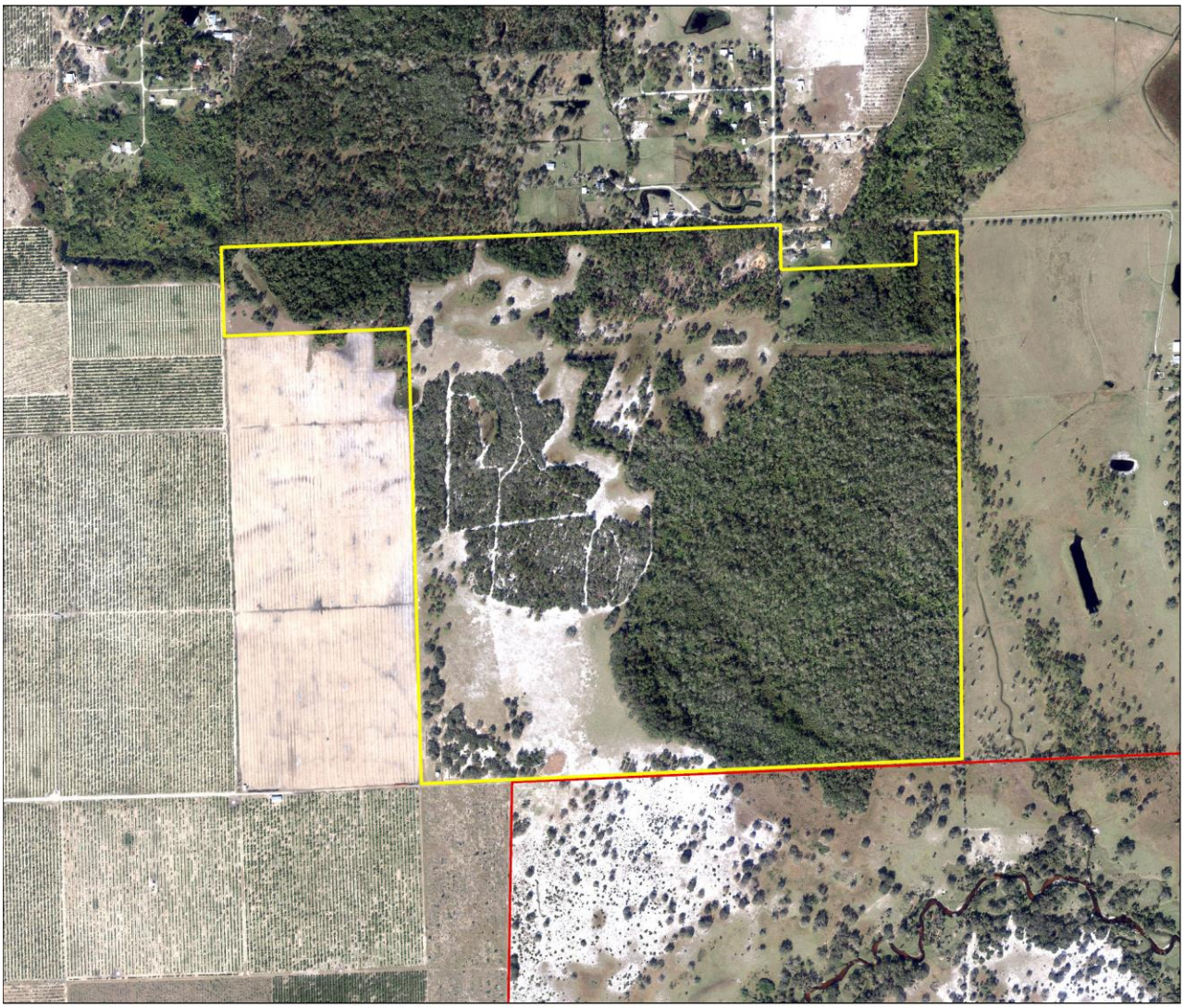
B1: Florida Forever map



B2: Aerial map

Lettuce Creek Cattle Company Florida Forever Proposal

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



Map Produced by: FL Natural Areas Inventory, N. Pasco, July 2024 Background: 2023 Highlands County Ortho Resolution = 0.076 meter

FNAI

Florida Forever Proposal Boundary

Florida Forever BOT Projects

N

0 0.25 0.5 1 Miles

Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

County	Parcel ID	Owner	GIS Acres	Just (Market) Value	Parcel Designation
Highlands	C253529A0000100000	Lettuce Creek Cattle Company	358.69	$2,478,382	Essential
Highlands	C253529A0000600000	Lettuce Creek Cattle Company	18.67	$133,065	Essential
			377.36	**$2,611,447**	

Appendix D:

Imperiled Species FNAI Ranking Definitions

FNAI

Definitions of imperiled species ranks and conservation 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

FNAI
Definitions of imperiled species ranks and conservation status

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.
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 = Partial status: some but not all of the species' infraspecific taxa have federal
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.

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 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: <http://www.doacs.state.fl.us/pi/>.

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

Appendix E:

Site visit photos.



Photo 1. Scrubby flatwoods.



Photo 2. Xeric hammock/semi-improved pasture.

Florida Forever Project Evaluation Report

Little Orange Creek Corridor
Alachua and Putnam Counties



Mesic flatwoods on Circle A Ranch.

Acquisition Type: Less-Than-Fee and Fee Simple
GIS Acres: 3,925.31
Just Value: $11,339,301
Application Date: April 15, 2024
Project Sponsors: Putnam Land Conservancy

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 11, 2024

Executive Summary

The proposed Little Orange Creek Corridor Florida Forever project encompasses 42 parcels distributed between 7 landowners, totaling approximately 3,925 acres in Alachua and Putnam Counties. Conservation lands are near or adjacent to both ends of the proposal. The northern boundary of the west end of the proposal abuts Little Orange Creek Nature Park in two separate locations. Fox Pen Preserve (Alachua Conservation Trust) and the St. Johns River Water Management District's (SJRWMD) Georgia-Pacific Lochloosa Conservation Easement are less than 0.5 and 0.75 miles from the proposal, respectively. The southeastern end of the proposal adjoins the BJ Bar Ranch Conservation Easement (SJRWMD), and North Florida Land Trust's (NFLT) Putnam Lakes Preserve. Parcels in Putnam County are proposed for less-than-fee acquisition and parcels in Alachua County are proposed for fee-simple acquisition. The project has a tax assessed value of $11,339,301.

Most of the proposal lies within Priority 3 of the Florida Ecological Greenways Network (FEGN) and within the Ocala to Osceola (O2O) Wildlife Corridor, which aims to conserve a 100 mile long, 1.6-million-acre landscape of public and private lands in north-central Florida and connect the Ocala National Forest to the Osceola National Forest. In doing so, the O2O provides habitat for long-ranging imperiled species such as the Florida black bear. Furthermore, the proposal will help to protect the only known location in Florida where the southern tessellated darter can be found. A variety of rare and imperiled species have been documented onsite, such as the narrowleaf naiad, gopher tortoise and Florida black bear.

Restoration sandhill comprises the largest landcover type in the proposal, extending approximately 1,300 acres. The landowner of this keystone tract, Little Orange Creek LLC, is dedicated to restoring former successional hardwood forest and sandhill as exemplified by the regular application of prescribed fire and a combination of mechanical/chemical treatments. The landowner intends to have a section of their property eventually become a recipient site for gopher tortoises.

The proposal contains 5 documented archaeological sites, one of which was unrecorded prior to the site visit. These sites are in good condition and collectively represent over 4,000 years of Florida's unique cultural history. The Division of Historical Resources notes the possibility of additional unrecorded archaeological sites on the property.

Boundary adjustments were made to the proposal during the project evaluation phase. Approximately 14 parcels that did not contribute to the overall project purpose were removed from the proposal in consultation with the project sponsor and landowners. The size of this proposal was reduced from the initial 4,242 acres to 3,925 acres.

If approved for addition to the 2025 Florida Forever Priority List, the project should be considered as a standalone project in the Partnerships and Regional Incentives category. The entirety of the proposal should be considered essential due to the resources documented on the property (see Appendix C). An interagency team conducted a site visit to the site on July 17, 2024. Information included in the project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The proposed Little Orange Creek Corridor project fills a large gap between existing conservation lands in Alachua and Putnam counties. The project will help facilitate wildlife movement between existing protected areas and protect flatwoods and sandhill habitat critical to a variety of rare and imperiled species. Acquisition of the Little Orange Creek Corridor will also help to protect the water resources of Little Orange Creek and increase resource-based recreational opportunities in the region.

Acquisition of this project would serve to:

- Enhance the coordination and completion of land acquisition projects.
- Increase the protection of Florida's biodiversity at the species, natural community and landscape levels.
- Protect, restore, and maintain the quality and natural functions of land, water and wetland systems.
- Increase natural resource-based public recreation or educational opportunities.
- Preserve significant archeological sites.
- Increase the amount of forestland available for sustainable management of natural resources.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Little Orange Creek Corridor proposal encompasses approximately 3,925 acres from the eastern edge of Hawthorne in Alachua County extending about 6 miles eastward to near County Road 21 in Putnam County. The property consists of multiple ownerships and is proposed for a combination of fee-simple acquisition and conservation easement.

The western edge of the corridor borders Holden Park Road for about 1.6 miles; portions of the proposal in Putnam County also have frontage on Old Hawthorne Road, Gordon Chapel Road, Vause Lake Road, Arrowhead Point Road, and several smaller public and private roads. Most of the proposal is in a single block of contiguous lands, although there is a narrow gap of 0.05 to 0.2 miles in width near Lake Fanny.

As indicated by its name, the proposed site would establish a corridor of undeveloped land between Little Orange Creek Nature Park and Putnam Lakes Preserve, both of which are further connected to other conservation lands including Little Orange Creek Preserve and BJ Bar Ranch Conservation Easement. Fox Pen Preserve and the Georgia Pacific-Lochloosa Conservation Easements are less than 0.5 and 0.75 miles from the proposal, respectively.

This evaluation is based on information gathered from the proposal, aerial photography, US Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.6), the FNAI Natural Heritage database, and other public GIS data. A field survey was conducted on June 17, 2024, by the Acquisition and Restoration Council (ARC) liaison staff, including FNAI ecologists Kim Alexander and Dan Hipes.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

Little Orange Creek Corridor lies within the Hawthorne Lakes Geomorphological Province within the Lakes District. This is a region characterized by widespread lakes and wetlands resulting from sinkhole formation; many such features are represented in the proposal. The topography on the proposal is gently rolling, with the highest elevation of approximately 140 feet above mean sea level (MSL) near the northern and western edges of the corridor and about 80 feet above MSL at the interior lakes and wetlands. Little Orange Creek, which originates northeast of Hawthorne, flows through the northwest edge of the property and into Little Orange Lake. East of Little Orange Lake, the creek re-emerges and feeds a series of marshes and swamps before leaving the south-central portion of the property feeding Redwater Lake.

Covering more than 1,300 acres, the most extensive and impressive landcover type on the Little Orange Creek Corridor is restoration sandhill. Until recently there was extensive successional hardwood forest and severely hardwood-encroached sandhill. In the past few months, the manager of Little Orange Creek LLC (the largest landowner within the proposal) has removed a large proportion of the hardwoods followed by growing season prescribed fire to further reduce hardwood debris and encourage growth of herbaceous vegetation. A large proportion of the restoration area was burned the week of the agency site visit. The

completeness of the burn provided an exceptional view across the rolling topography leading down to marshes, lakes, surrounding flatwoods and back up to restoration sandhill. Remnant longleaf pines of varying ages are sparsely distributed across the restoration area. A good number of turkey oaks (*Quercus laevis*), sand post oaks (*Quercus margaretta*), and bluejack oaks (*Quercus incana*) are widely spaced in the midstory. Small but dense patches of laurel oak (*Querus hemisphaerica*) were left during the hardwood removal process to provide "thermal cover" for wildlife, according to the land manager. Peripheral unburned portions have characteristic sandhill shrub and herb species including gopher apple (*Geobalanus oblongifolius*), woolly pawpaw (*Asimina incana*), winged sumac (*Rhus copallinum var. copallinum*), dwarf dangleberry (*Gaylussacia nana*), common persimmon (*Diospyros virginiana*), sweet goldenrod (*Solidago odora*), witchgrass (*Dichanthelium sp.*), Elliott's milkpea (*Galactia elliottii*), bluestem (*Andropogon sp.*) and southern wiregrass (*Aristida beyrichiana*). Yankeeweed (*Eupatorium compositifolium*) is abundant. Bahia grass (*Paspalum notatum*), a common pasture grass, is present in a few locations. A couple of invasive species are present within the restoration sandhill: Natal grass (*Melinis repens*; FISC Category I), and cogon grass (*Imperata cylindrica*; FISC Cat I). The manager is aware of these populations and is actively treating them. A few patches of undisturbed (albeit long unburned) sandhill are present, totaling nearly 90 acres within the proposal area. There is a canopy of longleaf pine (*Pinus palustris*) with a moderately dense midstory of sand pine (*Pinus clausa*), slash pine (*Pinus elliottii*), sand live oak (*Quercus geminata*), turkey oak, and myrtle oak (*Quercus myrtifolia*). The shrub layer is moderately dense saw palmetto (*Serenoa repens*), woolly pawpaw, gopher apple (*Geobalanus oblongifolius*), and deerberry (*Vaccinium stamineum*). Hebaceous cover is dominated by southern wiregrass. Other common species included splitbeard bluestem (*Andropogon ternarius*), coastalplain chaffhead (*Carphephorus corymbosus*), Elliott's milkpea, lopsided indiangrass (*Sorghastrum secundum*), scurf hoary-pea (*Tephrosia chrysophylla*), narrowleaf silkgrass (*Pityopsis graminifolia*), Florida alicia (*Chapmannia floridana*), purple thistle (*Cirsium horridulum*), silver croton (*Croton argyranthemus*), Michaux's croton (*Croton michauxii*), dogtongue wild buckwheat (*Eriogonum tomentosum*), and fragrant eryngo (*Eryngium aromaticum*).

A couple of large basin marshes, totaling more than 800 acres are present. A few scattered swamp tupelo (*Nyssa biflora*) are present around the periphery. There is a moderately dense to very dense shrub layer of red maple (*Acer rubrum*), common buttonbush (*Cephalanthus*

occidentalis), and the invasive Peruvian primrosewillow (*Ludwigia peruviana*; FISC-I). Herbaceous cover is generally very dense and dominated by maidencane (*Hymenachne hemitoma*), pickerelweed (*Pontederia cordata*), common arrowhead (*Sagittaria latifolia*), and arrow arum (*Peltandra sp.*). Other common species are blue maidencane (*Amphicarpum muehlenbergianum*), Virginia chain fern (*Anchistea virginica*), watershield (*Brasenia schreberi*), sawgrass (*Cladium jamaicense*), rush (*Juncus sp.*), white waterlily (*Nymphaea odorata ssp. odorata*), water hyacinth (*Oshuna crassipes*; FISC-I), smartweed (*Persicaria sp.*), fascicled beaksedge (*Rhynchospora fascicularis*), and bladderwort (*Utricularia sp.*). No disturbance was observed within the basin marshes.

Basin swamp is present on the edges of the large depressions. There is a nearly closed canopy of pond cypress (*Taxodium ascendens*) over a moderately dense subcanopy of sweetgum (*Liquidambar styraciflua*), sweetbay (*Magnolia virginiana var. australis*), swamp tupelo and swamp laurel oak (*Quercus laurifolia*). There is a sparse midstory of cabbage palm (*Sabal palmetto*) and dahoon (*Ilex cassine*). The shrub layer is generally absent, represented by seedling canopy trees and hairy highbush blueberry (*Vaccinium fuscatum*). Herbaceous cover is moderately dense. Common species are false nettle (*Boehmeria cylindrica*), longleaf woodoats (*Chasmanthium sessiliflorum var. sessiliflorum*), marshpennywort (*Hydrocotyle sp.*), narrowfruit horned beaksedge (*Rhynchospora inundata*), millet beaksedge (*Rhynchospora miliacea*), beaksedge (*Rhynchospora sp.*), lizard's tail (*Saururus cernuus*), and marsh/shield fern (*Thelypteridaceae*). The invasive Chinese tallow tree (*Triadica sebifera*; FISC-I) is present. Some evidence of feral hog rooting was observed in the basin swamp.

Restoration mesic flatwoods is present in areas peripheral to the restoration sandhill and covers approximately 230 acres. These are areas of former pine plantation (mostly slash pine) that have been thinned or clearcut with plans for maintaining open pinelands for the benefit of wildlife. Some of the patches were included in the recent prescribed fires and are already in good condition. The areas visited during the site visit have a good diversity of characteristic native species including patches with longleaf pine. The shrub layers are moderately dense and include gallberry, coastalplain staggerbush (*Lyonia fruticosa*), fetterbush (*Lyonia lucida*), Southern bayberry (*Morella cerifera*), dwarf dangleberry (*Gaylussacia nana*), sand live oak, pawpaw, winged sumac, saw palmetto and shiny blueberry (*Vaccinium myrsinites*). Herbaceous cover is sparse to moderate and includes blue maidencane, bluestem, woolly

witchgrass, Elliott's milkpea, and tailed bracken (*Pteridium pseudocaudatum*). The woody vine muscadine (*Muscadinia rotundifolia*) is common. A small area of restoration wet flatwoods is present in association with the mesic flatwoods. This community is generally similar to the mesic flatwoods but has a slash pine canopy and greater density of shrubs that are dominated by loblolly bay (*Gordonia lasianthus*), and fetterbush. Bluestem was the only noted herbaceous species.

Baygall is present in transitional areas between sandhill and some of the large wetlands. There is a sparse canopy of slash pine, sweetbay and water oak (*Quercus nigra*). The dense midstory and tall shrub layer is composed of those same species as well as loblolly bay, large gallberry (*Ilex coriacea*), titi (*Cyrilla racemiflora*), common buttonbush and swamp bay (*Tamala palustris*). The short shrub layer is dominated by fetterbush but also includes hairy highbush blueberry and sweet pepperbush (*Clethra alnifolia*). Herb cover is sparse to moderate and is composed primarily of Virginia chain fern and various sedges (*Cyperaceae* sp.). No disturbance was observed.

Mesic hammock is present in fire shadows associated with the various wetlands on the site. Several of these hammocks have very large live oaks (*Quercus virginiana*) in the canopy. Other canopy trees include Southern magnolia, loblolly pine (*Pinus taeda*), pignut hickory (*Carya glabra*), and sweetgum. The midstory is generally sparse to moderately dense and includes sweetgum, Carolina laurelcherry (*Prunus caroliniana*), water oak, sweetbay, Eastern red cedar (*Juniperus virginiana*), red mulberry (*Morus rubra*), red maple, cabbage palm and American hornbeam (*Carpinus caroliniana var. caroliniana*). The shrub layer is sparse and includes smallflower pawpaw (*Asimina parviflora*) and American beautyberry (*Callicarpa americana*), and bluestem palmetto (*Sabal minor*). Herbaceous cover is sparse and patchy, primarily composed of longleaf woodoats, witchgrass (*Dichanthelium sp.*) and netted chain fern (*Lorinseria areolata*). Woody vines are common and include trumpet creeper (*Campsis radicans*), muscadine, and earleaf greenbriar (*Smilax auriculata*). The mesic hammocks are generally in good shape; however, the edges of several of the hammocks have been altered by clearings, roads, and encroachment by pine plantation. There is some disturbance from feral hogs.

Several small to large depression marshes add to the considerable diversity of natural systems on Little Orange Creek Corridor. The marshes generally have no canopy except for an occasional pond cypress, swamp tupelo or red maple. Shrubs also are sparse but may include common buttonbush and southern bayberry; peelbark St. John's wort (*Hypericum fasciculatum*) is common. Herbaceous cover is dense and dominated by maidencane. Other common species are narrowfruit horned beaksedge (*Rhynchospora inundata*), millet beaksedge (*Rhynchospora miliacea*), marshpennywort (*Hydrocotyle sp.*), dryland white bluestem (Andropogon capillipes), blue maidencane, Virginia chain fern (*Anchistea virginica*), white waterlily (*Nymphaea odorata ssp. odorata*) and pickerelweed (*Pontederia cordata*).

Bottomland forest covers less than 30 acres within the property, primarily associated with Little Orange Creek. There is a well-developed canopy of water oak, swamp laurel oak (*Quercus laurifolia*), with pignut hickory and southern magnolia found in the mesic ecotone to adjacent uplands. The midstory and tall shrub layer are moderately dense and included American hornbeam, sweetgum, red maple, and cabbage palm. Herbaceous cover is sparse to moderate, represented primarily by longleaf woodoats, and netted chain fern. Little Orange Creek, which flows through bottomland forest, is mostly unvegetated, but has dense patches of grassy arrowhead.

At approximately 225 acres, successional hardwood forest is the most extensive and widespread altered landcover type on Little Orange Creek Corridor. These are for the most part former sandhill or mesic flatwoods that have been allowed to succeed to a hardwood-dominated community. These areas are quite variable but often have a remnant slash pine or longleaf pine canopy. Sand pine also may be present. There is generally a dense subcanopy and midstory dominated by laurel oak and water oak. Other noted species are Eastern wild black cherry (*Prunus serotina var. serotina*), turkey oak, live oak, and cabbage palm. Shrub cover is variable and includes American beautyberry, saw palmetto, and sparkleberry (*Vaccinium arboreum*). Herbaceous cover is generally sparse; no species were noted during the agency site visit. Woody vines are common to abundant and include muscadine, summer grape (*Vitis aestivalis var. aestivalis*) and earleaf greenbriar. Three invasive plant species were noted in the successional hardwood forest: paper mulberry (*Broussonetia papyrifera*; FISC-II), camphor tree (*Camphora officinarum*; FISC-I), and Caesar's weed (*Urena lobata*; FISC-I).

Abandoned field/abandoned pasture is restricted to the western end of Little Orange Creek Corridor. These areas appear to be former sandhill or mesic flatwoods but retain almost no characteristics of those systems. There is a sparse, low-statured, highly variable canopy of scattered trees including one or more of the following: slash pine, loblolly pine, Eastern wild black cherry, laurel oak, live oak, cabbage palm, and Eastern red cedar. The shrub layer is patchy and generally tall. Common species are winged sumac, cabbage palm, slimleaf pawpaw (*Asimina angustifolia*), woolly pawpaw, coralbean (*Erythrina herbacea*), gopher apple (*Geobalanus oblongifolius*), flatwoods plum (*Prunus umbellata*) and Hercules' club (*Zanthoxylum clava-herculis*). Herbaceous cover is generally dense except in the shrubby patches. Broomsedge bluestem (*Andropogon virginicus var. virginicus*), bahia grass and centipede grass (*Eremochloa ophiuroides*) are the dominant grasses. Other common herbs include indigo (*Indigofera sp.*), Canadian horseweed (*Erigeron canadensis*), poorjoe (*Hexasepalum teres*), sweet goldenrod (*Solidago odora*) and Elliott's milkpea. Woody vines including muscadine and summer grape are abundant. At least four invasive plant species are present within the abandoned field/abandoned pasture: Chinaberry (*Melia azedarach*; FISC Cat I), camphor tree, common lantana (*Lantana strigocamara*; FISC Cat I), and cogon grass infestations are low.

Approximately 62 acres of pine plantation is currently mapped within the Little Orange Creek Corridor. The plantations are scattered small stands concentrated in the western portion of the property. Former pine plantations on the Little Orange Creek LLC property have been thinned or cut with restoration to at least a somewhat natural community as a goal.

An area of improved pasture, approximately 20 acres in size is present in the western portion of the property. This pasture is clean (generally weed free) bahia grass pasture on former sandhill.

Approximately 14 acres are, in whole or partially, developed residential lots, with at least 5 permanent residences present. A few pole structures and cabin-like structures also are evident on aerial photography; these were not confirmed during the site visit. Other small-acreage (<1% of the proposal) altered landcover types include utility corridor, spoil area, and clearing.

At least eight invasive plant species are present within Little Orange Creek Corridor: Peruvian primrosewillow, Chinaberry, camphor tree, common lantana, cogon grass, paper mulberry, Caesar's weed and Chinese tallow tree. Most of these species are associated with altered landcover types and have somewhat small infestations. The one exception is the substantial population of Peruvian primrosewillow in at least one of the large basin swamps, a common problem in large, generally inaccessible marshes.

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

Community or Landcover	Acres	Percent of Proposal
restoration sandhill	1,338	34
basin marsh	812	21
basin swamp	290	7
restoration mesic flatwoods	235	6
baygall	160	4
sandhill upland/flatwoods lake	143	4
mesic hammock	134	3
sandhill	85	2
restoration wet flatwoods	58	1
depression marsh	55	1
bottomland forest	27	1
successional hardwood forest	225	6
abandoned pasture	164	4
road	84	2
pine plantation	62	2
pasture - improved	20	<1
developed	14	<1
utility corridor	9	<1
spoil area	7	<1
clearing	5	<1
Total	3,925	100

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Little Orange Creek Corridor (LOCC) Florida Forever proposal based on field observations during the July 17, 2024, site visit and results of the FWC GIS data analysis. Located in eastern Alachua County and western Putnam County, this proposal could establish connectivity between conservation lands in Marion, Alachua, and Putnum counties. The proposed corridor of parcels would facilitate connectivity of Little Orange Creek Nature Park and Preserve to the Putnam Lakes Preserve and would close the gap between conservation lands from Paynes Prairie Preserve State Park to the O2O portion of the Florida Wildlife Corridor. The largest parcel, owned by a private LLC, is 2,792 acres with a large portion formerly in commercial timber production. The parcels located

in Alachua County are proposed as fee simple acquisitions and Alachua County has agreed to manage them.

Little Orange Creek Corridor consists of areas with overgrown sandhill, some of which have succeeded into xeric hammock; sandhill with varying levels of management; wetlands, including a sandhill lake; and ruderal habitat previously in agricultural production. A large portion of the 2,792-acre parcel that was formerly in commercial timber production has been cleared through clear-cut and hardwood removal operations with plans for groundcover and longleaf pine canopy restoration. The owner is restoring sandhill with the goal of making the property a gopher tortoise (*Gopherus polyphemus*) recipient site. Management varies between parcels from areas that have not been managed to areas treated with prescribed fire and timber management, such as thinning and planting of longleaf pine seedlings. A few of the landowners are currently working with the Alachua Conservation Trust (ACT) to use prescribed fire to manage their properties and more landowners have expressed interest in working with ACT to implement management. Upland habitat, therefore, varied in condition based on level of management applications. The majority of upland habitat lacked diverse, herbaceous groundcover, but there were some areas with partially intact native groundcover, such as wiregrass (*Aristida stricta*) and sandhill milkweed (*Asclepias humistrata*). Invasive plant species observed during the site visit included Caesar's weed and natal grass.

Management recommendations to improve habitat for wildlife include the use of prescribed fire at intervals appropriate for each community type, thinning hardwoods and offsite pines in overgrown sandhill, restoration of longleaf pine as the dominant canopy species, and treatment of invasive plant species. As previously mentioned, some of the landowners are already implementing these practices. There are over 1,500 acres of wetlands included in the proposal boundary. Management recommendations for wetlands include burning uplands and associated wetlands using techniques that allow fire to carry across wetland basins. Protection of these parcels will protect the water quality of wetlands within the proposal boundary as well as Little Orange Creek, which is a tributary of Orange Creek.

Listed species observed during the site visit included a few gopher tortoise burrows, including juvenile burrows; wood storks (*Mycteria americana*) foraging in a wetland; and a Florida sandhill crane (*Antigone canadensis pratensis*) vocalizing. Observations of species included in

Florida's State Wildlife Action Plan included Bachman's sparrow (*Peucaea aestivalis*), northern bobwhite (*Colinus virginianus*), common nighthawk (*Chordeiles minor*), and swallow-tailed kite (*Elanoides forficatus*). Other wildlife observations included great egret (*Adrea alba*), great horned owl (*Bubo virginianus*), white-tailed deer (*Odocoileus virginianus*), and turkey *(Meleagris gallopavo*). During and after a rainstorm, squirrel tree frogs (*Hyla squirella*) and pinewoods tree frogs (*Hyla femoralis*) were heard vocalizing.

Wetlands on some of the parcels may provide habitat for imperiled and rare species such as the striped newt (*Notophthalmus perstriatus*), gopher frog (*Lithobates capito*), and ornate chorus frog (*Pseudacris ornate*). The imperiled southern tessellated darter (*Etheostoma olmstedi maculaticeps*) occurs in Orange Creek and there are historic records from Little Orange Creek.

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for LOCC is 6.6. Approximately 55% of the Little Orange Creek Corridor is modeled as FWC Strategic Habitat Conservation Areas and all the property is considered frequent bear (Ursus americanus floridanus) range. About 49% ranks as Priority 3 in the Critical Lands and Waters Identification Project, Biodiversity Category and about 45% is within Priority 3 of the FEGN. The entire property protects class 3F surface waters, about 42% is Priority 2-4 floodplain resources, and 36% (1,547 acres) is wetlands.

In conclusion, the acquisition of the Little Orange Creek Corridor under the Florida Forever program would benefit the conservation of Florida's fish and wildlife, plants, and habitats. Protection of the parcels in this corridor would increase connectivity between conservation lands, protect water resources, and protect habitat for imperiled species. The quality of wildlife habitat would increase with restoration of natural communities, including the use of prescribed fire. Some of the landowners are already implementing recommended management practices to restore and maintain habitat, including the restoration of sandhill for gopher tortoises.

GOALS, MEASURES AND CRITERIA

GOAL A:
ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:
The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 3,925 acres would contribute to the enhancement of essential natural resources, ecosystem service parcels and connecting linkage corridors.

Measure A2:
The number of acres protected through the use of alternatives to fee simple acquisition.

According to the application submitted, approximately 3,350 acres are proposed for less-than-fee acquisition.

Measure A3:
The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

Alachua County has been identified as a potential acquisition partner for this project.

GOAL B:
INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:
The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 62 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measures Evaluation (FFME) table (Appendix B) reports the site contains approximately 3,174 acres (81% of site) of Strategic Habitat Conservation Areas. This is divided between Priority 3 (43% of site), Priority 5 (29%), and Priority 2 (9%) areas.

Measure B2:
The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 634 of Florida's rarest species were mapped and divided into six priority classes. The FFME reports the proposed project contains approximately 1,718

acres (44% of site) of rare species habitat. The habitat is divided between Priority 6 (30% of site), Priority 5 (11%), and Priority 4 (3%) areas.

The following table lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum total of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Habitat Conservation Priorities

Scientific Name	Common Name	Global Rank	Acres
Najas filifolia	narrowleaf naiad	G3	213
Drymarchon couperi	eastern indigo snake	G3	305
Notophthalmus perstriatus	striped newt	G2G3	1
Antigone canadensis pratensis	Florida sandhill crane	G5T2	683
Mycteria americana	wood stork	G4	1172
Mustela frenata peninsulae	Florida long-tailed weasel	G5T3?	1

Measure B3:

The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages.

The FFME reports approximately 3,352 acres (85%) of the proposed project contributes to protection of ecological greenways with 45% of the site falling within Priority 3 areas and 41% in Priority 5 areas. Prioritization is based on such factors as importance for wide-ranging species like Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B4:

The number of acres acquired of under-represented native ecosystems.

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The Florida Forever Measures table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Little Orange Creek Corridor proposal contains 1,423 acres of sandhill (36% of the site), 293 acres of mesic/wet flatwoods (7%), and 143 acres of sandhill upland lake (4%). Most of the sandhill and mesic/wet flatwoods are currently in a restoration state.

Measure B5:
The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

Although it connects Little Orange Creek Nature Park to its north and Putnam Lakes Preserve to its south, the Little Orange Creek Corridor proposal, would not currently contribute to a contiguous landscape-sized protection area of at least 50,000 acres.

Measure B6:
The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

Little Orange Creek Corridor supports habitat for several rare species of conservation concern. Multiple osprey nests have been documented on Gillis Pond and nearby lakes; at least one osprey was observed flying over the site during the agency site assessment visit. A group of seven Florida sandhill cranes were observed foraging on site during the site visit; the many marshes and now open restoration sites provide excellent habitat for the cranes. Many active gopher tortoise burrows were observed in several of the former sandhill landcover types. The restoration on the site will substantially increase the available habitat for tortoises. One male Bachman's sparrow (*Peucaea aestivalis*) was heard singing in a small patch of good quality sandhill; the ongoing restoration of the site will substantially increase the habitat available within the property. The proposal is also in an area where FWC classifies the Florida black bear as Frequent. More extensive surveys may reveal additional occurrences of rare species.

The FFME table lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. The table below contains species falling into any of these observational categories, species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision, and species reported in the application or during the site visit.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

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					
Gopherus polyphemus	gopher tortoise	G3	S3	N	ST
Antigone canadensis pratensis	Florida sandhill crane	G5T2	S2	N	ST
Pandion haliaetus	osprey	G5	S3S4	N	N
Peucaea aestivalis	Bachman's sparrow	G3	S3	N	N
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on site by applicant					
none					

GOAL C:

PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:

The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

More than 1600 acres within the Little Orange Creek Corridor are in early stages of restoration to a natural system. An additional 470 acres (depending on the extent of the properties purchased as full fee) of altered land cover types within the site is potentially restorable to some semblance of natural systems. Many small infestations of several invasive plant species provide an opportunity to further improve the native systems on site.

Measure C3:

The percentage completion of targeted capital improvements in surface water improvement and management plans created under s. 373.453 (2), regional or master stormwater management system plans, or other adopted restoration plans.

Two waterbodies directly connected to the project area are listed as impaired by the Florida Department of Environmental Protection (DEP). Little Orange Creek is listed as impaired for Fecal Coliform. Little Orange Lake is listed as impaired for total phosphorus. Neither of these waterbodies are subject to an adopted TMDL for their relevant impairment parameters. Phase

2 of the Orange Creek Basin Management Action Plan (June 2014) includes a land acquisition strategy to address impairment of Little Orange Creek. Specifically, this strategy aims to prevent surface runoff of pollutants due to land use change. Additionally, this strategy has the objective of providing continued aquifer recharge and ecosystem/habitat preservation. This strategy was completed in 2012. Protecting land within the project area footprint from land use change will help to further prevent future surface water runoff of pollutants to Little Orange Creek and Little Orange Lake. Protection of land within the project area will also contribute to sustaining aquifer recharge capacity in this region.

The St. Johns River Water Management District's (SJRWMD) cost-share program—which has the goal of assisting partners with funding of projects that provide water supply, springs flows and water quality benefits—has awarded over $1 million dollars in funding to projects aimed at improving water quality within the Little Orange Creek Basin.

Measure C4:
The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 1,692 acres (43%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly divided between Priority 4 (17% of site), Priority 3 (17%), and Priority 2 (10%), with the remainder in Priority 5 (< 1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:
The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 3,902 acres (99%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 6 (42% of site), Priority 4 (29%), Priority 5 (18%), and Priority 7 (9%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C8:
The number of acres of functional wetland systems protected.

The FFME reports approximately 1,501 acres (38%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 3 (16% of site),

Priority 4 (12%), Priority 2 (9%), and Priority 5 (<1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:
The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

Exotic pasture grass is being eradicated on the 2,700 acres of the Little Orange Creek, LLC parcels. Other non-native species were observed during site visit including camphor, tropical soda apple, Caesar's weed, tropical soda apple, and paper mulberry.

GOAL D:
ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:
The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

Based on SJRWMD wetland vegetation coverage GIS data, approximately 1,470 acres of naturally occurring storage areas, including lakes and freshwater wetlands are included in the project area. These retention and storage areas contribute to the maintenance of water resources and supply within the Little Orange Creek basin and greater Ocklawaha River watershed.

Measure D3:
The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

The FFME reports approximately 3,923 acres (100%) of the proposed project would provide protection for groundwater recharge areas. This area is divided between Priority 3 (49% of site), Priority 2 (35%), Priority 4 (11%), and Priority 1 (4%). Prioritization is based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Little Orange Creek Corridor Florida Forever proposal

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	0
DEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	4
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	10
FDEP Special Nutrient Impaired WBIDs	9	0
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	8
FDEP Springsheds or within 5 miles	10, 7	10
FDEP BMAPs	10	10
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	42

GIS Evaluation score is converted to a 1 to 5 value (low to high),

FINAL DEAR SCORE = 3, medium water quality protection benefits

GOAL E:
INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measure E1:
The number of acres acquired that are available for natural resource-based public recreation or education.

The potential for connectivity exists on lands proposed for public use (such as the public trail network) in the neighboring Little Orange Creek Preserve and Nature Park. Landowners on the parcels proposed as conservation easements may be open to consideration for hosting Operation Outdoor Freedom hunt events administered by the Florida Forest Service.

Measure E2:
The miles of trails that are available for public recreation, giving priority to those that provide significant connections including those that will assist in completing the Florida National Scenic Trail.

The FFME reports that 1.2 miles of the land trail priorities and opportunities identified by the Florida Greenways and Trails System Plan (2018 update) come within a quarter mile of the proposal.

Measure E3:
The number of new resource-based recreation facilities, by type, made available on public land.

No pre-existing recreation facilities are available.

GOAL F:
PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

Measure F1:
The increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

The Little Orange Creek Corridor Florida Forever Project would meet Measure F1, as acquisition would result in an increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

Measure F2:
The increase in the number and percentage of historic and archaeological properties that are in state ownership.

The acquisition of the Little Orange Creek Corridor Florida Forever Project would meet Measure F2, as the acquisition would result in an increase in the number and percentage of historic and archaeological properties that are in state ownership.

CULTURAL RESOURCES:

According to the Division of Historical Resource's Florida Master Site File, there are currently five archaeological sites located within or intersecting the boundary of the Little Orange Creek Florida Forever project. Collectively, these resources represent over 4,000 years of Florida's past. Notably, Little Orange Creek Cow Pens (PU02121) is largely intact cattle pen likely originating from the early part of the 20th century, which was unrecorded prior to the Florida Forever site evaluation field visit.

FIELD OBSERVATIONS:

As mentioned above, the Little Orange Creek Cow Pens (PU02121) was unrecorded prior to the field visit and appears to be well preserved and in good condition. Moreover, all recorded sites observed appeared to be in good condition as well. Notably, there is great potential for numerous unrecorded sites to exist on the Little Orange Creek Corridor property. Should any artifacts or other cultural resources be discovered on the project in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology Program for further evaluation.

GOAL G:
INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

Measure G1:
The number of acres acquired that are available for sustainable forest management.

The FFME reports approximately 2,127 acres (54% of site) could be available for sustainable forest management, divided between Priority 3 (1,059 acres), Priority 2 (907 acres), and Priority 5 (162 acres). Prioritization is based on 4 criteria set by the Florida Forest Service: whether trees are natural or planted, size of tract, distance to market, and hydrology. Priority 5 areas are considered “potential” pinelands; agricultural areas that could be restored to pineland.

Measure G2:
The number of acres of state-owned forestland managed for economic return in accordance with current best management practices.

Approximately 200 acres on Circle A Ranch is currently managed for economic return, although this area is interspersed with wetlands. The Little Orange Creek LLC property contains a 700-acre area of 22-year-old slash pine that is partially thinned and logged for purposes of conversion to gopher tortoise habitat.

Measure G4:
The percentage and number of acres identified for restoration restored by reforestation.

Approximately 200 acres (5%) of the total property area is currently identified for restoration. The majority landowner, Little Orange Creek LLC, has expressed that their goal for restoration is to improve habitat for the gopher tortoise by restoring native groundcover and longleaf pine, all of which are intermittently present throughout the larger Little Orange Creek Corridor evaluation area.

FLORIDA FOREVER CRITERIA

The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.):

- the project meets multiple goals described in subsection (4).
- the project enhances or facilitates management of properties already under public ownership.
- the project has significant archaeological or historic value.
- the project contributes to the solution of water resource problems on a regional basis.

- the project may be acquired, in whole or in part, using alternatives to fee simple, including but not limited to, tax incentives, mitigation funds, or other revenues, the purchase of development rights, hunting rights, agricultural or silvicultural rights, or mineral rights or obtaining conservation easements or flowage easements.
- the project is a join acquisition, either among public agencies, nonprofit organizations, or private entities, or by a public-private partnership.

The Acquisition and Restoration Council shall give increased priority to:

- projects that can be acquired in less than fee ownership, such as a permanent conservation easement.
- projects that contribute to improving the quality and quantity of surface water and groundwater.
- projects located within the Florida Wildlife Corridor as defined in (§ 259.1055(4), F.S.)

MANAGEMENT

For the portions of the project proposed for fee simple acquisition, see Appendix D for management prospectus.

For the portions of the project proposed for less-than-fee acquisition, the primary management responsibility would remain with the landowner. Periodic monitoring of the site's management would occur to confirm continued compliance with the conditions of the easement. Monitoring would be coordinated by the Office of Environmental Services (OES) within the Department of Environmental Protection's (DEP) Division of State Lands (DSL).

FUNDING SOURCES

Alachua County has been identified as a potential partner in acquisition, along with Florida Forever.

FUNDING FOR MAPPING, APPRAISAL, NEGOTIATIONS & CLOSING

Alachua County has been identified as a potential partner in acquisition, along with Florida Forever.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues, Jurisdictional and Sovereignty Lands, Legal Issues
Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)
The easements and encumbrances of record would be determined during the appraisal mapping. A current title commitment would be obtained, or the owner's title insurance policy would be reviewed if the policy id available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits
There are no apparent contamination sites within the project based on the application form.

Estimated Cost of Appraisal and Mapping
DEP Bureau of Appraisal estimates $10,000 to $20,000 in appraisal fees.

Acquisition Phases
Subject to funding, the Little Orange Creek Corridor Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs
High Potential: Public use opportunities in this area include hiking, off-road biking, canoeing, kayaking, fishing, wildlife viewing, and primitive camping.

The proposal is a blend of less-than-fee and fee simple acquisitions. Most of the project is proposed as less-than-fee acquisition (3,350 acres). The proposed fee simple portions of the project are in Alachua County and Alachua County has agreed to manage these parcels.

The 2,792-acre Little Orange Creek, LLC tract and the 222-acre Circle A Ranch tracts are being restored to longleaf upland community with its associated groundcover. The other conservation easements may be different and depend on the conservation values of the property and the ownership tenure and goals of the landowner. So, a generalization of the

uses, terms, and restrictions is near-impossible. Dwellings and other structures exist on some of the other less-than-fee parcels in this application and these would be carved out with a suitable envelope around them that would include ancillary structures, barns, wells, stables, etc.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces
Low Potential: The project will also help protect the state threatened southern tessellated darter due to this being one of the only areas where this fish has been regularly found.

Potential for Being Subdivided
Moderate to High: Several tracts in the Alachua County portion adjacent to Little Orange Lake have been approved for development. Also, the paved road frontage of Gordon Chapel Road has a strong potential for development due to its proximity to Hawthorne.

Existing Land Uses and Future Land Use Designations
Existing Land Uses: The landscape is a mixture of forested upland planted pines and wetlands that are associated with Little Orange Creek and six sandhill upland lakes, the largest being Little Orange Lake. Most the upland pine forests are being restored to longleaf pine and the areas that are currently lacking native understory are being restored. The entire project also contributes to aquifer recharge.

Development Potential
Moderate to High Potential: The area of the subject site along Holden Park Road and SE 65th Lane is currently designated as Moderate Density Residential in the City of Hawthorne Future Land Use Map. Currently there are several approved developments in the Alachua County portion of the property along Little Orange Lake. Most of the subject site is adjacent to development and is designated for agricultural use or for residential use.

Transportation Planning Issues
The proposed project is in FDOT District 2 in Alachua and Putnam Counties. There is a CSX rail mainline less than half a mile west of the proposed project area that is also a FDOT Strategic Intermodal System (SIS) corridor. An additional active CSX spur line is adjacent to the project area on its northern border. State Road (SR) 20 is a SIS corridor and designated evacuation route, located adjacent to the project area on its northern border. There is a FDOT Work Program project underway in preconstruction to reconstruct portions of SR20 and add

additional lanes. SR200/US301 is a SIS corridor and designated evacuation route, located approximately one mile northwest of the project area, where a FDOT Work Program resurfacing project is in the preconstruction phase.

The Palatka-to-Hawthorne Trail is an existing Shared Use Non-Motorized (SUN) Trail corridor that is adjacent to SR20, bordering the proposed project area. The proposed project would provide a protected corridor located near the FDOT wildlife crossing at Little Orange Creek Preserve.

While the Department finds no adverse impacts to this proposed project at this time, there should be coordination with the appropriate FDOT District 2 staff during the acquisition process to ensure that issues related to the transportation system are addressed and incorporated into the management plans as appropriate.

Ongoing Governmental Efforts

SJRWMD is involved in numerous ongoing government efforts related to the project area including: Orange Creek Basin Interagency Working Group, Orange Creek Basin BMAP Working Group, North Florida Regional Water Supply Partnership, Orange Creek Basin Surface Water Improvement and Management Plan. SJRWMD's Governing Board added the Orange Creek Basin to the Surface Water Improvement and Management (SWIM) program priority list in 2003. The program goal is to restore and maintain healthy aquatic and wetland habitats in the basin's three large lakes (Newnans, Lochloosa and Orange) and Paynes Prairie. The Orange Creek Basin SWIM program is focused on reducing pollutants, especially excess phosphorus in Newnans, Lochloosa and Orange lakes. Major activities include monitoring water quality and plankton communities, modeling pollutant loading, quantifying sources of nutrient pollutants and working cooperatively with state and local governments. Over many years beginning in 1989, the district acquired approximately 50,000 acres of conservation lands in the Orange Creek Basin, either as full-fee purchases or as conservation easements, with costs sometimes shared by partners. These lands are managed by the district or its partners, and most are open to the public for recreational activities. Some of the property has been used for restoration projects, such as restoration of thousands of acres of shallow marsh at the 3,500-acre Orange Creek Restoration Area.

ACKNOWLEDGEMENTS
Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Meghan Lauer and Katie Briley in DSL's Office of Environmental Services were responsible for the overall coordination of this report, with contributions from the following:

- Division of Historical Resources: Brandon Ackermann, Jason O'Donoughue
- Florida Forest Service: Cat Ingram, Blake Josephson
- Department of Commerce: Yazmin Valdez, James Stansbury
- Florida Fish and Wildlife Conservation Commission: Diana Pepe, Jess Rodriguez
- Florida Natural Areas Inventory: Kim Alexander, Dan Hipes
- DEP Division of Environmental Assessment and Restoration: Moira Homann, Kenneth Weaver
- Florida Department of Transportation: Allison Beaty
- St. Johns River Water Management District: Brent Bachelder
- Alachua County: Emily Uhlmann, Kevin Ratkus

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

Little Orange Creek Corridor: Florida Forever Measure Evaluation 20240910

GIS ACRES = 3,925

MEASURES	Resource Acres[3]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	339	9%
Priority 3	1,698	43%
Priority 4	0	0%
Priority 5	1,138	29%
Total Acres	3,174	81%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	133	3%
Priority 5	419	11%
Priority 6	1,166	30%
Total Acres	1,718	44%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	1,758	45%
Priority 4	0	0%
Priority 5	1,594	41%
Total Acres	3,352	85%
B4: Under-represented Natural Communities		
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)	1,423	36%
Sandhill Upland Lake (G3)	143	4%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	293	7%
Upland Hardwood Forest (G5)	0	0%
Total Acres	1,859	47%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	1	
G3	1	
G4	1	
G5	1	
Total	4	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	373	10%
Priority 3	658	17%
Priority 4	652	17%
Priority 5	8	< 1%
Priority 6	0	0%
Total Acres	1,692	43%

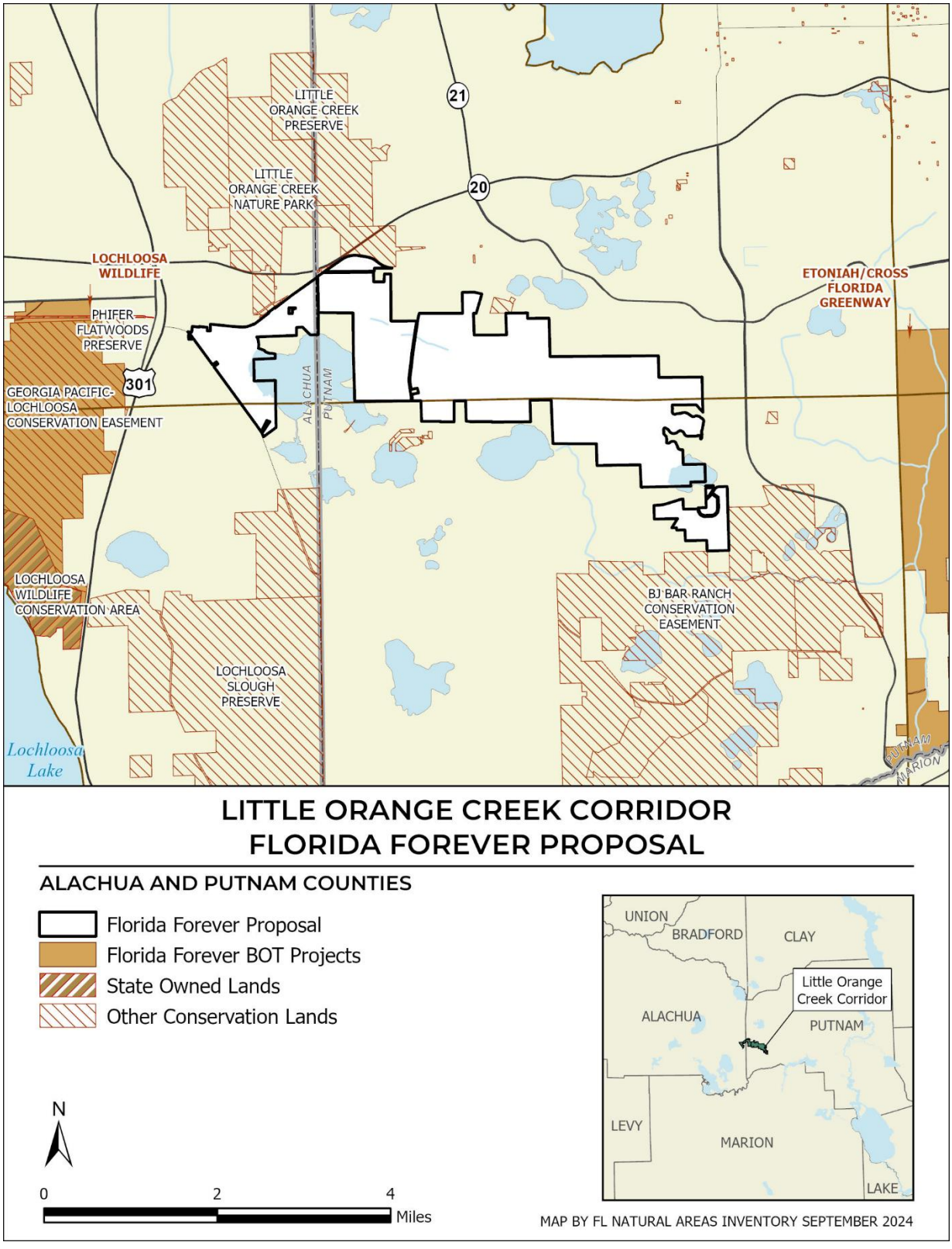
MEASURES (continued)	Resource Acres[3]	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	1,155	29%
Priority 5	717	18%
Priority 6	1,665	42%
Priority 7	364	9%
Total Acres	3,902	99%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	373	9%
Priority 3	646	16%
Priority 4	478	12%
Priority 5	4	< 1%
Priority 6	0	0%
Total Acres	1,501	38%
D3: Aquifer Recharge		
Priority 1	147	4%
Priority 2	1,391	35%
Priority 3	1,935	49%
Priority 4	450	11%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	3,923	100%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways and Trails & Univ. Florida)		
Land Trail Priorities	1.2	
Land Trail Opportunities	0.0	
Total Miles	1.2	
F2: Arch. & Historical Sites (number)	4 sites	
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	907	23%
Priority 3	1,059	27%
Priority 4	0	0%
Priority 5 - Potential Pinelands	162	4%
Total Acres	2,127	54%
G3: Forestland for Recharge	1,706	43%

[3]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.

Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by Florida Natural Areas Inventory

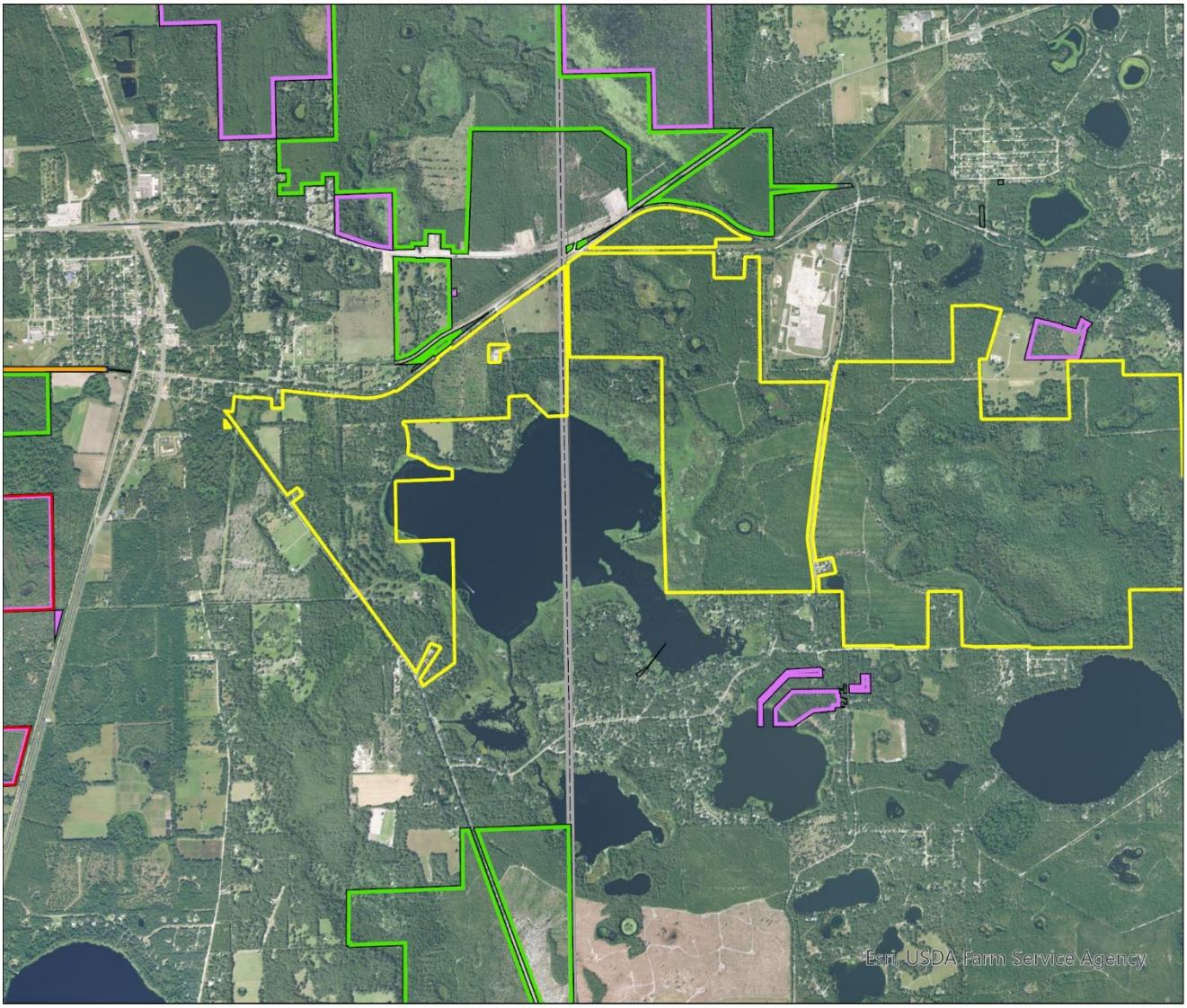
B1: Florida Forever map



B2: Aerial map

Little Orange Creek Corridor Florida Forever Proposal: Map 1

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



Map Produced by: FL Natural Areas Inventory, N. Pasco, September 2024 Background: USDA NAIP Imagery Resolution = 1.0 meter

FNAI

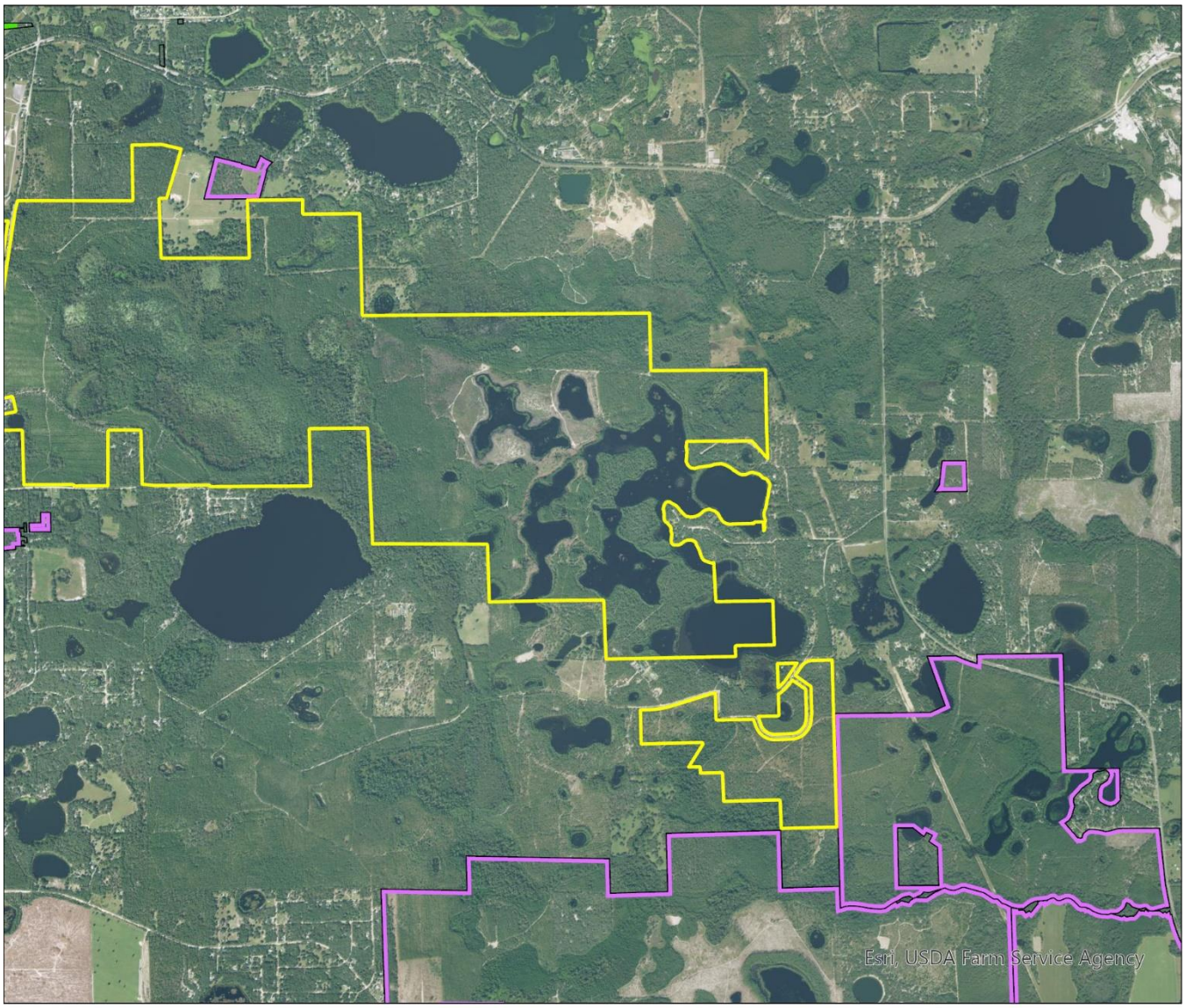
- Florida Forever Proposal Boundary
- Florida Forever BOT Projects
- Existing State Conservation Lands
- Existing Local Conservation Lands
- Existing Private Conservation Lands

N

0 0.75 1.5 3 Miles

Little Orange Creek Corridor Florida Forever Proposal: Map 2

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



Map Produced by: FL Natural Areas Inventory, N. Pasco, September 2024 Background: USDA NAIP Imagery Resolution = 1.0 meter

FNAI

- Florida Forever Proposal Boundary
- Existing Local Conservation Lands
- Existing Private Conservation Lands

N

0 0.75 1.5 3 Miles

Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

County	Parcel ID	Owner	Acres	Just (Market) Value	Parcel Designation
Putnam	03-11-23-0000-0040-0000	Little Orange Creek LLC	17.73	$176,400	Essential
Putnam	03-11-23-0000-0040-0010	Novusway Inc	300.65	$648,700	Essential
Putnam	03-11-23-0000-0040-0011	Little Orange Creek LLC	61.98	$540	Essential
Putnam	04-11-23-0000-0010-0000	Little Orange Creek LLC	402.87	$681,910	Essential
Putnam	05-11-23-0000-0030-0000	Little Orange Creek LLC	116.94	$303,350	Essential
Putnam	06-11-23-0000-0020-0010	Little Orange Creek LLC	58.18	$185,670	Essential
Putnam	10-11-23-0000-0010-0000	Circle A Ranch 360 LLC	4.83	$97,460	Essential
Putnam	10-11-23-0000-0010-0010	Circle A Ranch 360 LLC	10.09	$110,990	Essential
Putnam	10-11-23-0000-0010-0020	Circle A Ranch 360 LLC	9.01	$103,620	Essential
Putnam	10-11-23-0000-0010-0030	Circle A Ranch 360 LLC	10.59	$101,540	Essential
Putnam	10-11-23-0000-0100-0000	Circle A Ranch 360 LLC	10.93	$107,370	Essential
Putnam	10-11-23-0000-0101-0000	Circle A Ranch 360 LLC	19.25	$217,140	Essential
Putnam	10-11-23-0000-0102-0000	Circle A Ranch 360 LLC	53.83	$238,630	Essential
Putnam	10-11-23-0000-0103-0000	Circle A Ranch 360 LLC	45.80	$180,350	Essential
Putnam	10-11-23-0000-0105-0000	Circle A Ranch 360 LLC	37.64	$247,030	Essential
Putnam	10-11-23-3940-0010-0000	Circle A Ranch 360 LLC	13.45	$143,880	Essential
Putnam	10-11-23-3940-0030-0000	Circle A Ranch 360 LLC	3.11	$34,540	Essential
Putnam	10-11-23-3940-0040-0000	Circle A Ranch 360 LLC	3.11	$34,540	Essential
Putnam	29-10-23-0000-0110-0000	Little Orange Creek LLC	29.68	$246,400	Essential
Putnam	30-10-23-0000-0040-0010	Little Orange Creek LLC	3.50	$33,000	Essential
Putnam	30-10-23-0000-0040-0100	Little Orange Creek LLC	290.93	$702,450	Essential
Putnam	31-10-23-0000-0020-0000	Little Orange Creek LLC	797.07	$1,776,560	Essential
Putnam	32-10-23-0000-0010-0000	Little Orange Creek LLC	569.15	$1,195,880	Essential
Putnam	33-10-23-0000-0020-0000	Little Orange Creek LLC	319.36	$881,200	Essential
Putnam	34-10-23-0000-0080-0000	Little Orange Creek LLC	160.83	$449,650	Essential
Alachua	19322-001-000	Landmarc Inc	35.25	$237,560	Essential
Alachua	19322-001-001	Lubben & Saunders Co-Trustees	53.35	$97,866	Essential
Alachua	19322-001-002	Landmarc Inc & Lubben & Saunders Co-Trustees	1.73	$6,930	Essential
Alachua	19503-000-000	Lakes of Hawthorne LLC	128.97	$320,525	Essential
Alachua	19919-000-000	Lakes of Hawthorne LLC	2.15	$119,297	Essential
Alachua	19945-002-001	Landmarc Inc	50.10	$90,198	Essential
Alachua	19945-002-002	Lubben & Saunders Co-Trustees	41.74	$76,806	Essential
Alachua	19952-000-000	Lakes of Hawthorne LLC	86.12	$142,000	Essential
Alachua	19954-000-000	Little Orange Lake Investors LLC	113.72	$921,728	Essential
Alachua	19959-000-000	Little Orange Lake Investors LLC	12.84	$64,500	Essential
Alachua	19959-003-000	Little Orange Lake Investors LLC	4.44	$44,960	Essential
Alachua	19959-004-000	Little Orange Lake Investors LLC	6.88	$54,880	Essential
Alachua	19959-005-001	Little Orange Lake Investors LLC	5.47	$41,876	Essential
Alachua	19959-006-000	Little Orange Lake Investors LLC	6.83	$40,860	Essential
Alachua	19959-007-000	Little Orange Lake Investors LLC	6.72	$53,440	Essential

Alachua	19959-008-000	Little Orange Lake Investors LLC	4.91	$89,100	Essential
Alachua	19960-001-000	Little Orange Lake Investors LLC	13.58	$37,975	Essential
			3,925.31	**$11,339,301**	

Appendix D:
Management Prospectus for Little Orange Creek Corridor, a less-than-fee and fee simple proposal.

Little Orange Creek Corridor Management Prospectus

Alachua County

Introduction

The Little Orange Creek Corridor (LOCC) is a 3,925-acre project located in eastern Alachua County and western Putnam County. Although valuable as a stand-alone project, the LOCC project will help connect a large landscape scale complex of conservation lands in Alachua, Marion, and Putnam Counties, protecting water resources and facilitating wildlife movement between existing protected areas through a combination of fee simple and conservation easement acquisitions.

This Management Prospectus considers the acquisition and management of the Alachua County parcels that are a part of this project. It is not intended to be an in-depth final management plan recommendation, but it can serve as a baseline for future management considerations. Input from the public and other stakeholders and potential management partners will be incorporated into longer-term management strategies as acquisitions of the parcels in this project are completed. The prospectus has been prepared by the Alachua County Environmental Protection Department – Land Conservation and Management Program, also known as the Alachua County Forever Program. The mission of the Alachua County Forever Program is to acquire, improve and manage environmentally significant lands that protect water resources, wildlife habitat, and natural areas suitable for resource-based recreation.

Purpose of Acquisition and Project Scope

The purpose of this acquisition is to preserve and enhance the resources onsite while considering opportunities for passive resource-based recreation.

The Alachua County parcels are located on the southeast side of the City of Hawthorne, encompassing lands that surround Little Orange Lake to the north and west. There are 21 parcels under four different ownerships within the scope of this project that have been proposed for fee simple acquisition. There is public road frontage on Holden Park Road and

SE 65th Lane. If acquired in its entirety, the Alachua County portion of this project would protect 1.4 miles of shoreline on Little Orange Lake (in Alachua County), 0.35 miles of Little Orange Creek, and a variety of adjacent upland and wetland habitats. The combined market value, based on Alachua County Property Appraiser (ACPA) assessments, is $2,470,503. This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price. The actual value of the individual parcels will be determined by appraisals attained as part of the acquisition process.

Site Characteristics

The Alachua County parcels of the proposed Little Orange Creek Conservation Corridor (LOCC) project are in southeastern Alachua County and southeast of the City of Hawthorne. The parcels encompass over 600 acres of land. Within Alachua County alone, these parcels are located between existing protected areas and could be integral in bridging the conservation gap between them. The Lochloosa Slough and Fox Pen Preserve complex, managed by Alachua County and Alachua Conservation Trust (ACT), is half a mile south of the Alachua County parcels of LOCC and spans over 6,500 acres. This Preserve continues into the Orange Creek Restoration Area (managed by St. Johns River Water Management District) further south. The Alachua County parcels of the LOCC are also hydrologically connected to the nearly 2,900-acre Little Orange Creek Preserve and Nature Park to the north in Hawthorne via Little Orange Creek which terminates into Little Orange Lake.

The Alachua County parcels of the LOCC are part of the Little Orange Creek watershed, which is located within the much larger, 600 square mile Orange Creek Basin. The Little Orange Creek's watershed drains from the northeast of the City of Hawthorne and flows to the south to Little Orange Lake, Holden Pond, Moss Lee Lake and Bream Lake. The residential and commercial development around these lakes has been moderate, but developmental pressure is increasing rapidly. Even with modest lake shore development the St. Johns River Water Management District has documented elevated water quality impairments such as fecal coliform in its 2011 Orange Creek Basin Surface Water Improvement & Management Plan. The main recreational activities on the lakes within the Little Orange Creek watershed is freshwater fishing and recreational motor boating and kayak paddling.

Fourteen different land cover types were identified across the site according the FNAI/ FWC Cooperative Landcover GIS dataset (v3.7) including: freshwater forested and non-forested

wetlands, marshes, prairies and bogs, lacustrine, mixed hardwood/ coniferous forest, tree plantations, and improved pasture, among other more developed/ semi-urban land types. (Figure 3) Known natural and altered communities observed during site evaluation assessments for the northeastern most parcels (Landmarc Inc. and Lubben and Saunders Co-Trustees) include upland hardwood forest, blackwater stream, lakeshore swamp, successional hardwood forest, old field, improved pasture, and moderate impact development. There are 16 different soil types ranging from excessively well drained in the uplands to very poorly drained closer to Little Orange Lake, with the main one being Lake Sand (Figure 5).

Aerial imagery dating back to 1938 indicates that many of the parcels included for potential acquisition have been cleared historically for agricultural or other purposes, and many areas remain in a cleared/ semi-cleared state and are beginning to colonize with early successional species. Invasive species monitoring and treatment will be a necessary element of any future site management or restoration plans. Non-native invasive plants known to exist on the property include camphor tree, tuberous sword fern, coral ardisia, Chinaberry, tropical soda apple, small leaved spiderwort, cogon grass, and Caesar's weed. While some scattered patches were higher density, non-native invasive plant cover was low/moderate on the parcels that were able to be accessed by Alachua County Staff. Inclusion of the pasture grasses in presence of non-native species increases the cover to moderate.

There is one documented eagle nest on property, and gopher tortoises are also known to occupy the site.

Three known cultural or historic resources have been recorded in the Florida Master Site File for the Alachua County parcels of this project.

Once acquisition is completed, a more detailed assessment of the property will be conducted to better inform management strategies in the ten-year management plan.

Management Goals

Alachua County uses a landscape-level approach in the strategy to acquire and manage lands within Alachua County, aiming to acquire pieces that create connections to existing conservation lands.

Alachua County uses a landscape-level approach in the management of Alachua County preserves, which focuses on restoring the ecology and function of onsite natural communities. Acquired lands will be managed to maintain or improve environmentally significant natural resources, and to protect water quality, wildlife habitats, and natural areas suitable for resource-based recreation. Key management objectives are as follows:

1. Maintain, enhance, or restore existing natural communities.
2. Inventory natural features of the site, including flora, fauna, and natural communities.
3. Protect populations of significant and listed plant and animal species.
4. Develop and implement a prescribed fire management plan.
5. Protect water resources from adverse impacts.
6. Effectively and responsibly manage cultural resources.
7. Promote public outdoor recreation and environmental education consistent with preserving the historic and natural resources of the site.
8. Periodically review, evaluate and modify the management of the property as needed.

Alachua County will be primarily managing the property and writing/implementing the management plan. Portions of the property may be managed or co-managed with other agencies such as the City of Hawthorne, or the Alachua County Parks and Open Spaces department if local funds are utilized to purchase portions of the project. All natural and cultural resources will be managed under an approved management plan for the purposes of acquisition included within the Florida Forever Act and Chapters 253 and 259, Florida Statutes.

Conditions Affecting Intensity of Management

Current onsite conditions and restoration/ recreation goals will affect the intensity of management of the site. An in-depth assessment will need to be conducted to ground-truth existing natural communities and assess historic disturbance to determine appropriate future desired conditions. Past, present, and predicted land use changes of onsite and surrounding landscapes will need to be taken into consideration to ascertain the feasibility or effectiveness of potential restoration and management objectives, as development patterns or hydrological changes in the vicinity may make some restoration goals impractical to achieve. Many areas are anticipated to require ecological restoration to achieve desired future conditions and may

include groundcover restoration, reforestation, and implementation of an appropriate prescribed fire regime. Treatment of invasive species will also affect intensity of management, and it is likely that multiple targeted treatments may be necessary to control certain species such as Caesar weed. In some areas, solid waste removal needs and cost may determine scale of restoration goals. Public access and integration of compatible resource-based based recreation opportunities will also affect management intensity. These considerations and others will be included in the site assessment and incorporated into the ten-year management plan.

Estimate of the Revenue Generating Potential

If Alachua County is the sole manager of the property, there will likely be no plans to generate revenue from this site other than potential revenue generated from timber harvests should such activities be a part of restoration plans for the site. Any revenue generated from such activities would be utilized for continued future maintenance of the site, in accordance with the County's Board-adopted Timber Management Business Plan. However, since this area is close to the City of Hawthorne, and it is also within an area of the County identified as a priority need area for a rural Community Park in the Alachua County Parks and Open Space Master Plan (adopted in 2023), consideration may be given to joint management strategies which might generate revenue to enhance tourism and provide recreational amenities to local residents. Such activities could include a kayaking or paddle boarding concession to allow recreational access to Little Orange Lake. Any plans to generate revenue on the property will be addressed as part of the ten-year management plan once appropriate acquisition is complete.

Timetable for Implementation

Since the Alachua County portion of the LOCC project contains parcels under multiple separate ownerships, both acquisition and subsequent management will likely be done in phases as the individual pieces are acquired. As acquisition is completed, site assessments will be conducted in order to draft a management plan which will establish current site conditions, future goals, and any potential role cooperating agencies and stakeholders may play in future management.

During the planning process, site security measures will be implemented, and low impact accessibility improvements will be assessed. The site will be monitored for trespass and illegal dumping, and appropriate boundary marking signs will be posted. Assessments will be made to determine the condition of existing infrastructure and ascertain what improvements will need to be made in the future. Essential roads will be maintained to provide management access, and public access where appropriate, and unnecessary roads, fencelines and firebreaks will be abandoned and restored as practical. If any new fencing is needed for site security purposes, fencing methods and materials will consider impacts to wildlife movement and ecological connectivity. Cultural sites will be managed in accordance with Florida Department of Historic Resources policies. Long -range plans will focus on protection and management of the natural and cultural resources onsite as well as providing appropriate recreational opportunities. Any extensive site improvements for restoration or allowing for public access will not be initiated until the final management plan is accepted by the State and Alachua County, if the property is acquired.

Potential Recreational Amenities/ Activities and Initial Improvements

The primary objective of the site will be to preserve, maintain, and restore the natural resources on-site while providing appropriate access and passive recreation opportunities to the public. Recreational activities on the site may include hiking, biking, canoeing, kayaking and paddleboarding, fishing, wildlife viewing, and environmental education.

Recreation activities will be evaluated to minimize the degradation or alteration of natural resources and habitats onsite. Trailheads and observation areas may include educational signage describing the ecological significance of the site, it's ecological value to the Little Orange Creek watershed, and its importance in landscape-wide connectivity efforts across multiple counties. Potential initial improvements and possible future amenities are listed below. Initiation of more intense management activities or construction of amenities will not take place until more thorough site assessments are completed, and they will be included in the ten-year management plan should implementation be feasible or desired.

<u>Preliminary improvements may include:</u>

- Parking area(s) and trailhead(s) with information kiosk(s)
- Hiking and/ or multi-use trails (to potentially include bicycling)

- Nature viewing areas or observation platforms
- Interpretive signs
- Paddling access points
- Solid waste clean-up
- Invasive species removal
- Road improvements for management access
- Firebreak construction
- Fencing and other site security measures

No major land alterations or physical improvements will be undertaken without prior written approval of the State of Florida or as included in the management plan except as necessary for site security or management access for staff.

Cost Estimates and Financial Support

Initial Improvements

$28,500	Trailhead
$6,000	Gates
$52,800	Site Perimeter Fencing
$16,600	Firebreak/ Trail Construction
$75,000	Solid Waste Removal
Total	**$178,900**

Average Annual Management Costs

$4,950	Road/Trail/Firebreak Maintenance
$36,000	Invasive Plant Control
$3,250	Prescribed Fire
$5,000	Other Resource Management
$6,998	Monitoring/Security/Support
Total	**$56,198**

Map. 1

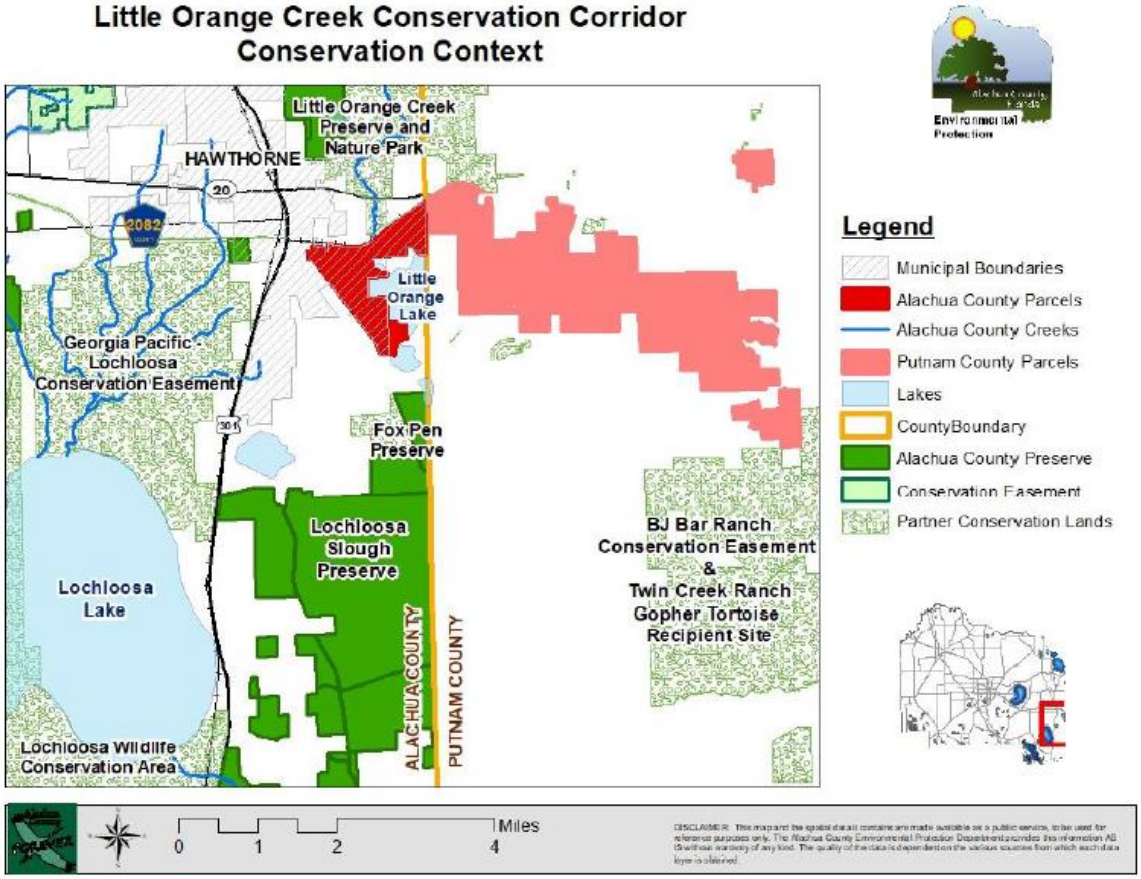


Figure 1: Location and Conservation Context

Map. 2

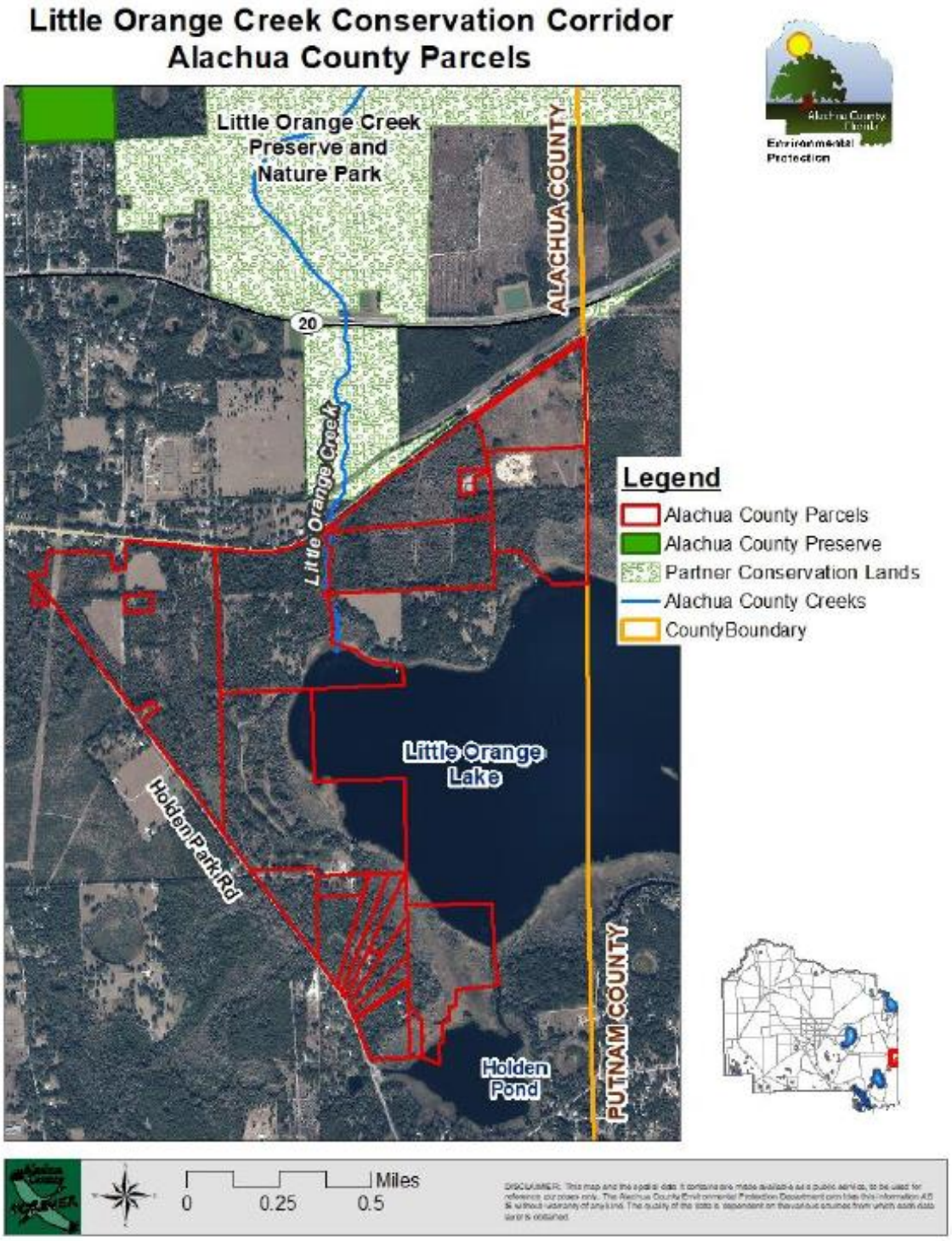


Figure 2: LOCCC Alachua County Parcels

Appendix E:

Imperiled Species FNAI Ranking Definitions

FNAI
Definitions of imperiled species ranks and conservation 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

FNAI
Definitions of imperiled species ranks and conservation status

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.
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 = Partial status: some but not all of the species' infraspecific taxa have federal
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.

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 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: <http://www.doacs.state.fl.us/pi/>.

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

Appendix F:

Site Visit Photos.



Photo 1. Bottomland forest on property.



Photo 2. Florida sandhill cranes foraging post-burn.



Photo 3. Active gopher tortoise burrow.



Photo 4. Basin marsh on property.



Photo 5. Little Orange Creek.



Photo 6. Cattle pen originating from the early part of the 20th century.

Florida Forever Project Evaluation Report

Rock Bend Ranch
DeSoto County



Peace River at Rock Bend.

Acquisition Type: Less-Than-Fee
GIS Acres: 658.44
Just Value: $3,118,020
Application Date: March 22, 2024
Project Sponsors: Wildlands Conservation

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 11, 2024

Executive Summary

The proposed Rock Bend Ranch Florida Forever project contains 4 parcels owned by Rock Bend Ranch LLC, totaling approximately 658 acres in DeSoto County. Rock Bend Ranch lies within 5 miles of several conservation lands, including the Horse Creek Ranch conservation easement, the Limestone Ranch Florida Forever project, and the Peace River Refuge Florida Forever project, among others. The project is proposed for less-than-fee acquisition and has a tax assessed value of $3,118,020.

Rock Bend Ranch is currently leased for cattle grazing, with approximately 40 head of cattle on the property. The landowner is actively working to improve and restore natural communities on site, exemplified by the implementation of a burn plan with a 3-4 year burn rotation and an herbicide management plan for treating invasive plant species. Nearly 80% of the property is naturally vegetated, predominantly comprised of floodplain swamp. The property west of the floodplain contains several under-represented natural communities in Florida including scrub, scrubby flatwoods and sandhill.

The proposal lies within Priority 3 of the Florida Ecological Greenways Network (FEGN). A number of listed species have been documented onsite such as the American alligator, giant airplant, gopher tortoise, and Florida spiny-pod. Other protected species reported on site by the landowner include the Florida panther, Florida scrub jay, Florida sandhill crane, crested caracara and wood stork.

There are two recorded archaeological sites on the property. These sites are made up of low-density pre-Columbian ceramic and lithic scatters. The Division of Historical Resources noted the possibility for additional archaeological sites on Rock Bend Ranch.

The entire eastern boundary of the proposal, over 2 miles, borders the west bank of the Peace River, eventually emptying into Charlotte Harbor. Acquisition of this proposal will protect water resources of the Peace River and the greater Charlotte Harbor Basin.

If approved to the 2025 Florida Forever Priority List, the project should be considered as an amendment to the Peace River Refuge Florida Forever project boundary in the Less-Than-Fee category. All 658 acres proposed for acquisition are considered essential due to the resources

documented on the property (see Appendix C). An interagency team conducted a site visit to the project site on June 19, 2024. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The proposed Rock Bend Ranch project will help to ensure water quality and quantity of the Peace River, the main source of freshwater to Charlotte Harbor. This project will also protect critical habitat for a variety of rare and imperiled species in an area with high potential for intensive land use conversion.

Acquisition of this project would serve to:

- Conserve and protect a portion of Florida's rural landscape in order to provide and enhance wildlife corridors for rare and imperiled species.
- Enhance the coordination and completion of land acquisition projects.
- Increase the protection of Florida's biodiversity at the species, natural community, and landscape levels.
- Preserve significant archeological sites.
- Protect, restore, and maintain the quality and natural functions of land, water and wetland systems of the state.
- Provide surface and groundwater protection and protect natural floodplain functions.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Rock Bend Ranch Florida Forever proposal is approximately 658 acres in north-central DeSoto County, approximately 7 miles north of Arcadia. This is a single contiguous piece of property, representing the majority of a 714-acre ranch under a single ownership. The land is proposed by the owners for less-than-fee-simple acquisition.

The proposal lies in a region of overwhelmingly agricultural land use, with agricultural lands adjoining the proposal to the north, west, and south. It is an irregularly shaped tract, measuring about 1.6 miles north to south, and varying in width from about 0.35 miles to about 0.9 miles at its widest point. The Peace River is the property's eastern boundary; the southern boundary fronts NE Brownville St. for about 0.4 miles. NE Williams Ave. passes through the southwest corner of the tract, separating a wedge of land (about 8 acres) from the remainder of the proposal.

There are few managed lands nearby, although much of the river corridor extending to the north and south remains forested. The nearest conservation lands are the Horse Creek Ranch conservation easement (and the adjacent Horse Creek conservation easement), ca. 2 miles to the west. DeSoto County's Morgan Park and the Peace River Refuge FFBOT project are approximately 5 miles downstream (south) along the Peace River, and the unacquired Limestone Ranch FFBOT project surrounds the river about 1 mile north. Acquisition of the proposal would contribute to protection of the Peace River, as well as Charlotte Harbor, which receives most of its fresh water from the Peace River.

A field survey was conducted on June 19, 2024, by the Acquisition and Restoration Council (ARC) liaison staff, including FNAI biologists Geoffrey Parks and Jake Travers. This evaluation is based on observations and information gathered during the site visit, as well as information from the proposal, aerial photography, US Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FL FWCC and FNAI, Florida Cooperative Land Cover Map, version 3.6), the FNAI Natural Heritage database, and other public GIS data.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

The proposal property is situated on the Hardee Upland Province (Florida Geographic Survey, 2022), a large, broad, sandy plain 30 to 90 feet in elevation that stretches south from the Bone Valley uplands to the low Barrier Island Coastal Strip, which runs along the coastal portions of Charlotte, Sarasota, Manatee, and Lee counties, and the Caloosahatchee Valley to the south along the Caloosahatchee River. The property lies along the Peace River, the main waterway draining the Hardee Upland Province. The Peace River is the main source of freshwater for Charlotte Harbor, and protection of the proposal property could contribute to water quality protection for the Charlotte Harbor Aquatic Preserve. The river's upper section is highly impacted by phosphate mining operations and lands surrounding the lower river are largely converted to agricultural fields. There is very little protected land along the Peace River and none in the immediate vicinity of the proposal.

The proposal encompasses a range of elevations. Near the river and occupying about half of the proposal, is a broad forested floodplain lying at an elevation of about 20-25 feet above sea level. West of this floodplain, elevations slope upward significantly, with well-drained upland

soils rising to elevations as high as 65 feet. The uplands on the proposal are bisected by the drainage of Bear Branch, a blackwater stream that originates just west of the proposal and flows southeast towards the Peace River.

Most of the site is in relatively natural condition. The steep, sandy banks immediately adjacent to the river are relatively unvegetated, and other than sporadic Carolina willow (*Salix caroliniana*) there is little vegetation along the edge of the channel itself. Just inland of the river, however, is a broad, relatively level floodplain area consisting of a mosaic of natural communities, influenced by slight variation in topography and soils resulting from sediment deposition due to frequent flooding. This floodplain makes up nearly half of the proposal and consists of 3 different natural communities. Floodplain swamp occurs in low areas that hold water the longest, and consists of bald cypress (*Taxodium distichum*), Carolina ash (*Fraxinus caroliniana*), with a shrub layer of common buttonbush (*Cephalanthus occidentalis*). The groundcover is patchy, consisting of Virginia chain fern (*Anchistea virginica*), maidencane (*Hymenachne hemitoma*), and in standing water, pickerelweed (*Pontederia cordata*). Other trees found in this community include red maple (*Acer rubrum*), sweetbay (*Magnolia virginiana var. australis*). Some floodplain swamp extends northwestward along the Bear Branch drainage as well.

On higher sand deposits in the Peace River floodplain, mesic hammock occurs. These forests have a mostly closed canopy dominated by live oak (*Quercus virginiana*), with a lesser amount of laurel oak (*Quercus hemisphaerica*). Saw palmetto (*Serenoa repens*) sometimes forms a nearly continuous shrub layer, with occasional American beautyberry (*Callicarpa americana*), and hog plum (*Ximenia americana*). Vines can be common, and include muscadine (*Muscadinia rotundifolia*), trumpet creeper (*Campsis radicans*), and laurel greenbriar (*Smilax laurifolia*) in the shrub layer and climbing into the canopy. The cover of herbaceous plants is typically low, even in open areas between palmettos, although tailed bracken (*Pteridium pseudocaudatum*) occurs. Caesar's weed (*Urena lobata*, FISC-1) was noted to be common in this community.

Intermediate between the swamps and hammocks of the floodplain are areas of alluvial forest. Although this community is uncommon in the southern peninsula, these forests are clearly distinct from the associated hammock and swamp due to the prevalence of water hickory

(*Carya aquatica*) and water locust (*Gleditsia aquatica*). These areas are often very open, with a sparse canopy of relatively short trees and frequent grasses, including Guinea grass (*Megathyrsus maximus*, FISC-1) and limpograss (*Hemarthria altissima*, FISC-2).

West of the floodplain, the vegetation on the xeric soils on higher elevations is considerably different. Scrubby flatwoods is the most abundant natural community in these areas (7% of the proposal). These areas have a scattered pine canopy and are dominated by shrubby species, including wild olive (*Cartrema sp.*), coastalplain staggerbush (*Lyonia fruticosa*), fetterbush (*Lyonia lucida*), Chapman's oak (*Quercus chapmanii*), sand live oak (*Quercus geminata*), turkey oak (*Quercus laevis*), myrtle oak (*Quercus myrtifolia*), saw palmetto, sparkleberry (*Vaccinium arboreum*), and hog plum. Groundcover in open areas between shrubs consists of Southern wiregrass (*Aristida beyrichiana*) along with other low-statured species such as bluestem (*Andropogon sp*.), tailed bracken, shiny blueberry (*Vaccinium myrsinites*), sandyfield beaksedge (*Rhynchospora megalocarpa*), and milkpea (*Galactia sp.*). Shrub height in some areas has been recently reduced through mulching, intended to facilitate continued use of prescribed fire.

Intergrading with the scrubby flatwoods on the tract are areas of sandhill (about 5% of the site). These generally appear to be in the initial stages of recovering from a long period of fire exclusion but retain substantial plant diversity. Where there is a pine canopy, it is typically sand pine (*Pinus clausa*), which appears to have invaded due to lack of fire, rather than longleaf (*Pinus palustris*). The midstory is typically open, with the dominant species being turkey oak, although other oaks such as sand live oak and laurel oak are present in lesser amounts. Shrub density varies, but is mostly patchy and often fairly low, with patches of saw palmetto and various oaks – Chapman's oak, myrtle oak – interspersed with grasses and herbs, including bluestem, Southern wiregrass, milkpea, skyblue lupine (*Lupinus diffusus*), scrub goldenaster (*Pityopsis aequilifolia*), sandyfield beaksedge, Chapman's goldenrod (*Solidago chapmanii*), lopsided indiangrass (*Sorghastrum secundum*), pineywoods dropseed (*Sporobolus junceus*), and coastalplain chaffhead (*Carphephorus corymbosus*). Recent application of prescribed fire has begun the process of rehabilitating this community by reducing sand pines and midstory.

Although both sandhill and scrubby flatwoods on the tract contain many species associated with the scrub community, only one area of true scrub was noted during the site visit. This

community differs slightly from the others in the lack of wiregrass and lack of dominance of saw palmetto and turkey oak. About 22 acres of scrub occur on the tract (3% of the proposal). This has a canopy of scattered sand pine, and a shrub layer of Chapman's oak, myrtle oak, sand live oak, and palmettos, with several of the herbs noted above, as well as Elliott's milkpea (*Galactia elliottii*).

Baygalls occur where soils are frequently saturated by groundwater seepage, generally at the intergrade between the sandy uplands and the lower elevations of the floodplain. These are closed canopy forests where loblolly bay (Gordonia lasianthus) is dominant, with occasional other trees such as red maple. Virginia chain fern, false nettle (Boehmeria cylindrica), marshpennywort (Hydrocotyle sp.), cinnamon fern (Osmundastrum cinnamomeum), lizard's tail (Saururus cernuus), and toothed midsorus fern (Telmatoblechnum serrulatum) grow at variable density in the groundcover; invasive Caesar's weed grows on elevated hummocks. Southern needleleaf (Tillandsia setacea) is common on the limbs and trunks of canopy trees.

Bottomland forest makes up a small portion (1%) of the proposal. The largest area of bottomland forest is found surrounding a small drainage to the west of NE Brownville St., This community has a mixed canopy of species such as red maple, sweetgum (*Liquidambar styraciflua*), sweetbay, swamp laurel oak (*Quercus laurifolia*), water oak (*Quercus nigra*), and Florida elm (*Ulmus americana var. floridana*). Shrubs found in this community are mainly shortleaf wild coffee (*Psychotria tenuifolia*) and bluestem palmetto (*Sabal minor*). The groundcover is a mix of species common in hydric and more dry conditions, including bracken fern (*Pteridium sp.*), netted chain fern (*Lorinseria areolata*), and variable witchgrass (*Dichanthelium commutatum*); invasive Caesar's weed occurs fairly commonly and balsampear (*Momordica charantea*; FISC-2) was also noted.

Pastures make up about 14% of the proposal. Improved pastures occur in 2 general locations on the site, in the uplands in the north-central portion of the proposal, and to a lesser extent, near the southern end. These are typically dominated by bahiagrass (*Paspalum notatum*), with varying amounts of West Indian dropseed (*Sporobolus jacquemontii;* FISC-1). Occasional hammock-like islands of live oak or sand live oak and saw palmetto occur, along with occasional individual netted pawpaw (*Asimina reticulata*), American beautyberry, and sweetgum.

Areas that are dominated by non-native grasses and influenced by grazing but that still retain some native canopy trees, shrubs, and sometimes herbs, are classified as semi-improved pastures. These make up about 2% of the property, generally intergrading between improved pastures and forested areas, but also in small areas of the floodplain. Dominant grasses are bahiagrass and/or bermudagrass (*Cynodon dactylon*), but species in other strata vary based on site conditions. Wetter sites have swamp laurel oak, Carolina ash, and water locust; in sites derived from mesic hammocks, live oak, saw palmetto, and American beautyberry are common. Semi-improved pasture's very well-drained soils are similar to the adjacent scrubby flatwoods or sandhill, with sand live oak, turkey oak as a sparse canopy, and hog plum and common persimmon (*Diospyros virginiana*) in the shrub layer. Smaller plants intermixed with bahiagrass include Adam's needle (*Yucca filamentosa)*, hoarypea (*Tephrosia* sp.) sensitive pea (*Chamaecrista sp.*), and southern wiregrass.

Successional hardwood forests occupy a small amount of the proposal, mainly at the intergrade between other forest types and pasture. These have a sparse canopy of water oak with a disturbed understory of saw palmetto covered in muscadine. Other species occurring in the successional hardwood areas include southern magnolia (*Magnolia grandiflora),* fetterbush, and roundpod St. John's wort *(Hypericum cistifolium*).

Small areas of other altered landcovers make up the remainder of the site. A utility corridor crosses the tract, occupying about 1% of the proposal and vegetated with a mix of pasture grasses and ruderal herbs. A network of unpaved roads crosses the property, and small artificial ponds occur in 2 locations in the improved pastures.

Although many of the natural communities on the site are relatively free of invasive plants, invasive species occur commonly in some parts of the proposal. Caesar's weed is frequent and often at high density in the floodplain. Guinea grass is abundant in open areas near the river, where according to the landowners, its density fluctuates greatly in response to annual flooding. Other invasive plants recorded on the tract include West Indian dropseed (fairly common in improved pastures), and occasional small patches of old-world climbing fern (*Lygodium microphyllum*, FISC-1), and tropical soda apple (*Solanum viarum*, FISC-1).

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

Community or Landcover	Acres	Percent of Proposal
floodplain swamp	217	33
mesic hammock	174	26
scrubby flatwoods	44	7
sandhill	33	5
scrub	22	3
alluvial forest	21	3
baygall	20	3
bottomland forest	8	1
blackwater stream	2	<1
floodplain marsh	<1	<1
pasture - improved	82	12
pasture - semi-improved	15	2
successional hardwood forest	10	2
utility corridor	9	1
artificial pond	1	<1
road	<1	<1

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Rock Bend Ranch (RBR) Florida Forever proposal based on field observations during the June 19, 2024, site visit, results of the GIS analysis and discussions with the landowners and other site visit participants. Rock Bend Ranch is bordered on the east by the Peace River and agricultural land on all other sides. The State (Department of Environmental Protection and the Southwest Florida Water Management District) has established conservation easements less than three miles to the west on over 16,000 acres of Horse Creek and Horse Creek Ranch, and the Limestone Ranch Florida Forever BOT Project is located just one mile north of the property.

Freshwater forested wetlands make up most of the property (51%). Improved (8%) and unimproved (5%) pastures of Rock Bend Ranch are leased for cattle grazing with a total of 40 head of cattle. The pastures are in good condition with scattered live oaks to provide shade for cattle and some wildlife habitat. Livestock fencing, gates, and cows were observed during the visit. Some of the scrub and brushland habitat (14%) is intact but needs mechanical treatment and prescribed fire. The mesic flatwoods (13%) are somewhat degraded due to fire suppression and are transitioning to hammock/hardwoods, and some impacts from grazing were present.

One of the landowner's goals is to improve and restore natural communities. To achieve this goal, the landowner has a burn plan that includes conducting prescribed fire management on a

three to four-year rotation (depending on the natural community) and controlling invasive plant species through spot herbicide treatments when observed. Invasive plants, including torpedo grass (*Panicum repens*), tropical soda apple, guinea grass, Caesar's weed, cogon grass (*Imperata cylindrica*) and maidencane were observed during the site visit. Additionally, feral hog (*Sus scrofa*) trapping and removal efforts are ongoing at Rock Bend Ranch, and some feral hog rooting was observed.

Imperiled and rare species observations included gopher tortoises (*Gopherus polyphemus*; State-designated Threatened) and mounds of southeastern pocket gopher (*Geomys pinetis pinetis*; State Wildlife Action Plan). Additionally, three crested caracaras (*Polyborus plancus audubonii*; Federally-designated Threatened) were observed on the adjacent citrus grove. A diversity of avian species were observed, including tricolored heron (*Egretta tricolor*; State-designated Threatened), swallow-tailed kite (*Elanoides forficatus*; State Wildlife Action Plan), turkey vulture (*Cathartes aura*), great egret (*Ardea alba*), pileated woodpecker (*Dryocopus pileatus*), and great blue heron (*Ardea herodias*). Additional avian species were heard calling throughout the property, including tufted titmouse (*Baeolophus bicolor*), Carolina wren (*Thryothorus ludovicianus*), yellow-billed cuckoo (*Coccyzus americanus*), northern parula (*Setophaga americana*), blue-gray gnatcatcher (*Polioptila caerulea*), American crow (*Corvus brachyrhynchos*), white-eyed vireo (*Viero griseus*), downy woodpecker (*Dryobates pubescens*), great-crested flycatcher (*Myiarchus crinitus*), barred owl (*Strix varia*), and northern cardinal (*Cardinalis cardinalis*). Other wildlife observations included southern toad (*Anaxyrus terrestris*), American alligator (*Alligator alligator*), Palamedes swallowtail (*Papilio Palamedes*), eastern tiger swallowtail (*Papilio glaucus*), gulf fritillary (*Dione vanilla*), and blue dasher dragonfly (*Pachydiplax longipennis*). The landowners mentioned the presence of game species, including wild turkeys (*Meleagris gallopavo*), white-tailed deer (*Odocoileus virginianus*), and fish species including snook (*Centropomus undecimalis*), tarpon (*Megalops atlanticus),* catfish (unknown species), and largemouth bass (*Micropterus salmoides*).

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for this property is 6.2. Approximately 56% of Rock Bend Ranch is classified as Critical Lands and Waters Identification Protection Priority 2 in terrestrial. The entire property is within occasional

black bear (*Ursus americanus floridanus*) range, and game cameras have captured photos of at least one Florida panther (*Puma concolor coryi*; Federally-designated Endangered) using the site, according to the landowners.

About 44% of the property comprises FWC Strategic Habitat Conservation Areas for the swallow-tailed kite and Florida scrub-jay (*Aphelocoma coerulescens*), and 97% has an imperiled species richness of 1-7 species. The entire property provides protection to class 3F surface waters, including the Peace River (59%) and Bear Branch (41%). Wetlands comprise 365 acres (55%), and 39% of Rock Bend Ranch is Priority 3 floodplain resources.

In conclusion, the acquisition of the Rock Bend Ranch proposal under the Florida Forever program would benefit the overall conservation of Florida's wildlife, plants, and habitats. Rock Bend Ranch's pastures are beneficial to various wildlife species and likely provide habitat for other species not observed during the site visit. The upland communities are currently good habitat for many wildlife species and have potential to be even better. With basic invasive plant management, prescribed fire, and mechanical treatment, all the natural communities still present on the property would better benefit wildlife in the greater area. Additionally, with ever-expanding development pressures, the acquisition would ensure wildlife connectivity to the surrounding agricultural lands and protect water resources in the Peace River watershed.

GOALS, MEASURES AND CRITERIA

GOAL A:
ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:
The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 658 acres would contribute to the enhancement of essential natural resources, ecosystem service parcels and connecting linkage corridors.

Measure A2:
The number of acres protected through the use of alternatives to fee simple acquisition.

The entirety of the project (658 acres) is proposed for less-than-fee acquisition via conservation easement.

Measure A3:
The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

No funding partners have been identified for this project.

GOAL B:
INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:
The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 62 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measures Evaluation (FFME) table (Appendix B) reports the site contains approximately 505 acres (77% of site) of Strategic Habitat Conservation Areas. This is divided within Priority 5 (61% of site) and Priority 3 (16%).

Measure B2:
The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 634 of Florida's rarest species were mapped and divided into 6 priority classes. The FFME reports the proposed project contains approximately 641 acres (98% of site) of rare species habitat. The habitat is divided between Priority 6 (68% of site), Priority 5 (24%), and Priority 4 (5%).

The following table lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum total of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Habitat Conservation Priorities

Scientific Name	Common Name	Global Rank	Acres
Antigone canadensis pratensis	Florida sandhill crane	G5T2	119
Caracara plancus	crested caracara	G5	152
Mustela frenata peninsulae	Florida long-tailed weasel	G5T3?	602

Measure B3:
The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages.

The FFME reports approximately 653 acres (99%) of the proposed project contributes to the protection of ecological greenways, falling entirely within Priority 2 areas. Prioritization is based on such factors as importance for wide-ranging species like Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B4:
The number of acres acquired of under-represented native ecosystems.

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The Florida Forever Measures table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Rock Bend Ranch proposal contains 66 acres of scrub and scrubby flatwoods (10% of the site) and 33 acres of sandhill (5%).

Measure B5:
The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

The Rock Bend Ranch proposal would not currently contribute to a contiguous landscape-sized protection area of at least 50,000 acres. The closest protected lands are approximately 2 miles to the west.

Measure B6:
The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

This site supports habitat or potential habitat for several rare or listed species. During the site visit, active burrows of gopher tortoise were observed, as was an American alligator. The landowner noted that a pair of crested caracara are frequent on the property; although these were not seen on the site during the site visit, a group of 3 were observed together directly across the road from the proposal. Several listed plants were observed during the site visit (see table below). The application notes several additional wildlife species, and it is possible that more extensive surveys could reveal the occurrence of additional species of rare plant as well.

The FFME lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. The table below contains species falling into any of these observational categories, species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision, and species reported in the application or during the site visit.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**
Rare plants documented on site					
Gonolobus suberosus	angle pod	G5‡	SNR	N	T
Tillandsia utriculata	giant airplant	G4‡	S4	N	E
Matelea floridana	Florida spiny-pod	G2	S2	N	E
Zephyranthes simsonii	redmargin zephyrlily	G2G3	S2S3	N	T
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
Alligator mississippiensis	American alligator	G5	S4	SAT	FT(S/A)
Gopherus polyphemus	gopher tortoise	G3	S3	N	ST
Additional rare animals reported on site by applicant					
Antigone canadensis pratensis	Florida sandhill crane	G5T2	S2	N	ST
Aphelocoma coerulescens	Florida scrub-jay	G1G2	S1S2	T	FT
Caracara plancus	crested caracara	G5	S2	T	FT
Egretta caerulea	little blue heron	G5	S4	N	ST
Egretta tricolor	tricolored heron	G5	S4	N	ST
Falco sparverius paulus	southeastern American kestrel	G5T4	S3	N	ST
Mycteria americana	wood stork	G4	S2	T, PDL	FT
Puma concolor coryi	Florida panther	G5T1	S1	E	FE

**Explanations of species ranks and conservation status are found at: https://www.fnai.org/PDFs/Rank_and_Status_Explanation.pdf.*

‡Species not tracked by FNAI

GOAL C:
PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:
The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

The property is offered for less-than-fee acquisition; however, the current landowners are actively working to manage the tract for protection and enhancement of the natural communities, and plan to continue prescribed fire, invasive plant control, and feral hog control on the property. These management techniques, which were evident during the site visit, should benefit imperiled species. The improved pastures would require a varying amount of long-term commitment to restore to native species, although in the case of the semi-improved pastures, some native species remain that could help facilitate this process.

The floodplain swamps, hammocks, baygall, bottomland forest, and alluvial forests require little management other than control of invasive plants. Caesar's weed (FISC-1) is widespread on the property and could pose a control challenge. A few other species, though more localized, were also observed during the site visit: Guinea grass (FISC-1) is abundant along the berms above the river, and West Indian dropseed is well established in the improved pasture. Individual areas of old-world climbing fern and tropical soda apple also occur. A baseline assessment to determine the full extent of invasive species is warranted if acquisition of an easement occurs.

Measure C4:
The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 395 acres (60%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly divided between Priority 3 (45% of site), Priority 2 (13%), and Priority 4 (2%), with the remainder in Priority 5 (1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:
The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 652 acres (99%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 4 (66% of site), Priority 5 (24%), and Priority 3 (9%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C8:
The number of acres of functional wetland systems protected.

The FFME reports approximately 345 acres (52%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 3 (43% of site), Priority 2 (6%), Priority 4 (3%), and Priority 5 (1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:
The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

Approximately 600 acres are under maintenance control with herbicide application. Invasive species observed during site reconnaissance include Guinea grass, smut grass, Sida, small areas of cogon grass, tropical soda apple, and Ceaser's weed.

GOAL D:
ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:
The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

The 658-acre property is located within the Southwest Florida Water Management District's (SWFWMD) Southern Planning Region for water supply and is within the Southern Water Use Caution Area. In addition, this property occurs within the District's proposed Fee Acquisition for the Lower Peace River Corridor Project. The property has over two miles of frontage along the west side of the Peace River and contains a portion of the Bear Branch creek which drains to the Peace River. According to the Florida Forever Application, 388 acres of freshwater forested wetlands occur along the Peace River and the Bear Branch drainage. There are also a few small areas of basin swamp (0.2 acres) and an artificial pond (0.83 acres) on the property. 387 acres occur withing the FEMA 100-year floodplain and 44 acres occur within the FEMA 500-year floodplain.

SWFWMD's mission is comprised of Four main Area's of Responsibility (AOR's); Water Supply, Water Quality, Natural Systems, and Flood Protection. Each area has a goal; Water Supply: Ensure an adequate supply of water to provide for all existing and future reasonable and beneficial uses while protecting and maintaining water resources and related natural systems. Water Quality: Protect and improve water quality to sustain the water resources,

environment, economy, and quality of life. Natural Systems: Preserve, protect, and restore natural systems to support their natural hydrologic and ecological functions. Flood Protection: Minimize flood damage to protect people, property, infrastructure, and investment. This property contributes to all four AOR's, Water Quality 81%, Water Supply, 32%, Natural Systems 73%, and Flood protection 56%.

Measure D3:
The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

The FFME reports approximately 658 acres (100%) of the proposed project would provide protection for groundwater recharge areas. This area is divided between Priority 5 (58% of site), Priority 4 (30%), and Priority 3 (12%). Prioritization is based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Rock Bend Ranch Florida Forever proposal

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	0
FDEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	4
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	7
FDEP Special Nutrient Impaired WBIDs	9	9
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
FDEP Springsheds or within 5 miles	10, 7	0
FDEP BMAPs	10	0
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	6
Total Possible	101	26

GIS Evaluation score is converted to a 1 to 5 value (low to high)

FINAL DEAR SCORE = 2, medium low water quality protection benefits

GOAL E:
INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measure E1:
The number of acres acquired that are available for natural resource-based public recreation or education.

The site is proposed as a conservation easement and as such, public access is not applicable. Landowners may consider the property to be available for Operation Outdoor Freedom hunt events, administered by the Florida Forest Service, or public educational opportunities.

Measure E2:
The miles of trails that are available for public recreation, giving priority to those that provide significant connections including those that will assist in completing the Florida National Scenic Trail.

The FFME reports that 2.2 miles of the land trail priorities and opportunities identified by the Florida Greenways and Trails System Plan (2018 update) come within a quarter mile of the proposal.

GOAL F:
PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

Measure F1:
The increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

The proposed Rock Bend Ranch Florida Forever Project would meet Measure F1, as acquisition would result in an increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

CULTURAL RESOURCES:

According to the Division of Historical Resource's Florida Master Site File, there are currently two archaeological sites located within or intersecting the boundary of the proposed Rock Bend Ranch Florida Forever project. Both recorded sites (DE00025, DE00442) are low-density ceramic and/or lithic scatters that are pre-Columbian in origin.

FIELD OBSERVATIONS:

During the Field Review of the proposed Rock Bend Ranch Florida Forever project, staff observed both recorded archaeological sites in good condition. There is a noted potential for unrecorded sites to exist on the Rock Bend Ranch property. Should any artifacts or other cultural resources be discovered on the property in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology Program for further evaluation.

GOAL G:
INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

Landowners are not interested at time of site reconnaissance in planting pine trees in areas that could withstand reforestation. They plan to keep 100 acres in cattle grazing use. Areas onsite are forested, with some portions under management and other portions that could use management.

Measure G1:
The number of acres acquired that are available for sustainable forest management.

The FFME reports approximately 287 acres (44% of site) could be available for sustainable forest management, divided between Priority 5 (201 acres) and Priority 3 (86 acres). Prioritization is based on 4 criteria set by the Florida Forest Service: whether trees are natural or planted, size of tract, distance to market, and hydrology. Priority 5 areas are considered "potential" pinelands; agricultural areas that could be restored to pineland.

Measure G3:
The number of acres of forestland acquired that will serve to maintain natural groundwater recharge functions.

The entire 658 acres are important for groundwater recharge. The open pastures and current mix of forest types and associated management all promote a healthy hydrological system on the property.

Measure G4:
The percentage and number of acres identified for restoration restored by reforestation.

The landowners do not have an interest in reforesting any areas onsite. The primary focus is cattle grazing. The pasture area, approximately 100 acres, could be reforested at a later date if the landowners change their minds.

FLORIDA FOREVER CRITERIA

The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.):

- the project meets multiple goals described in subsection (4).
- the project has significant archeological or historic value.
- the project contributes to the solution of water resource problems on a regional basis.
- the project has a significant portion of its land area in imminent danger of development, in imminent danger of losing its significant natural attributes or recreational open space,

or in imminent danger of subdivision which would result in multiple ownerships and make acquisition of the project costly or less likely to be accomplished.

- the project may be acquired, in whole or in part, using alternatives to fee simple, including but not limited to, tax incentives, mitigation funds, or other revenues, the purchase of development rights, hunting rights, agricultural or silvicultural rights, or mineral rights or obtaining conservation easements or flowage easements.

The Acquisition and Restoration Council shall give increased priority to:

- projects that can be acquired in less than fee ownership, such as a permanent conservation easement.
- projects that contribute to improving the quality and quantity of surface water and groundwater.
- projects located within the Florida Wildlife Corridor as defined in (§ 259.1055(4), F.S.).

MANAGEMENT

If acquired as a perpetual conservation easement, the primary management responsibility would remain with the landowner. Periodic monitoring of the site's management would occur to confirm continued compliance with the conditions of the easement. Monitoring would be coordinated by the Office of Environmental Services (OES) within the Department of Environmental Protection's (DEP) Division of State Lands (DSL).

FUNDING SOURCES

Florida Forever is the only identified funding source.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues, Jurisdictional and Sovereignty Lands, Legal Issues
Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)
The easements and encumbrances of record would be determined during the appraisal mapping. A current title commitment would be obtained, or the owner's title insurance policy would be reviewed if the policy is available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits
There are no apparent contamination sites within the project based on the application form.

Estimated Cost of Appraisal and Mapping
DEP Bureau of Appraisal estimates $10,000 to $20,000 in appraisal fees.

Acquisition Phases
Subject to funding, the Rock Bend Ranch Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs
Moderate Potential: As stated before, the property contains large swaths of land with access and frontage along the Peace River, a desirable location for development. Protecting the Rock Bend Ranch project will also protect large green spaces and natural resources along the Peace River. Many trails and open space already exist on the subject property but are protected as of now.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces
High Potential: Development of the subject site is imminent, resulting in the loss of significant natural attributes and recreational open space. Development and subdivision would result in multiple ownership and make acquisition of the project costly or less likely to be accomplished.

In addition to development potential, the property includes over 380 acres of mixed wetland hardwoods that could be cleared for agricultural purposes without further state or federal authorizations. That is also what happened to the forested wetlands to the south where over 100 acres of forested wetland have been cleared, drained, and converted to pasture.

Potential for Being Subdivided
Low Potential: Most of the Peace River corridor is uniformly designated for agricultural and rural uses. The residential and institutional uses along the corridor exist closer to the City of Arcadia. It is unlikely that the area will be subdivided or converted for uses other than the agricultural and rural uses that the subject property is designated for.

Existing Land Uses and Future Land Use Designations

Existing Land Uses: The subject property protects existing open spaces and natural buffer areas within some floodplains that also serve as natural flow ways or natural temporary water storage areas. Also, the percentage of the land acquired within the project boundary creates additional open spaces, natural buffer areas, and greenways within a floodplain, while precluding rebuilding in areas that repeatedly flood.

Future Land Uses:

The future land use plan for DeSoto County has the subject site designated as Rural/Agricultural. This land use designation allows the owner to construct one house per ten acres. The site is a desirable tract for future development since it contains more than two miles of Peace River frontage.

Development Potential

Low to Moderate Potential: The subject property contains a large amount of land with frontage along the Peace River. The central and southern portions of the Peace River frontage in DeSoto County is characterized by rural and low-density residential development. No residential development within a half mile of the subject property; however, DeSoto county has seen a relatively steady population increase over the last fifty years. Arcadia, the County Seat, is within nine miles of the subject property.

Transportation Planning Issues

The proposed project is in FDOT District 1 in DeSoto County. There are no airports, seaports, or spaceports in the vicinity. The nearest rail line is a CSX mainline railway, which is a Strategic Intermodal System (SIS) rail corridor, situated approximately two and a half miles west of the project area.

The FDOT Work Program includes a resurfacing project on County Road 661A, located two and a half miles west of the proposed project area. Another resurfacing project is planned along US17/SR35, approximately one mile east of the proposed project area. US17/State Road (SR) 35 is both a SIS corridor and an evacuation route. Additionally, there is an SR 31 Extension Project Development Study (PDE) located five miles away. The project site is also within the Florida Wildlife Corridor.

While the Department finds no adverse impacts to this proposed project at this time, coordination with FDOT District 1 staff during the acquisition process is recommended to address transportation system issues and incorporate them into management plans as appropriate.

ACKNOWLEDGEMENTS
Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Meghan Lauer and Katie Briley in DSL's Office of Environmental Services were responsible for the overall coordination of this report, with contributions from the following:

- Division of Historical Resources: Brandon Ackermann, Jason O'Donoughue
- Florida Forest Service: Cat Ingram, Richard Larsen
- Department of Commerce: Yazmin Valdez, James Stansbury
- Florida Fish and Wildlife Conservation Commission: Nicole DeSha, Angeline Barker
- Florida Natural Areas Inventory: Geoff Parks, Jake Travers
- DEP Division of Environmental Assessment and Restoration: Moira Homann, Kenneth Weaver
- Florida Department of Transportation: Allison Beaty
- Southwest Florida Water Management District: Carlos Santos

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

Rock Bend Ranch: Florida Forever Measure Evaluation 20240725

GIS ACRES = 658

MEASURES	Resource Acres[a]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	105	16%
Priority 4	0	0%
Priority 5	400	61%
Total Acres	505	77%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	34	5%
Priority 5	159	24%
Priority 6	448	68%
Total Acres	641	98%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	653	99%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	653	99%
B4: Under-represented Natural Communities		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (G2)	66	10%
Rockland Hammock (G2)	0	0%
Dry Prairie (G2)	0	0%
Seepage Slope (G2)	0	0%
Sandhill (G3)	33	5%
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	99	15%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	2	
G3	0	
G4	1	
G5	1	
Total	4	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	83	13%
Priority 3	293	45%
Priority 4	12	2%
Priority 5	7	1%
Priority 6	0	0%
Total Acres	395	60%

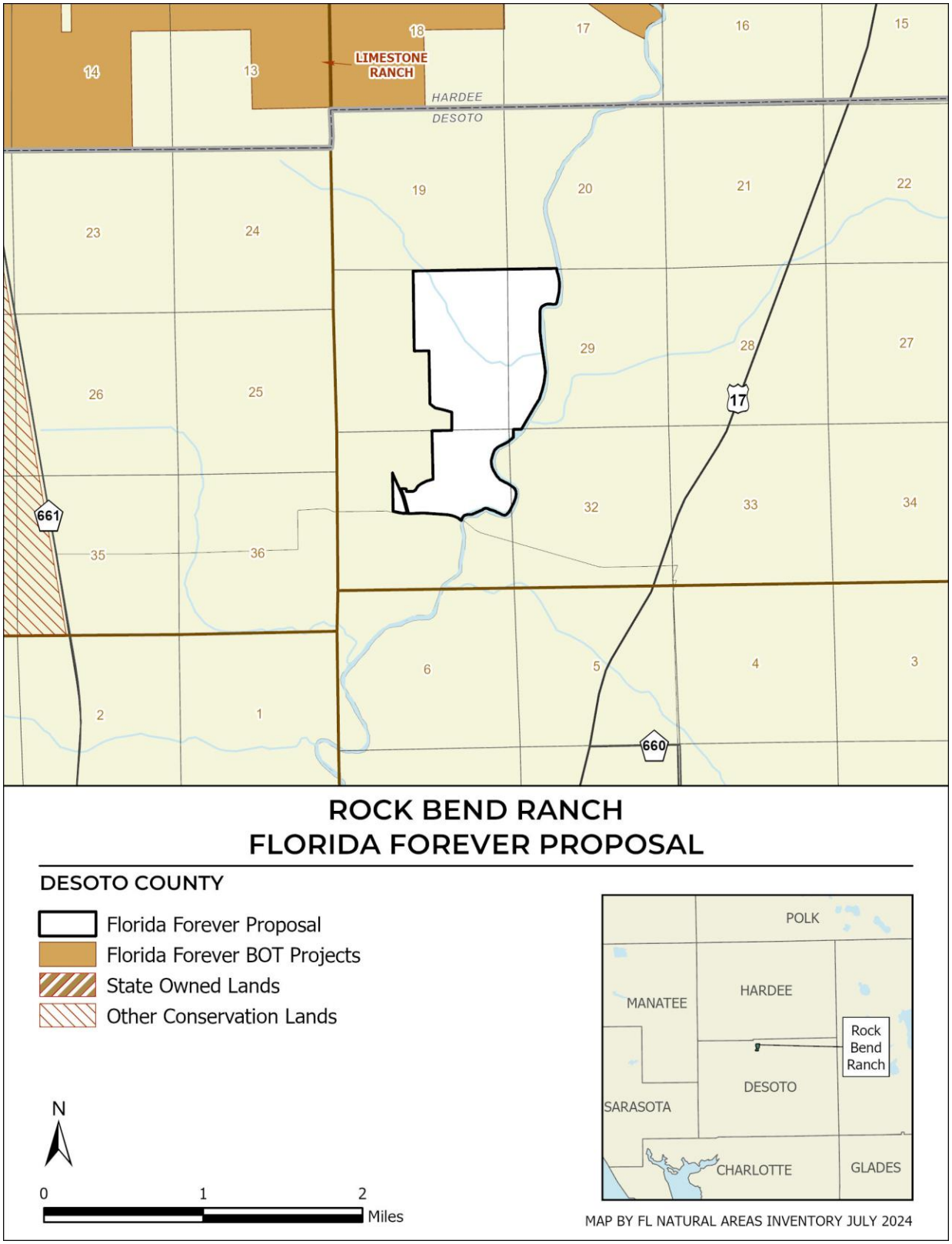
MEASURES (continued)	Resource Acres[a]	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	58	9%
Priority 4	436	66%
Priority 5	159	24%
Priority 6	0	0%
Priority 7	0	0%
Total Acres	652	99%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	36	6%
Priority 3	282	43%
Priority 4	19	3%
Priority 5	8	1%
Priority 6	0	0%
Total Acres	345	52%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	78	12%
Priority 4	197	30%
Priority 5	382	58%
Priority 6	0	0%
Total Acres	658	100%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways and Trails & Univ. Florida)		
Land Trail Priorities	0.0	
Land Trail Opportunities	2.2	
Total Miles	2.2	
F2: Arch. & Historical Sites (number)	2 sites	
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	86	13%
Priority 4	0	0%
Priority 5 - Potential Pinelands	201	31%
Total Acres	287	44%
G3: Forestland for Recharge	0	0%

[a]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.

Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by Florida Natural Areas Inventory

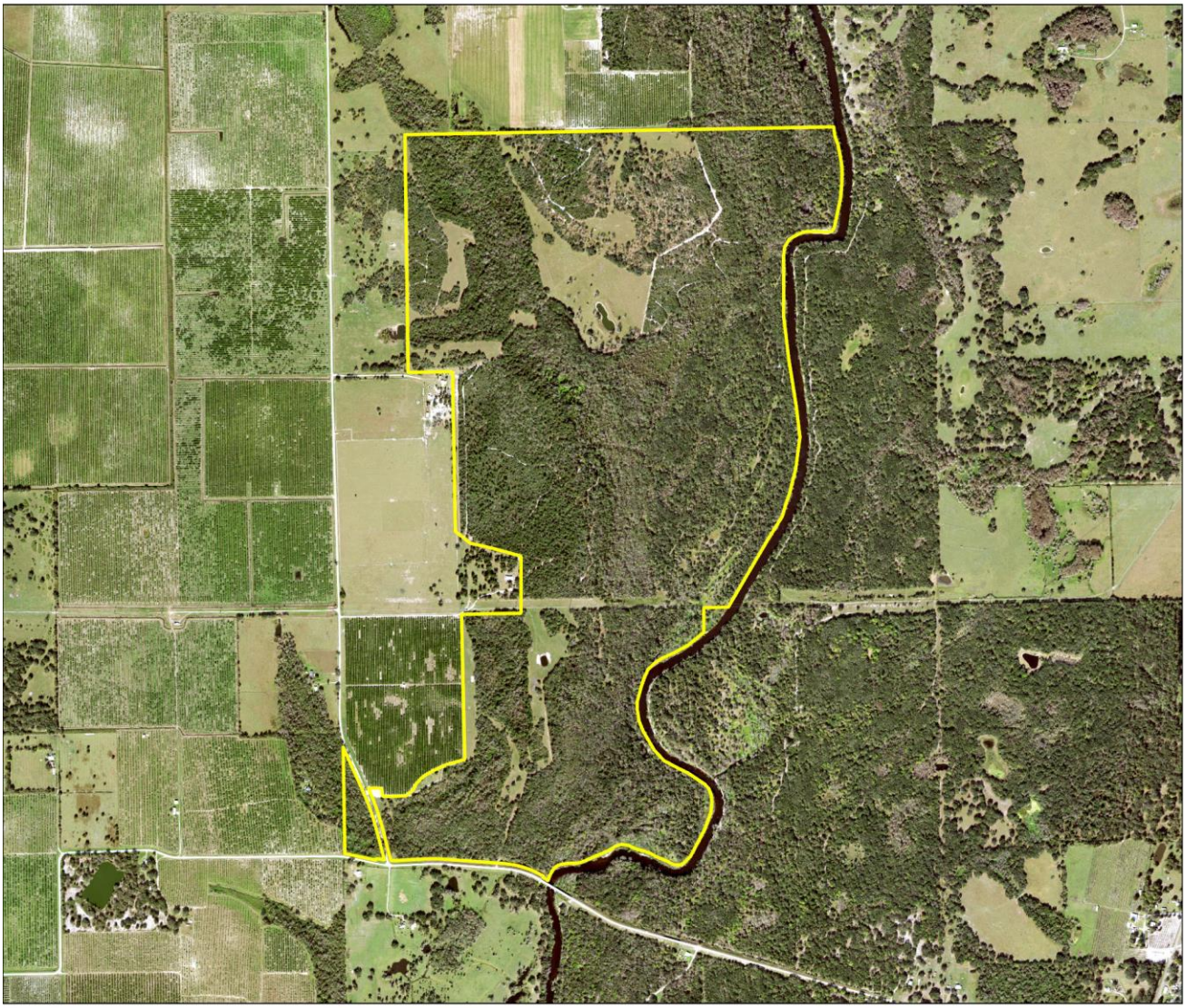
B1: Florida Forever map



B2: Aerial map

Rock Bend Ranch Florida Forever Proposal

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



Map Produced by: FL Natural Areas Inventory, N. Pasco, July 2024 Background: 2020 DeSoto County Ortho Resolution = 0.076 meter

Florida Forever Proposal Boundary

FNAI

N

0 0.25 0.5 1 Miles

Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

County	Parcel ID	Owner	Acres	Just (Market) Value	Parcel Designation
DeSoto	293625000000310000	Rock Bend Ranch LLC	129.90	$630,000	Essential
DeSoto	303625000000100000 (Partial)	Rock Bend Ranch LLC	350.25	$1,577,754	Essential
DeSoto	313625000000100000 (Partial)	Rock Bend Ranch LLC	177.67	$901,265	Essential
DeSoto	323625000000420000	Rock Bend Ranch LLC	0.62	$9,000	Essential
			658.44	**$3,118,020**	

Appendix D:

Imperiled Species FNAI Ranking Definitions

FNAI

Definitions of imperiled species ranks and conservation 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

FNAI
Definitions of imperiled species ranks and conservation status

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.
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 = Partial status: some but not all of the species' infraspecific taxa have federal
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.

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 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: <http://www.doacs.state.fl.us/pi/>.

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

Appendix E:

Site Visit Photos.



Photo 1. Gopher Tortoise on property.



Photo 2. Cattle in pasture.



Photo 3. View of the Peace River from Rock Bend Ranch.



Photo 4. Floodplain swamp on property.

Florida Forever Project Evaluation Report

Waccasassa Flatwoods
Levy County



Basin marsh on property.

Acquisition Type: Fee Simple
GIS Acres: 21,664.21
Just Value: $81,281,332
Application Date: March 28, 2024
Project Sponsors: SVN Saunders Ralston Dantzler Real Estate

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 11, 2024

Executive Summary

The proposed Waccasassa Flatwoods Florida Forever project contains 51 parcels owned by Rayonier Forest Resources, totaling approximately 21,664 acres in Levy County. The property is located near the junction of U.S. Highway 19 and State Road 24 near the towns of Otter Creek and Bronson. The property is directly adjacent to existing conservation lands including the Upper Waccasassa Flatwoods Conservation Area, Devil's Hammock Wildlife Management Area, Goethe State Forest and the Waccasassa Watershed Florida Forever project. The Waccasassa Flatwoods project is proposed as a fee simple acquisition and has a total tax assessed value of $81,281,332.

The property is currently a working timber operation and used for hunting and recreation. The property has been in silviculture since the 1940s. As such, uplands areas within the proposal are dominated by planted pine stands of varying age classes. The most common natural habitat type on the property are Cypress-dominated dome swamps with significant acreage of hydric hammock and bottomland forest also present. The property supports habitat for several rare species including swallow-tailed kite, gopher tortoise, bald eagle and Florida black bear. This proposal mostly lies within Priority 2 of the Florida Ecological Greenways Network.

Two tributaries of the Waccasassa River, Magee Branch and Otter Creek, run through the eastern and western tracts of the proposal, respectively. Waccasassa Flatwoods along with existing adjacent conservation lands will provide an upland land buffer to protect the water quality and quantity of the Waccasassa River and the downstream estuaries of the Big Bend Seagrasses Aquatic Preserve.

One previously unrecorded historical site was discovered on the staff's inspection of the property. This site involved a large surface concentration of rare rectangular turpentine pot fragments, remains from Florida's once booming turpentine industry. The Division of Historical notes the possibility for more unrecorded sites on the Waccasassa Flatwoods proposal.

If approved for addition to the 2025 Florida Forever Priority List, the project should be considered as an amendment to the Waccasassa Watershed Florida Forever project boundary in the Partnerships and Regional Incentives category. All 21,664 acres proposed for acquisition are considered essential due to the resources documented on the property (see Appendix C). An interagency team conducted a site visit to the project site on June 11, 2024. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The Waccasassa Flatwoods project will help to protect the water quality and quantity of the Waccasassa River and the downstream salt marshes and estuaries of the Big Bend Seagrasses Aquatic Preserve. This acquisition will expand a network of existing conservation lands and enhance ecological connectivity needed for ongoing protection of Florida's rare animal and plant species. As a proposed addition to Goethe State Forest, this acquisition will protect critical forestlands and provide quality outdoor resource-based recreation for the benefit and enjoyment of future generations of Floridians.

Acquisition of this project would serve to:

- Provide surface and groundwater protection and protect natural floodplain functions.
- Conserve and protect a portion of Florida's rural landscape to provide and enhance wildlife corridors for rare and imperiled species.
- Increase natural resource-based public recreation or educational opportunities.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Waccasassa Flatwoods Florida Forever proposal consists of three disjunct, single-owner tracts totaling approximately 21,664 acres in central Levy County. U.S. Highway 19 and State Road 24 form a V around the southern boundary of the western tract. This tract has frontage on U.S. Highway 19 from Otter Creek northwest to Chiefland and State Road 24 from Otter Creek northeast to Bronson. The eastern tract abuts State Road 24 east of the road. The large western and eastern tracts (ca. 11,107 and 10,545 acres respectively) are separated by approximately 2.5 miles over land and 1.5 miles along State Road 24. A small, mostly square third tract of about 12 acres is located 0.25 mile north of the eastern tract on NE 77th Avenue. The Gulf of Mexico is roughly 12 miles to the south southwest of the western and eastern tracts. The proposal is offered for fee simple acquisition.

Upper Waccasassa Conservation Area (UCWA: Suwannee River Water Management District) bridges the gap between the western and eastern tracts. Devil's Hammock (Levy County) abuts the western tract north from the UWCA parcel for about 2 miles. A portion of the existing Waccasassa Watershed Florida Forever project wraps around Devil's Hammock and fills in the large area between Devil's Hammock and the western and eastern tracts of the proposal.

Another portion of the existing Florida Forever project joins the northeastern boundary of the eastern tract and borders the small third tract of this proposal, making it part of a larger, connected, property. Goethe State Forest touches the southeastern corner of the eastern tract of the proposal. The 10-acre Sheppard Sanctuary (Florida Audubon Society) abuts the eastern tract in the notch along the tract's southern boundary near Goethe State Forest. This proposal would create a significant block of protection around the nearby existing conservation lands between them and Goethe State Forest.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

This evaluation is based on information gathered from the proposal application, aerial photography, U.S. Geological Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (Florida Natural Areas Inventory [FNAI], Florida Cooperative Land Cover Map, version 3.7), the FNAI Natural Heritage Database, and other publicly available GIS data sources.
A field survey was conducted on June 11, 2024, by the Acquisition and Restoration Council (ARC) liaison staff, including FNAI biologists Kim Alexander and Katy NeSmith.

The proposal lies within the Gulf Coastal Lowlands and consists of a low-relief area that once supported an extensive mosaic of mesic/wet flatwoods and forested wetlands. Otter Creek and Magee Branch, tributaries of the Waccasassa River, run through the western and eastern tracts, respectively. Elevations range from 25 feet above mean sea level (msl) at the creeks and gently rise to no more than 45 feet above msl on the western tract and reach their highest (ca. 60 feet) in the northeastern portion of the eastern tract.

The site consists mainly of commercial pine stands planted through former mesic and wet flatwoods communities. The majority of the native landcover has been modified for silviculture, almost all bedded and chemically site prepped; flatwoods have been replaced by pine plantation (55% of the site) and timber has been planted and harvested in many former basin/dome swamps. Per the application, plantations are principally in slash pine (*Pinus elliottii*), with some loblolly (*P. taeda*) and a few stands of longleaf (*P. palustris*). While the site is undeveloped, it does support miles of unpaved roads chiefly associated with timber management. Additionally, there are power transmission facilities and corridors in the eastern tract. The entire property is leased for hunting, allowing for 10 hunt clubs and 1,000 hunters.

There are several hunt camp sites, although few permanent structures, as the hunters bring in RV campers.

Numerous depressions occur throughout the property, mostly occupied by forested swamps, although herbaceous marshes are also present. Approximately 20% of the site is in relatively natural condition. Cypress-dominated basin and dome swamps are the most abundant natural community on the property. Aerial photos show that swamps on the property have a history of cypress logging and stands with more recent cutting are characterized as successional hydric forests.

Basin swamps on the proposal are typically dominated by pond cypress (*Taxodium ascendens*) in both the canopy and subcanopy, although some may have bald cypress (*Taxodium distichum*). Other tree species include swamp tupelo (*Nyssa biflora*), swamp laurel oak (*Quercus laurifolia*), slash pine (*Pinus elliottii*), American elm (*Ulmus americana*), red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), and Carolina ash (*Fraxinus caroliniana*), as well as smaller trees and shrubs such as common buttonbush (*Cephalanthus occidentalis*), Virginia willow (*Itea virginica*), fetterbush (*Lyonia lucida*), Southern bayberry (*Morella cerifera*), and swamp bay (*Tamala palustris*). Epiphytes, mainly Bartram's air-plant (*Tillandsia bartramii*) and Spanish moss (*Tillandsia usneoides*), are common. Graminoids such as narrowfruit horned beaksedge (*Rhynchospora inundata*), millet beaksedge (*Rhynchospora miliacea*), and sedge (*Carex* sp.) form the sometimes dense herbaceous layer, although other species are common, including Virginia chain fern (*Anchistea virginica*), swamp milkweed (*Asclepias perennis*), lemon bacopa (*Bacopa caroliniana*), false nettle (*Boehmeria cylindrica*), marshpennywort (*Hydrocotyle* sp.), primrosewillow (*Ludwigia* sp.), royal fern (*Osmunda spectabilis*), mild waterpepper (*Persicaria hydropiperoides*), and lizard's tail (*Saururus cernuus*). Vines are occasional to common; species noted were yellow jessamine (*Gelsemium sempervirens*), climbing hydrangea (*Hydrangea barbara*), muscadine (*Muscadinia rotundifolia*), peppervine (*Nekemias arborea*), Virginia creeper (*Parthenocissus quinquefolia*), saw greenbriar (*Smilax bona-nox*), coral greenbriar (*Smilax walteri*), and Eastern poison ivy (*Toxicodendron radicans* var. *radicans*). Lower, wetter parts of the swamps were more likely to have stands of coastalplain willow (*Salix caroliniana*) and sawgrass (*Cladium jamaicense*). In at least one area observed, a narrow edge of hammock-like vegetation formed an ecotone between pine plantation and swamp. This area included live oak (*Quercus virginiana*),

cabbage palm (*Sabal palmetto*), saw palmetto (*Serenoa repens*), hairy highbush blueberry (*Vaccinium fuscatum*), and slender woodoats (*Chasmanthium laxum*).

Isolated dome swamps are widespread on the site, although they are absent from the center of the property where larger wet forests occur. These small swamps are very similar in composition to the larger basin swamps, although typically with less plant species diversity.

Former swamps with more recent disturbance from timber harvesting are here considered successional hydric forest or shrubland. These areas often have few mature trees, typically some scattered pond cypress or swamp tupelo. However, continued cypress harvesting can create slash pine-dominated swamps with cypress only present in subcanopy layers. Often, the community is a dense, impenetrable thicket of fetterbush, Southern bayberry, and/or coastalplain willow, all draped with an abundant overgrowth of laurel greenbriar (*Smilax laurifolia*). Openings in the shrub layers are marsh-like with species such as Virginia chain fern, sawgrass, and sphagnum moss (*Sphagnum* sp.).

Most marshes on the proposal occur in deeper portions of basin swamps on deep mucky soils. These are typically stands of maidencane (*Hymenachne hemitoma*) or spikerush (*Eleocharis* sp.) with patches of pickerelweed (*Pontederia cordata*) and grassy arrowhead (*Sagittaria graminea*). Shallower edges may have Virginia chain fern, cinnamon fern (*Osmundastrum cinnamomeum*), or Virginia marsh St. John's wort (*Triadenum virginicum*), while the deepest portions may be dominated by white waterlily (*Nymphaea odorata* ssp. *odorata*).

Drainageways on the property were also observed to have bottomland forest or hydric hammock communities in addition to cypress swamps making up the mosaic of forested wetlands. Along the upper reaches of Otter Creek, a mixed bottomland forest occupies the wetland. The area has a canopy of sweetgum, swamp laurel oak, water oak (*Quercus nigra*), live oak, red maple, and American elm, with American hornbeam (*Carpinus caroliniana* var. *caroliniana*) and Virginia willow forming a sparse tall shrub layer. Cabbage palms are present, but not a common component. Bald cypress grows in a narrow zone along the streambed, which was dry during the site visit. There are a few scattered shrubs – common buttonbush, fetterbush, and Southern bayberry – as well as some vines – muscadine, peppervine, Virginia creeper, saw greenbriar, bristly greenbriar (*Smilax hispida*), Eastern poison ivy, and Florida grape (*Vitis simpsonii*). Herbs, while not dense, are found throughout the understory, a fairly

diverse mix of Virginia chain fern, spadeleaf (*Centella erecta*), slender woodoats, blue mistflower (*Conoclinium coelestinum*), iris (*Iris* sp.), netted chain fern (*Lorinseria areolata*), royal fern (*Osmunda spectabilis*), butterweed (*Packera glabella*), millet beaksedge, Carolina wild petunia (*Ruellia caroliniensis*), dock (*Rumex* sp.), and lizard's tail. Bartram's air-plant (*Tillandsia bartramii*) is a common epiphyte.

Hydric hammock, a similar community to bottomland forest, was observed along the Magee Creek drainage. The swamp is better developed through this area, but slightly higher elevations contain a mixed canopy of swamp laurel oak, red maple, American elm, water hickory (*Carya aquatica*), water locust (*Gleditsia aquatica*), and bald cypress, with cabbage palm common in the subcanopy. Shrubs consist mostly of common buttonbush, Southern bayberry, swamp bay, and St. Andrew's cross (*Hypericum hypericoides*). Vines include climbing hydrangea and coral greenbriar. Bartram's air-plant is a common epiphyte, and the groundcover includes some sparse herbs such as sedge, blue mistflower, and rosegentian (*Sabatia* sp.). Hydric hammock and bottomland forest often occur in a mosaic with swamps, and it is likely that these communities may occur as inclusions in some areas mapped as swamp, and vice versa.

Pine plantations make up over half of the proposal. These vary in age and condition. Both slash pine and loblolly pine (*Pinus taeda*) make up the stands, but some longleaf pine (*Pinus palustris*) has also been planted on the property. The stands are mostly bedded and have been site prepped with herbicide. Most areas observed have very little remnant flatwoods groundcover and are quite weedy with reduced shrub density resulting from herbicide use. Typical plants are purple bluestem (*Andropogon cretaceus*), Virginia buttonweed (*Diodia virginiana*), fireweed (*Erechtites hieraciifolius*), dogfennel (*Eupatorium capillifolium*), maidencane (*Hymenachne hemitoma*), Carolina redroot (*Lachnanthes caroliniana*), sand blackberry (*Rubus cuneifolius*), blue maidencane (*Amphicarpum muehlenbergianum*), and Virginia chain fern (*Anchistea virginica*). Occasionally, the groundcover includes flatwoods indicators such as tarflower (*Bejaria racemosa*), gallberry (*Ilex glabra*), yellow milkwort (*Polygala rugelii*), tailed bracken (*Pteridium pseudocaudatum*), saw palmetto (*Serenoa repens*), and shiny blueberry (*Vaccinium myrsinites*).

A few small areas totaling less than 80 acres may have a wet flatwoods community, although it is likely that these are historic swamps with a history of cypress logging that has promoted the

dominance of slash pines. These are mostly not accessible and were not evaluated during the site visit.

The property has a small area of historic sandhill on the northeast corner of the eastern tract. This is currently an area of successional hardwoods dominated in the canopy by laurel oak and water oak. The mixed understory has an abundance of American beautyberry (*Callicarpa americana*), common persimmon (*Diospyros virginiana*), and sparkleberry (*Vaccinium arboreum*), along with many vines of yellow jessamine and muscadine (*Muscadinia rotundifolia*). However, some remnants of the historic sandhill community remain, including Florida rosemary (*Ceratiola ericoides*), pinebarren frostweed (*Crocanthemum corymbosum*), hairy pinweed (*Lechea mucronata*), coastalplain palafox (*Palafoxia integrifolia*), winged sumac (*Rhus copallinum* var. *copallinum*), saw palmetto (*Serenoa repens*), Adam's needle (*Yucca filamentosa*), and Florida arrowroot (*Zamia integrifolia*).

Other altered landcover types making up small portions of the property include a network of unpaved roads through the property, a powerline right-of-way, and some small clearings. Very few invasive plants were seen during the site visit; Chinese brake (*Pteris vittata*; Florida Invasive Species Council Category II) was noted along creek crossings where limerock was present but was not observed in any natural areas.

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

Community or Landcover	Acres	Percent of Proposal
basin swamp/dome swamp	3,329	15
hydric hammock	536	2
basin marsh/depression marsh	256	1
bottomland forest	151	1
wet flatwoods	79	<1
pine plantation	11,995	55
successional hydric forest	4,660	22
road	596	3
utility corridor	55	<1
successional hardwood forest	7	<1
clearing	2	<1

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Waccasassa Flatwoods (WF) Florida Forever proposal based on field observations during the June 11, 2024, site visit and results of the GIS analysis. Devil's Hammock Wildlife Management Area (DHWMA) is situated between the two tracts of the Waccasassa Flatwoods Project proposal. DHWMA is contiguous with the

western tract and separated from the eastern tract by SR-24. DHWMA is managed by the Suwannee River Water Management District and Levy County with the Florida Fish and Wildlife Conservation Commission (FWC) as a cooperating manager. The eastern tract adjoins a small portion of Goethe State Forest (GSF) that is located west of CR-343. Goethe State Forest is managed by the Florida Forest Service with FWC as a cooperating manager. The project provides connectivity between these lands, and acquisition would buffer and protect water resources, including Otter Creek, the Waccasassa River, Magee Branch, and an unconfined portion of the Floridan Aquifer.

Waccasassa Flatwoods has been managed for timber production since the 1940s, with 54% currently in pine stands of varying ages. A variety of wetland habitats, such as swamps, marshes, ponds, hydric hammock, and isolated wetlands, comprise approximately 40%. There are also clearcut areas that provide open habitat.

The pine stands consist mainly of slash pine (*Pinus elliottii*), with a smaller percentage planted in loblolly pine (*Pinus taeda*). The application notes that there are also several stands of longleaf pine (*Pinus palustris*). All stands have bedding, and some is significant, with some stands having been bedded 3-4 times. Stands are established and maintained with chemical and mechanical treatments; there is no history of prescribed burning. Upland habitats lack the diverse herbaceous groundcover that is characteristic of natural pine flatwoods due to this long history of planting at commercial densities, mechanical and chemical site preparation, and fire exclusion. Conducting prescribed burns, thinning dense stands, and decreasing herbicide treatments would improve groundcover and habitat for wildlife. Prescribed fire would also improve the ecotones between upland and wetland habitats. While management actions will improve habitat, it is likely groundcover will not respond in some areas. If feasible, planting native groundcover may be necessary to create species and structural diversity. Few invasive species were observed, but Chinese ladder brake fern (*Pteris vittate*) and signs of feral hogs (*Sus scrofa*) were present.

The property's many wetlands provide habitat for wading birds, waterfowl, reptiles, amphibians, and fish. There are many snags on the property in both upland and wetland habitats that benefit wildlife by providing perches, foraging sites, and roosts. If acquired and added to Goethe State Forest, the fence currently separating the property from DHWMA could be removed, which would benefit wide-ranging species. The property contributes to the

maintenance of water quality in the Waccasassa River and the Gulf of Mexico, which helps protect fisheries.

Imperiled and rare species observations from the site visit included a gopher tortoise (*Gopherus polyphemus*) burrow, wood stork (*Mycteria americana*), bald eagle nest (*Haliaeetus leucocephalus*), red-headed woodpecker (*Melanerpes erythrocephalus*), and swallow-tailed kite (*Elanoides forficatus*). Waccasassa Flatwoods has habitat that could support additional species of imperiled wading birds, such as the little blue heron (*Egretta caerulea*). The striped newt (*Notophthalmus perstriatus*) occurs on nearby lands and there is potential habitat on Waccasassa Flatwoods, although it has been altered. With proper management, the habitat may be suitable for red-cockaded woodpeckers (*Picoides borealis*) to disperse from Goethe State Forest, but that would be decades into the future.

Additional species observed in the uplands included downy woodpecker (*Picoides pubescens*), red-bellied woodpecker (*Melanerpes carolinus*), red-shouldered hawk (*Buteo lineatus*), Carolina chickadee (*Poecile carolinensis*), northern parula (*Setophaga americana*), white-eyed vireo (*Vireo griseus*), red-eyed vireo (*Vireo olivaceous*), wild turkey (*Meleagris gallopavo*), and black racer (*Coluber constrictor*). Black bears (*Ursus americanus floridanus*) are occasionally observed.

Additional species observations near wetlands included great blue heron (*Ardea herodias*), white ibis (*Eudocimus albus*), Florida cottonmouth (*Agkistrodon conanti*), eastern ribbonsnake (*Thamnophis saurita*), nests of freshwater turtles, squirrel treefrog (*Hyla squirella*), cricket frog (*Acris gryllus*), and oak toad (*Anaxyrus quercicus*). Although not observed, ponds on the property could support wood duck (*Aix sponsa*) and other waterfowl species.

Several species of invertebrates were also observed during the site visit including giant swallowtail (*Papilio cresphontes*), gulf fritillary (*Dione vanillae*), viceroy (*Limentis archippus*), orchard orbweaver (*Leucauge argyrobapta*), golden silk orbweaver (*Nephila clavipes*), yellow garden spider (*Argiope aurantia*), eastern pondhawk (*Erythemis simplicicollis*), bar-winged skimmer (*Libellula axilena*), great blue skimmer (*Libellula vibrans*), and *Ariadna bicolor*.

If acquired in fee, Waccasassa Flatwoods could provide the public with a variety of recreational opportunities, such as hiking, wildlife-viewing, hunting, and fishing. There are several entry

points from the main roads and the property has a good network of improved roads. There are currently 10 hunt camp leases with deer (*Odocoileus virginianus*), hog, and turkey being the main game harvested.

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for Waccasassa Flatwoods is 6.4. Approximately 83% of the property is modeled as FWC Strategic Habitat Conservation Areas and 93% is Priority 2 of the FEGN. The entire property provides protection to class 3F surface waters and 70% is Priority 2-4 floodplain resources. Waccasassa Flatwoods includes rare fish imperiled waters for the ironcolor shiner (*Notropis chalybaeus*) and 8,000 acres of wetlands.

In conclusion, acquisition and addition to Goethe State Forest would increase connectivity between conservation lands, protect water resources, and provide recreational opportunities. The quality of wildlife habitat would increase with restoration of natural communities, including the use of prescribed fire.

GOALS, MEASURES AND CRITERIA

GOAL A:
ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:
The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 21,664 acres would contribute to the enhancement of essential natural resources, ecosystem service parcels and connecting linkage corridors.

Measure A3:
The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

No funding partners have been identified for this project.

GOAL B:
INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:
The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 62 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measures Evaluation (FFME table (Appendix B)) reports the site contains approximately 18,113 acres (84% of site) of Strategic Habitat Conservation Areas. This is divided between Priority 3 (76% of site), Priority 5 (7%), and Priority 2 (< 1%).

Measure B2:
The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 634 of Florida's rarest species were mapped and divided into six priority classes. The FFME reports the proposed project contains approximately 7,606 acres (35% of site) of rare species habitat. The habitat is mostly divided between Priority 6 (25% of site) and Priority 5 (9%), with Priorities 2 through 4 each covering less than 1% of the site.

Table 2 lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum total of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Habitat Conservation Priorities

Scientific Name	Common Name	Global Rank	Acres
Arnoglossum diversifolium	variable-leaved Indian-plantain	G2	209
Hasteola robertiorum	Florida hasteola	G1	86
Nellica liebmanniana ssp. 1	pinewoods dainties	G4T2	815
Salix floridana	Florida willow	G2G3	100
Nectopsyche tavara	Tavares white miller caddisfly	G3	139
Stelis ater	Southwest Florida stelis bee	G2	1542
Drymarchon couperi	eastern indigo snake	G3	161
Antigone canadensis pratensis	Florida sandhill crane	G5T2	952
Dryobates borealis	red-cockaded woodpecker	G3	201
Mycteria americana	wood stork	G4	4466

Measure B3:
The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages.

The FFME reports approximately 21,608 acres (100%) of the proposed project contributes to protection of ecological greenways with 93% of the site falling within Priority 2 areas, and 6% in Priority 5. Prioritization is based on such factors as importance for wide-ranging species like Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B4:
The number of acres acquired of under-represented native ecosystems.

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The Florida Forever Measures table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Waccasassa Flatwoods proposal contains 79 acres of wet flatwoods (< 1% of site).

Measure B5:
The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

The Waccasassa Flatwoods proposal would contribute to a contiguous landscape-sized protection area of more than 139,000 acres, although its connection with much of this protected landscape through Goethe State Forest is currently minimal.

Measure B6:
The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

This site supports potential habitat for several rare species of conservation concern, with a few species documented or reported from the site. Six swallow-tailed kites (*Elanoides forficatus*) were seen flying, possibly foraging, during the site visit and an active gopher tortoise (*Gopherus polyphemus*) burrow was observed in the northeast part of the eastern tract. A bald eagle (*Haliaeetus leucocephalus*) nest was observed on the western tract. The wading birds great egret (*Ardea alba*; G5, S4, N, N) and great blue heron (*Ardea herodias*; G5, S5, N, N) were observed in a depression/basin marsh on the western tract. Florida sandhill cranes (*Antigone canadensis pratensis*; G5T2, S2, N, ST) were heard in the distance and may use the more open marshes on the proposal property. One listed plant, Florida willow (*Salix floridana*),

has been documented on the boundary of the western tract but was not observed during the site visit. Several additional plants and animals have been documented on the adjacent Devil's Hammock and UWCA managed areas and additional survey effort may confirm these rare plants and wildlife species on the proposal property. These include rare plants variable-leaved Indian-plantain (*Arnoglossum diversifolium*; G3, S3, N, T), Chapman's sedge (*Carex chapmanii*; G3, S3, N, T), Florida hasteola (*Hasteola robertiorum*; G1, S1, N, E), pinewoods dainties (*Nellica liebmanniana* ssp.1; G4T2, S2, N, E), and Florida ladies'-tresses (Spiranthes floridana; G1, S1, N, N), and rare animals one-toed amphiuma (*Amphiuma pholeter*; G3, S3, N, N), American alligator (*Alligator mississippiensis*; G5, S4, SAT, FT[S/A]), Limpkin (*Aramus guarauna*; G5, S3, N, N), and Southwest Florida stelis bee (*Stelis ater*; G2, S2, N, N).

The FFME lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. Table 3 below contains species falling into any of these observational categories, as well as species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision. Species ranks and conservation status are described in Appendix E.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

Scientific Name	**Common Name**	**Global Rank**	**State Rank**	**Federal Status**	**State Status**
Rare plants documented on site					
Salix floridana	Florida willow	G2G3	S2S3	UR	E
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
Gopherus polyphemus	gopher tortoise	G3	S3	N	ST
Elanoides forficatus	swallow-tailed kite	G5	S2	N	N
Haliaetus 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					

GOAL C:
PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:
The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

The approximately 690 acres of natural hydric hammock and bottomland forest and 3,600 acres of swamps and marshes on the site are mostly in good ecological condition.

Areas that would require varying degrees of restoration include former swamps and pine plantation (16,655 acres). Former swamps with significant disturbance from silvicultural activities are classified as successional hydric forest or shrubland (4,660 acres). These areas still have some complement of native species and depending on the extent of bedding and planting of pines may require less or more effort to restore them to a naturally functioning wetland. They would benefit from prescribed fire and pine removal and time to allow for reestablishment of the swamp canopy. The pine plantations (11,995 acres) are mostly bedded and have been site prepped with herbicide, reducing or eliminating former, mainly flatwoods, shrub and groundcover species. Most of the planted pine acreage is in slash pine (ca. 84%) with a lesser amount in loblolly pine. The application also mentions several stands of longleaf pine. The planted pine areas would benefit from thinning and replacing slash with longleaf where appropriate. Thinning, and prescribed fire on a more frequent 2- to 3-year schedule would allow more light to reach the ground layer and provide more chance for natural groundcover recovery or for augmentation of groundcover composition by seeding or planting native pyrogenic grasses to succeed.

Invasive plant occurrences appear to be relatively few (Chinese brake fern) considering the low numbers observed on the site visit. A baseline assessment to determine whether additional occurrences of this or other species is warranted if acquisition is pursued.

Measure C3:
The percentage completion of targeted capital improvements in surface water improvement and management plans created under s. 373.453 (2), regional or master stormwater management system plans, or other adopted restoration plans.

There are no capital improvements in surface water improvement and management plans, regional or master management system plans or adopted restoration plans for this site.

Measure C4:
The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 15,194 acres (70%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly divided between Priority 4 (52% of site), Priority 3 (15%), and Priority 2 (3%), with the remainder in Priority 5 (<1%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:
The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 21,625 acres (100%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 6 (54% of site), Priority 4 (37%), Priority 2 (6%), and Priority 1 (1%), with the remainder in Priorities 3, 5, and 7 (each with < 1%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C7:
The number of acres acquired that protect fragile coastal resources.

The FFME reports the proposed project includes no fragile coastal resources like coastal wetlands, imperiled coastal lakes, and fragile coastal uplands. However, conservation of this property would help protect the Waccasassa River and in turn benefit the downstream estuaries and salt marshes of the Big Bend Seagrasses Aquatic Preserve.

Measure C8:
The number of acres of functional wetland systems protected.

The FFME reports approximately 9,245 acres (43%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 4 (29% of site), Priority 3 (11%), and Priority 2 (3%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:
The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

No exotics were observed during site reconnaissance, however cogon grass is probable along Hwy 19-98, and perhaps climbing fern. The landowner rep was not aware of any invasive issues or treatments underway at time of site tour.

GOAL D:
ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:
The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

This site is an extremely large property comprised of multiple parcels on two sides of State Highway 24, owned by one landowner. Most of the property is within the Waccasassa watershed, with a small portion of the northern most portion of the property in the Lower Suwannee River watershed. The site appears to have five permits within or on the boundaries of the site. The permits for are activities such as forestry roads or bridge and culvert replacements. There are significant natural resources present (wetlands) such that protecting the site can provide additional long-term benefits. An evaluation of the National Wetlands Inventory Map determined that there may be up to 7,909 acres of wetlands. Most of the site is within FEMA Flood Zone AE. The site is within the study area of the FEMA flood map revisions that are ongoing. However, it appears there will be very little change. An evaluation of the FEMA flood maps determined that there may be up to 15,306 acres of flood plain storage. Water improvement projects would only increase the ability of the site to achieve additional storage.

Measure D2:
The quantity of water made available through the water resource development component of a district water supply plan for which a water management district is responsible.

This site is not included in any plans for a District project.

Measure D3:
The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

The FFME reports approximately 20,857 acres (96%) of the proposed project would provide protection for groundwater recharge areas. This area is divided between Priority 2 (54% of

site), Priority 3 (37%), Priority 4 (5%), and Priority 5 (< 1%). Prioritization is based on features that contribute to aquifer vulnerability such as swallets, thickness of the intermediate aquifer confining unit and closed topographical depressions, as well as areas within springshed protection zones and in proximity to public water supply wells.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Waccasassa Flatwoods Florida Forever proposal

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	24
FDEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	0
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	10
FDEP Special Nutrient Impaired WBIDs	9	0
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
FDEP Springsheds or within 5 miles	10, 7	10
FDEP BMAPs	10	10
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	4
Total Possible	101	58

GIS Evaluation score is converted to a 1 to 5 value (low to high)

FINAL DEAR SCORE = 4, medium high water quality protection benefits

GOAL E:
INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measure E1:
The number of acres acquired that are available for natural resource-based public recreation or education.

Waccasassa Flatwoods will provide a great opportunity for nature-based recreation. Potential recreational activities may include hiking, wildlife viewing, nature study, camping, or host for Operation Outdoor Freedom events. FFS, in cooperation with FWC, will consider opportunities for public hunts. Moreover, a variety of public educational and interpretational opportunities other than interpretive trails and/or an outdoor classroom may be considered once inventory of onsite cultural, historical, and archaeological resources are established.

Measure E2:
The miles of trails that are available for public recreation, giving priority to those that provide significant connections including those that will assist in completing the Florida National Scenic Trail.

The FFME reports that 10.2 miles of the land trail priorities and opportunities identified by the Florida Greenways and Trails System Plan (2018 update) come within a quarter mile of the proposal.

Measure E3:
The number of new resource-based recreation facilities, by type, made available on public land.

There are no recreation facilities on the property other than several minimally developed RV hunt campsites.

GOAL F:
PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

Measure F1:
The increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

The project would meet Measure F1, as acquisition would result in an increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

Measure F2:
The increase in the number and percentage of historic and archaeological properties that are in state ownership.

The project would meet Measure F2, as the acquisition would result in an increase in the number and percentage of historic and archaeological properties that are in state ownership.

CULTURAL RESOURCES:
According to the DHR's Florida Master Site File, there is currently one archaeological site located within or intersecting the boundary of the Waccasassa Flatwoods Florida Forever project. The recorded resource is the Waccasassa Flatwoods Turpentine Site (VO10690), a large surface concentration of rare rectangular turpentine pot fragments, which was unrecorded prior to the Florida Forever site evaluation field visit. The Waccasassa Flatwoods Turpentine Site reflects the historical usage of the Waccasassa Flatwoods property during the period of Florida's once booming turpentine industry.

FIELD OBSERVATIONS:

The Waccasassa Flatwoods Turpentine Site (VO10690) was unrecorded prior to the field visit and appears to be well preserved and in good condition. Notably, there is great potential for numerous unrecorded sites to exist on the Waccasassa Flatwoods property. Should any artifacts or other cultural resources be discovered on the project in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology Program for further evaluation.

GOAL G:

INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

The area is already fully utilized for sustainable forestry. No additional increase in anticipated.

Measure G1:

The number of acres acquired that are available for sustainable forest management.

The FFME reports approximately 13,149 acres (61% of site) could be available for sustainable forest management, divided between Priority 1 (9,208 acres), Priority 3 (2,791 acres), Priority 2 (927 acres) and Priority 5 (223 acres). Prioritization is based on 4 criteria set by the Florida Forest Service: whether trees are natural or planted, size of tract, distance to market, and hydrology. Priority 5 areas are considered "potential" pinelands; agricultural areas that could be restored to pineland.

Measure G2:

The number of acres of state-owned forestland managed for economic return in accordance with current best management practices.

If acquired, the site could support 11,800 acres of managed forestland for economic return. Much of the tract is currently in sustainable silvicultural use. Approximately 55% of the site is in pine plantation, which is predominantly older (approximately 10 – 20+ years) stands of slash pine (*Pinus elliottii*) with some mostly 10 years of age or younger loblolly pine (*P. taeda*) and minor amounts of natural longleaf pine (*P. palustris*) observed. Reportedly smaller higher sites contain small amounts of planted longleaf. The remainder of the tract is composed of Successional Hydric Forest (20%) and Basin Swamp/Dome Swamp (20%), many of which have a history of harvest and natural regeneration. Stands have thinned or harvested in the last decade. There is a network of several miles of maintained forest roads used for silvicultural operations.

Measure G4:
The percentage and number of acres identified for restoration restored by reforestation.

Approximately 2,644 acres need to be reforested over the next two years. Some areas have yet to be cut but these areas are identified in their harvest plan and may have been already sold. The following timber management activities are needed, according to the site Timber Stand Map:

- Planned Harvest: 95 acres
- Planned Harvest & Site Preparation: 475 acres
- Site Preparation: 1,749 acres
- Cutover Pine: 325 acres

At least half of these areas will be capable of supporting longleaf pine (1,325+).

Suggested restoration possibilities include the following scenarios:

  - Introduction of prescribed fire on thinned slash pine stands.
  - Second thinning on areas already thinned followed by prescribed burning regime.
  - Thinning and eventual harvest of loblolly areas followed by reforestation with longleaf/slash pine.

This tract is valuable for conservation not just for its location amongst other conservation areas, but also in it's potential for restoration. Restorative management will cause native groundcover regeneration, as remnants still exist across the site.

FLORIDA FOREVER CRITERIA

The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.):

- the project meets multiple goals described in subsection (4).
- the project enhances or facilitates management of properties already under public ownership.
- the project has significant archaeological or historic value.
- the project contributes to the solution of water resource problems on a regional basis.

The Acquisition and Restoration Council shall give increased priority to:

- projects that contribute to improving the quality and quantity of surface water and groundwater.
- projects located within the Florida Wildlife Corridor as defined in (§ 259.1055(4), F.S.).

MANAGEMENT

This property is proposed to be managed by the Florida Forest Service at a part of Goethe State Forest. See Appendix D for more details.

FUNDING SOURCES

Florida Forever is the only identified funding source.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues, Jurisdictional and Sovereignty Lands, Legal Issues
Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)
The easements and encumbrances of record would be determined during the appraisal mapping. A current title commitment would be obtained, or the owner's title insurance policy would be reviewed if the policy is available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits
There are no apparent contamination sites within the project based on the application form.

Estimated Cost of Appraisal and Mapping
DEP Bureau of Appraisal estimates $10,000 to $20,000 in appraisal fees.

Acquisition Phases
Subject to funding, the Waccasassa Flatwoods Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs
<u>High Potential:</u>
There is a high potential for contribution to recreation and open space needs. Walking, biking and hunting are activities that are already common in this area. A lot of the wood roads could

be developed for trails or other recreational uses. This area also has access for traffic from the US 19/98 and SR 24 corridors, which may provide an increase in demand of recreational uses. This is a proposed fee-simple acquisition by the State of Florida, which is the purchase of lands outright. The FFS will most likely be the lead manager and public hunting is already a recreational use. Upon acquisition, there is a high possibility of increasing recreational uses like hunting, hiking, bicycling and wildlife viewing opportunities. Camping could also be a recreational activity to be developed if road systems were improved throughout the region upon acquisition.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces
Moderate Potential:

If development were to occur, several rare species would be affected. There are 38 listed rare species, 21 of which are animals and 17 are plants. Nesting by the American Bald Eagle has also been documented over the years. Since the landowner is putting this up for sale, the potential sale could result in loss of significant natural attributes.

Potential for Being Subdivided
Moderate to High Potential:

There is a moderate to high potential for being subdivided due to the landowner is putting the property up for sale in the open market. The method of marketing increases the possibility of development, although almost the entire property is currently designated as Forestry/Rural Residential (F/RR) on Levy County's zoning map. The Code of Ordinances of Levy County states on Sec 50-661.- Establishment of districts; intent of districts, "As such, the F/RR district is intended to allow only very low-density residential development that is spatially separated from the predominant land use in the district - commercial forests. Residential density is limited to one dwelling per 20 (or more) acres." Due to this zoning, it lowers the potential of being subdivided, although the location of this area is only 38 miles from the intersection of I-75 and SR 24 in Gainesville. It has 5.7 miles of frontage on U.S. Highway 19/98 and 1.8 mile of frontage on SR 24. The easy accessibility of the property and its location on the route to Cedar Key also raises its potential for future development.

Zoning and Densities within the Project Boundaries
The proposal is currently zoned as Forestry/Residential.

Existing Land Uses and Future Land Use Designations

Existing Land Uses: 12,400 acres (57%) of the property are pine plantations which are used for commercial harvest. Of the 57%, 84% is slash pine and the rest is made up of loblolly pine and longleaf pine. 4,730.53 acres (21.75%) are forested wetlands, which is primarily made up of mixed hardwood-coniferous swamps (17.27%). About 4,009.08 acres (18.44%) are non-forested Wetlands, which is mostly made up of mixed shrub-shrub wetland (16.78%). There is a very limited number of structures, facilities on the property. There is T-Mobile telecommunications tower off SR 24 and a 100-foot-wide Duke Energy electric transmission line easement that traverses the east tract running north and south just east of the line between T13S, R16E and T13S, R17E. There are also a few hunt camp sites for recreational use on the property.

Future Land Uses: On the Levy County Future Land Use Map, the Waccasassa Flatwoods are designated as Forestry/Rural Residential. In the Code of Ordinances for Levy County, the zoning district for the subject property is limited to residential/commercial/public use because of ongoing forestry operations. This is due to the possible exposure of wildfires, smoke, dust, fumes, and exposure to chemicals like herbicides and pesticides. The residential development allowed is very low density, with only one dwelling allowed per 20 (or more) acres.

Development Potential

Moderate Potential: The Waccasassa Flatwoods area is designated as Forestry/Rural Residential, which means residential density is limited to one dwelling per 20 (or more) acres. There is moderate potential for development due to the location of the project. This project is positioned along US Highway 12/98 approximately 10 miles south of Chiefland and on SR 24 approximately 20 miles from Cedar Key. Since the landowner is putting the property up for sale in the open market, there is a possibility of development by new landowners, although as of right now there is the limitation created by the current zoning designation of the area.

Transportation Planning Issues

The proposed project is in FDOT District 2 in Levy County. It is adjacent to Devil's Hammock Wildlife Management Area and borders Highway 19 and State Road (SR) 24. SR24 bisects the project area. There are no rail lines or weigh stations in proximity to the site.

The project site is surrounded by evacuation routes. A FDOT Shared Use Non-Motorized (SUN) trail project, the Chiefland to Dunnellon Trail corridor, is planned to run parallel to US19/98. If funded, this project will include the construction of a twelve-foot-wide bicycle facility, with the current alignment passing through part of the northern parcel of the project area. The existing Nature Coast Trail is located five and a half miles north of the project area and would be extended by this project.

SR55/US19/98 is a Strategic Intermodal System (SIS) facility that borders the project area, and US27/SR500 is a SIS facility approximately one and a half miles from the project area. In the FDOT Work Program, a 2025 drainage improvement project is planned at the southern end of the proposed project area along SR 24, covering approximately nine miles. Additionally, right-of-way (ROW) acquisition has begun for a resurfacing project bordering the project area on the western side along SR 55/US19/98. A bridge improvement and widening project is underway approximately three quarters of a mile north of the proposed project area on SR55/US19/98, with preliminary design activities in progress.

SR55/US19 serves as an evacuation route and is located along the western border of the project. The area is within the Florida Wildlife Corridor but lacks dedicated wildlife crossings. A wildlife crossing is under consideration on SR55/US19, approximately ten miles south of the acquisition. An upcoming drainage improvement project on SR24 provides an opportunity to evaluate the need for a wildlife crossing, given the presence of multiple conservation lands nearby, including the potential Florida Forever acquisition.

While the Department finds no adverse impacts to this proposed project at this time, coordination with FDOT District 2 staff during the acquisition process is recommended to address transportation system issues and incorporate them into management plans as appropriate.

ACKNOWLEDGEMENTS
Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Meghan Lauer and Katie Briley in DSL's Office of Environmental Services were responsible for the overall coordination of this report, with contributions from the following:

- Division of Historical Resources: Brandon Ackermann, Jason O'Donoughue
- Florida Forest Service: Joseph MacKenzie, Cat Ingram

- Department of Commerce: Yazmin Valdez, James Stansbury
- Florida Fish and Wildlife Conservation Commission: Diana Pepe, Cade Chaney
- Florida Natural Areas Inventory: Kim Alexander, Katy Nesmith
- DEP Division of Environmental Assessment and Restoration: Moira Homann, Kenneth Weaver
- Florida Department of Transportation: Allison Beaty
- Suwannee River Water Management District: Steven Carpenter, Leroy Marshall

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

Waccasassa Flatwoods: Florida Forever Measure Evaluation 20240723

GIS ACRES = 21,664

MEASURES	Resource Acres[a]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	6	< 1%
Priority 3	16,484	76%
Priority 4	0	0%
Priority 5	1,623	7%
Total Acres	18,113	84%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	63	< 1%
Priority 3	29	< 1%
Priority 4	25	< 1%
Priority 5	1,975	9%
Priority 6	5,514	25%
Total Acres	7,606	35%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	20,202	93%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	1,407	6%
Total Acres	21,608	100%
B4: Under-represented Natural Communities		
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)	0	0%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	79	< 1%
Upland Hardwood Forest (G5)	0	0%
Total Acres	79	< 1%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	1	
G3	0	
G4	1	
G5	0	
Total	2	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	688	3%
Priority 3	3,191	15%
Priority 4	11,314	52%
Priority 5	1	< 1%
Priority 6	0	0%
Total Acres	15,194	70%

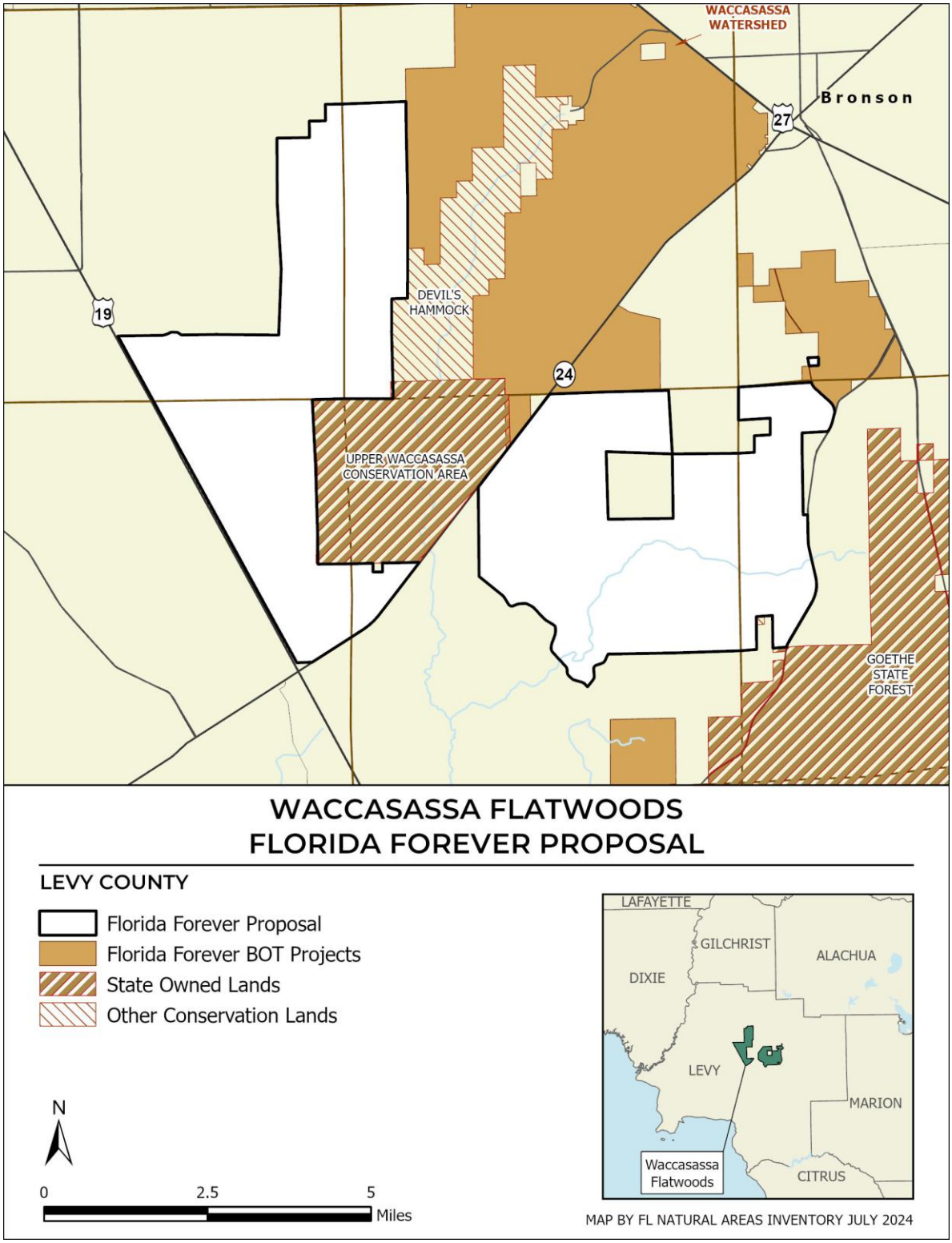
MEASURES (continued)	Resource Acres[a]	% of project
C5: Surface Water Protection		
Priority 1	268	1%
Priority 2	1,325	6%
Priority 3	89	< 1%
Priority 4	8,122	37%
Priority 5	47	< 1%
Priority 6	11,659	54%
Priority 7	116	< 1%
Total Acres	21,625	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	652	3%
Priority 3	2,399	11%
Priority 4	6,194	29%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	9,245	43%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	11,658	54%
Priority 3	8,094	37%
Priority 4	1,084	5%
Priority 5	22	< 1%
Priority 6	0	0%
Total Acres	20,857	96%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways and Trails & Univ. Florida)		
Land Trail Priorities	5.4	
Land Trail Opportunities	4.8	
Total Miles	10.2	
F2: Arch. & Historical Sites (number)	0 sites	
G1: Sustainable Forestry		
Priority 1	9,208	42%
Priority 2	927	4%
Priority 3	2,791	13%
Priority 4	0	0%
Priority 5 - Potential Pinelands	223	1%
Total Acres	13,149	61%
G3: Forestland for Recharge	11,866	55%

[a]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.

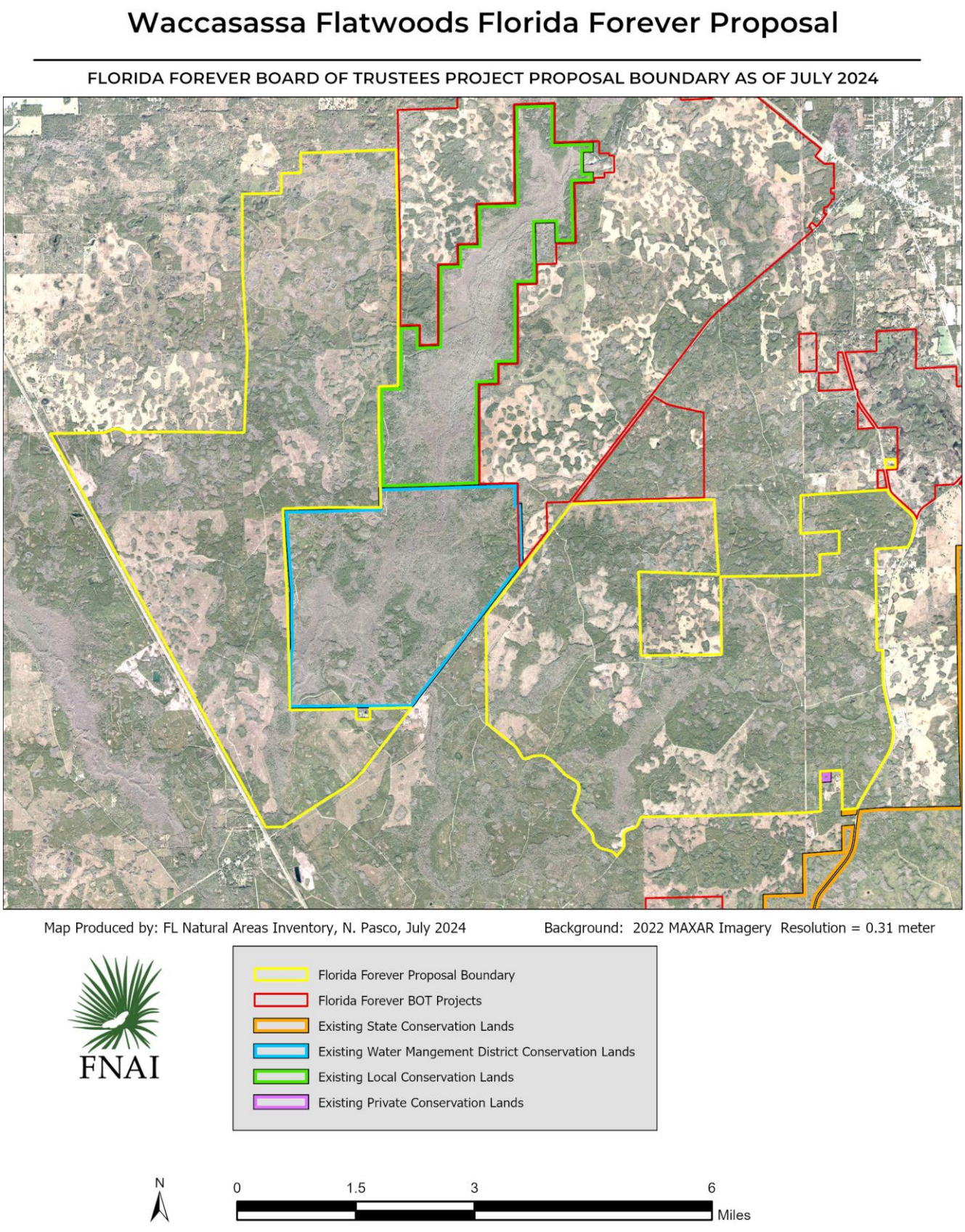
Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by Florida Natural Areas Inventory

B1: Florida Forever map



B2: Aerial map



Appendix C:
PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

County	Parcel ID	Owner	Acres	Just (Market) Value	Parcel Designation
Levy	0180700000	Rayonier Forest Resources LP	120.70	$865,920	Essential
Levy	0180800000	Rayonier Forest Resources LP	639.79	$2,389,860	Essential
Levy	0183000000	Rayonier Forest Resources LP	639.45	$2,397,340	Essential
Levy	0183100000	Rayonier Forest Resources LP	645.54	$2,422,248	Essential
Levy	0183300200	Rayonier Forest Resources LP	5.17	$19,814	Essential
Levy	0184200200	Rayonier Forest Resources LP	139.47	$521,655	Essential
Levy	0184300000	Rayonier Forest Resources LP	658.06	$2,393,600	Essential
Levy	0184400000	Rayonier Forest Resources LP	620.09	$2,397,340	Essential
Levy	0184500000	Rayonier Forest Resources LP	637.24	$2,432,683	Essential
Levy	0184700000	Rayonier Forest Resources LP	319.92	$1,112,276	Essential
Levy	0184800000	Rayonier Forest Resources LP	633.78	$2,356,200	Essential
Levy	0184900200	Rayonier Forest Resources LP	447.19	$1,672,565	Essential
Levy	0186500300	Rayonier Forest Resources LP	111.68	$417,683	Essential
Levy	0186700000	Rayonier Forest Resources LP	642.31	$2,372,207	Essential
Levy	0186800000	Rayonier Forest Resources LP	324.17	$1,168,301	Essential
Levy	0187000000	Rayonier Forest Resources LP	481.31	$1,795,200	Essential
Levy	0187200400	Rayonier Forest Resources LP	409.31	$1,530,854	Essential
Levy	0188700300	Rayonier Forest Resources LP	85.54	$319,957	Essential
Levy	0189000200	Rayonier Forest Resources LP	553.44	$2,069,903	Essential
Levy	0246200000	Rayonier Forest Resources LP	316.53	$1,170,620	Essential
Levy	0248200000	Rayonier Forest Resources LP	629.80	$2,326,280	Essential
Levy	0248300000	Rayonier Forest Resources LP	625.47	$2,315,060	Essential
Levy	0249700000	Rayonier Forest Resources LP	538.14	$1,994,841	Essential
Levy	0249900000	Rayonier Forest Resources LP	473.23	$1,727,506	Essential
Levy	0250900000	Rayonier Forest Resources LP	603.99	$2,287,085	Essential
Levy	0251000100	Rayonier Forest Resources LP	603.12	$2,255,631	Essential
Levy	0251100100	Rayonier Forest Resources LP	148.69	$588,213	Essential
Levy	0251900000	Rayonier Forest Resources LP	555.19	$2,241,307	Essential
Levy	0252000000	Rayonier Forest Resources LP	663.32	$2,402,277	Essential
Levy	0252200000	Rayonier Forest Resources LP	641.30	$2,432,047	Essential
Levy	0252300000	Rayonier Forest Resources LP	649.36	$2,400,182	Essential
Levy	0252400000	Rayonier Forest Resources LP	651.42	$2,401,379	Essential
Levy	0252500000	Rayonier Forest Resources LP	676.22	$2,398,088	Essential
Levy	0252600100	Rayonier Forest Resources LP	606.43	$2,372,207	Essential
Levy	0252700100	Rayonier Forest Resources LP	1.73	$12,058	Essential
Levy	0253000100	Rayonier Forest Resources LP	260.38	$973,821	Essential
Levy	0253200100	Rayonier Forest Resources LP	147.45	$551,500	Essential
Levy	0253700100	Rayonier Forest Resources LP	89.92	$336,301	Essential
Levy	0253800100	Rayonier Forest Resources LP	617.99	$2,311,320	Essential
Levy	0253900000	Rayonier Forest Resources LP	664.02	$2,394,498	Essential
Levy	0254000000	Rayonier Forest Resources LP	651.57	$2,393,600	Essential
Levy	0254300100	Rayonier Forest Resources LP	135.31	$506,059	Essential
Levy	0358800100	Rayonier Forest Resources LP	12.43	$81,840	Essential
Levy	0361800100	Rayonier Forest Resources LP	188.12	$706,785	Essential

Levy	0362100000	Rayonier Forest Resources LP	79.99	$299,200	Essential
Levy	0362200000	Rayonier Forest Resources LP	436.20	$1,645,600	Essential
Levy	0362400000	Rayonier Forest Resources LP	628.89	$2,395,994	Essential
Levy	0365300000	Rayonier Forest Resources LP	63.33	$239,629	Essential
Levy	0365400000	Rayonier Forest Resources LP	640.31	$2,397,789	Essential
Levy	0366300000	Rayonier Forest Resources LP	510.46	$1,855,040	Essential
Levy	0366800000	Rayonier Forest Resources LP	39.74	$211,966	Essential
			21,664.21	**$81,281,332**	

Appendix D:
Management Prospectus for Waccasassa Flatwoods, a fee simple proposal.

Waccasassa Flatwoods Management Prospectus

Florida Forest Service

July 2024

Administration

This property is adjacent to the Black Prong Tract on Goethe State Forest (GSF) along County Road 343. The FFS may manage this as a new tract on GSF. The subject site will be managed with an emphasis on sustainable forest management. Equipment required to manage this property includes, but is not limited to, tractors with multiple implements, tractor plows, pick-up trucks, road grader, excavator, and UTVs. FFS, as lead manager, may collaborate with the Florida Fish and Wildlife Conservation Commission (FWC) regarding potential hunting and wildlife concerns.

Management Goals and Objectives

Management strategies will center on the multiple-use concept, as defined in sections 589.04(3) and 253.034(2)(a) F.S. Implementation of this concept will utilize and conserve state forest resources in a harmonious and coordinated combination that will best serve the people of the State of Florida, and that is consistent with the purpose for which the forest was acquired. Multiple-use management for GSF will be accomplished with the following strategies:

- Practice sustainable forest management for the efficient generation of revenue and in support of state forest management objectives;
- Provide for resource-based outdoor recreation opportunities for multiple interests;
- Restore and manage healthy forests and native ecosystems ensuring the long-term viability of populations and species listed as endangered, threatened, or rare, and other components of biological diversity including game and nongame wildlife and plants;
- Protect known archaeological, historical, cultural, and paleontological resources;
- Restore, maintain, and protect hydrological functions related to water resources and the health of associated wetland and aquatic communities.

CONDITIONS AFFECTING INTENSITY OF MANAGEMENT

Soil and Water Protection

Management activities will be executed in a manner to minimize soil erosion and impacts to both surface and groundwater. All silvicultural activities will be conducted in compliance with current FDACS/FFS Silviculture Best Management Practices.

Fire Management

Ideally, prescribed fire will be the primary tool utilized for resource management on the forest. The long-term goal of prescribed burning will be healthy forest ecosystem improvement which will include both dormant and growing season burns. Natural fire frequencies will be implemented when possible for each community once in maintenance status. Due to the absence of fire from the property, fuel loads on the property are high in most areas. Therefore, fire must be carefully reintroduced in a way that prevents/minimizes damage to the forest structure. As such, initial burns should be confined to the dormant season on days with lower temperatures and within a few days following a rain event. Areas with particularly heavy fuel loads may require mechanical treatment, such as mowing or roller chopping, prior to the reintroduction of fire.

Silvicultural Operations

Waccasassa Flatwoods will be managed to promote and improve overall forest health. Timber is a valuable economic resource, and timber harvesting for the purposes of ecological restoration, forest health improvement, and revenue generation are recognized silvicultural objectives. Proposed silvicultural activities include both commercial timber harvests and timber stand improvement activities. Commercial timber harvests shall focus on removal of undesirable pine species to promote the health and vigor of the overstory and to promote natural or artificial regeneration of desired pine species. Timber stand improvement projects may include both mechanical and chemical control of unwanted vegetation to promote healthy forests and habitat as appropriate for all natural communities. Care should be taken to both improve and maintain the existing road system throughout the site for practical management access.

Wildlife Management

Management of the wildlife resource on Waccasassa Flatwoods will largely focus on the rare species found in and around the property. A key attribute of this tract is adjacent or close in proximity to several existing conservation areas, including the Waccasassa Watershed Florida

Forever BOT Project, Devil's Hammock, Upper Waccasassa Conservation Area, and Sheppard Sanctuary. Waccasassa Flatwoods has the potential to provide habitat for Florida black bear and bald eagle, as under-represented natural communities exist onsite including mesic/wet flatwoods and upland hardwood forest. Dome swamps and marshes exist on site and play an important role in supporting a variety of Florida's endangered species. Rare plants documented and others found on adjacent conservation lands include the Florida willow, Godfrey's swamp privet, variable leaf indian plantain, diverseleaf crownbeard. Reintroduction of fire into the flatwoods will further improve habitat for Florida black bear and bald eagle. It will be imperative to evaluate the effects management may have on the habitat of these and other rare species when conducting operations on site.

Non-native Invasive Species

Prevention should be the focus of non-native invasive species management. When such species are discovered, an eradication plan will be developed and implemented based upon the severity of the infestation and the availability of personnel and funding. At present, the only observed non-native species onsite are areas of hog damage. Potentially, cogon grass and climbing fern may exist along major right-of-ways.

Revenue Generating Potential

Most uplands on Waccasassa Flatwoods are pine plantation. In accordance with the management plans, staff will conduct timber harvests and other management activities to achieve or maintain uneven-aged or even-aged forest structure, as appropriate. Given the proximity to forest product processing facilities, timber harvests should provide significant revenue over time. However, the planted pine stands on the tract have been thoroughly merchandised over the last 3-8 years. Marketable timber has been thinned or harvested followed by reforestation. As such, the planted pine stands on the tract are of a young age. The estimated average age the current aggregate of planted pine stands is between 6 and 8 years. Recreation developments will provide long-term opportunities for revenue while providing access to the public. Additionally, there may be opportunities for apiary leases and fuelwood harvests.

Timetable for Implementing Management, Provisions for Security and Protection of Resources, Public Access

Once the property is acquired and FFS assumes management, short-term efforts will concentrate on onsite security and management planning. Consideration will be given in the management planning process to accommodate recreational development. The magnitude and diversity of future resource-based recreation opportunities offered will depend on establishment of a management plan for the property, funding for positions, and potential funding for and usage of infrastructure.

POTENTIAL MULTIPLE-USE ACTIVITIES

Recreation

Waccasassa Flatwoods will provide a great opportunity for nature-based recreation. Potential recreational activities may include hiking, wildlife viewing, nature study, camping, or host for Operation Outdoor Freedom events. FFS, in cooperation with FWC, will consider opportunities for public hunts. Moreover, a variety of public educational and interpretational opportunities other than interpretive trails and/or an outdoor classroom may be considered once inventory of onsite cultural, historical, and archaeological resources are established.

Research Projects

Opportunity for scientific study for the purpose of obtaining information which expands the knowledge of and assists in restoration and management of this ecosystem may exist. Research should be conducted through cooperation with other governmental agencies, non-profit organizations, and educational institutions where feasible.

Cultural Resources

Efforts should be made to locate and document historical and archaeological resources onsite. FFS management may allow an archaeological assessment onsite and will monitor recorded sites. After proper identification, an associated plan will be created in consultation with the Division of Historical Resources.

Timber Management

All timber resources will be managed to promote and improve overall forest health.

Management Costs and Sources of Revenue

It is anticipated that management funding will come from the Land Acquisition Trust Fund. Estimated budget needs for interim management are as follows:

Salary (1 FTE Park Services Specialist)	$53,000
Expense	$60,000
OCO	$10,000
Total	$123,000

Cooperators in Management Activities

FFS may liaise with the FWC, FDEP, local governments, other state agencies, and the Suwannee River Water Management District to further resource management, recreational and educational opportunities.

Appendix E:

Site visit photos.



Photo 1. One of many maintained forestry roads within the project proposal.



Photo 2. Evidence of recent timber harvest.



Photo 3. Ecotone between planted pine and basin swamp.