

Foshalee Slough

Leon County

Florida Forever Project Evaluation Report

Prepared by:
Division of State Lands
Office of Environmental Services

Submitted to the Acquisition and Restoration Council
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Acquisition Type: Less-than-Fee
Acres: 945
Just Value: \$3,900,547
Application Date: October 31, 2021
Project Sponsor: Tall Timbers Research Station & Land Conservancy

Executive Summary

The proposed Foshalee Slough Florida Forever project contains six parcels totaling approximately 945 acres. The project is located in northern Leon County, east of State Road 319 and south of Middle Road. The property contains no buildings. Cities nearby include Tallahassee and Thomasville. According to the property tax appraiser, the properties have a total tax assessed value of \$3,900,547. The Foshalee Slough project is proposed as a less-than-fee acquisition.

The project includes the northern half of Foshalee Slough, an intact and relatively natural slough that is mostly forested depressional wetland hydrologically connected (during flood periods) to Lake Iamonia on its west. Over the past century, Foshalee Slough has been managed by the landowner and their predecessors as part of Foshalee Plantation, a private hunting estate. The slough has remained relatively natural through prescribed fire, multi-aged forest management and an absence of logging. Foshalee Slough is essential to Lake Iamonia and the Ochlockonee River due to its ability to hold overflow during flooding events. Foshalee Slough also provides water to Lake Iamonia during times of drought. The project is adjacent to the Red Hills Conservation Florida Forever project and surrounded by other existing conservation lands. The project is listed as Priority 2 within the Florida Ecological Greenways Network (FEGN).

Rare animals documented or reported within the proposed project area include Bachman's sparrow (*Peucaea aestivalis*), hoary edge (*Achalarus lyciades*) and snowy egret (*Egretta thula*). The project area also contains habitat ideal for rare species such as Tallahassee hedge-nettle (*Stachys lythroides*), red-cockaded woodpecker (*Dryobates borealis*), and wood stork (*Mycteria americana*). According to the Division of Historical Resources (DHR), the entire project is contained within the recorded Resource Group Foshalee Plantation/Cherokee Plantation and includes three archaeological sites.

If approved for addition to the 2023 Florida Forever Priority List, the 945 acres of Foshalee Slough should be considered as an amendment to the Red Hills Conservation Florida Forever project boundary. All 945 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 site on February 9, 2022. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

If acquired, the Foshalee Slough project will contribute to the protection of Foshalee Slough a natural forested slough and adjacent uplands. The project will contribute to the conservation of the biodiversity, forest resources and wetland ecosystems of the unique Red Hills region.

Acquisition of this project would serve to:

- 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 of the state.
- Conserve and protect a portion of Florida's rural landscape in order to provide and enhance wildlife corridors for rare and imperiled species.
- Preserve significant cultural resources.
- Provide surface and groundwater protection and protect natural floodplain functions.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Foshalee Slough proposal comprises 945 acres (925 GIS acres) in northern Leon County approximately 17 miles northeast of Tallahassee. The single, irregularly shaped tract is elongated, extending ca. 3 miles (5 km) from east to west but only ca. 0.7 mile (1.25 km) from north to south. The entire southern boundary is contiguous with the Red Hills Conservation Florida Forever project, and the

western boundary borders a 989-acre portion of Foshalee that is already under conservation easement to Tall Timbers Research Station and Land Conservancy (TTRS). Additional conservation lands, Sunny Hill and Horseshoe Plantation conservation easements, are contiguous with or near these units; combined, these lands provide substantial protection to the “Red Hills” region, which encompasses much of northern Leon and Jefferson counties from Lake Miccosukee to Lake Iamonia and the Ochlockonee River.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

This evaluation is based in part on information gathered from the proposal application, Florida Natural Areas Inventory (FNAI) database, aerial photography from 1995 to 2021, U.S. Geologic Survey (USGS) 7.5' topographic maps, and Cooperative Land Cover data (FNAI, Florida Cooperative Land Cover Map, version 3.4). A field survey was conducted on February 9, 2022, by FNAI staff Kim Alexander, along with the Acquisition and Restoration Council (ARC) liaison staff and representatives for the landowner and TTRS.

The property lies within what is commonly termed as the Red Hills region, characterized by rolling, moderately well drained uplands with clay soils overlain by loamy sands, and isolated lakes and depressional wetlands. The proposal principally contains the northern half of Foshalee Slough, the southern half of which lies in the Red Hills Conservation project. This intact and relatively natural slough is a mostly forested depressional wetland that is hydrologically connected (during flood periods) to Lake Iamonia on its west. Elevation ranges from 100 to 165 feet above mean sea level. Soils are mostly sandy loam and loamy fine sand in the uplands and fine sands in the slough.

Current uses of the property (including the proposal and the remainder of this landowner's holdings immediately north) include wildlife management and hunting (chiefly for northern bobwhite), silviculture (the predominant revenue source), agriculture, and conservation. In the largest section of upland pine in the proposal, a grid of chopped or mowed lanes to aid hunting activities exists within the open-canopied pinelands. Meso-mammals are trapped to reduce predation on quail populations. Current management also includes use of prescribed fire (allowed to burn into wetlands) and protection of wetlands from logging. It is anticipated that these uses would continue (dependent on easement terms) under private management.

Wetland communities occupying the slough make up the vast majority of the proposal, around 83%. These are mostly long hydroperiod basin swamp or marsh. The exact composition of forested versus non-forested habitat likely shifts over time with long term water level trends. Currently, it appears to be about two thirds forested swamp dominated by pond cypress (*Taxodium ascendens*), bald cypress (*T. distichum*), and swamp tupelo (*Nyssa biflora*). The areas of swamp visited by the team contained some very large cypress, estimated in the application to be 100- to 200- year old second growth trees. These form a closed canopy over an understory that was flooded at the time of the site visit with floating aquatic plants such as big floatingheart (*Nymphoides aquatica*) and water spangles (*Salvinia minima*) common. A narrow stand of cypress/tupelo swamp also forms a fringe around the deep-water marsh that makes up “Foshalee Lake” in the eastern portion of the slough. This is a very large expanse of deep-water marsh with highly fluctuating water levels. The marsh contains many floating and emergent species such as floating marshpennywort (*Hydrocotyle ranunculoides*), yellow pondlily (*Nuphar advena*), and big floatingheart. Shallower areas, particularly around the edge, have common buttonbush (*Cephalanthus occidentalis*), rushes (*Juncus sp.*), maidencane (*Panicum hemitomon*), and sugarcane plumegrass (*Saccharum giganteum*). The marsh is likely very diverse.

Low lying areas between the uplands and the slough are best characterized as bottomland forest. These are hardwood forested communities that don't regularly have standing water. The canopy is a mix of water oak (*Quercus nigra*), live oak (*Quercus virginiana*), sweetgum (*Liquidambar styraciflua*), and loblolly pine (*Pinus taeda*). The understory is fairly open with scattered longleaf woodoats

(*Chasmanthium laxum* var. *sessiliflorum*), titi (*Cyrilla racemiflora*), St. Andrew's cross (*Hypericum hypericoides*), and sawtooth blackberry (*Rubus pensilvanicus*). Crossvine (*Bignonia capreolata*), saw greenbrier (*Smilax bona-nox*), and lanceleaf greenbrier (*Smilax smallii*) are common vine. The weedy edge of this community has frequent patches of the non-native invasive Japanese climbing fern (*Lygodium japonicum*; FISC Category I). A patch of Chinese privet (*Ligustrum sinense*; FISC Category I) was also seen during the site visit.

Two small portions of the hardwood forested areas were drier and better described as upland hardwood forest. This includes a fairly steep slope on the eastern portion of the proposal that drops quickly from upland pine to the basin marsh of the slough. Water oak, live oak, and sweetgum are still dominant trees, but joined by pignut hickory (*Carya glabra*), southern magnolia (*Magnolia grandiflora*), and black cherry (*Prunus serotina*). Upland shrubs like horse sugar (*Symplocos tinctoria*) and sparkleberry (*Vaccinium arboreum*) are common. The mixed understory also contains longleaf woodoats, leather flower (*Clematis* sp.), Japanese climbing fern, saw greenbrier, bristly greenbrier (*Smilax tamnoides*). Live oak branches have epiphytic resurrection fern (*Pleopeltis michauxiana*).

Uplands on the property are about two thirds upland pine community, a high pine habitat on clayey or loamy soils dominated by longleaf pine (*Pinus palustris*) or shortleaf pine (*Pinus echinata*) over a grassy understory. However, as with most upland pine communities in the region, these are former old fields with a history of agriculture; thus, some of the original groundcover components such as wiregrass likely are absent or rare. Upland pine on the proposal is dominated by longleaf, shortleaf, slash and loblolly pine (*Pinus taeda*), many of which are large, mature specimens. A few large live oaks are scattered, as well as some young turkey oak (*Quercus laevis*) and southern red oak (*Q. falcata*). The dense herb layer contains a mix of bluestem (*Andropogon* sp.), rattlebox (*Crotalaria* sp.), thoroughwort (*Eupatorium* sp.), Carolina cranesbill (*Geranium carolinianum*), bahiagrass (*Paspalum notatum*), with sand blackberry (*Rubus cuneifolius*) occasional. A few agricultural food plots and a grid of chopped or mowed lanes that support hunting activities are imbedded within these open canopied pinelands. The pinelands are generally managed with chopping, mowing, and prescribed fire.

There are two small, isolated depression marshes embedded in upland pine near the western boundary of the proposal. These are primarily herbaceous communities dominated by maidencane dominated, but with clustered sedge (*Carex glaucescens*), common buttonbush (*Cephalanthus occidentalis*), clustered bushmint (*Hyptis alata*), primrosewillow (*Ludwigia* sp.), and camphorweed (*Pluchea* sp.) also abundant.

Less than 6% of the proposal has been either completely converted from its historical natural community or severely altered by human impacts such as fire suppression or silviculture. Four small pine plantations ranging from 5 to 19 acres were observed during the field visit and were mostly planted in loblolly pine. One of them appeared to have been partially thinned and/or chopped in the past, but most had a dense canopy and basal area of at least 100ft² per acre. Scattered sweetgum, water oak, and live oak, were also mixed in one of the plantations visited, with some witchgrass (*Dichanthelium* sp.), cat greenbrier (*Smilax glauca*), sparkleberry (*Vaccinium arboreum*), and Adam's needle (*Yucca filamentosa*) coming up in the heavily shaded groundcover. Successional hardwood forest was not mapped on the property, but does occur in a few narrow strips where placement of the fire lane has allowed former upland pine to become overgrown with laurel oak (*Quercus hemisphaerica*) and greenbrier. Two clearings, used as wildlife food plots, were observed on the property. There are no developed structures on the proposal other than a small concrete bridge, and very few roads, mostly accessing the small plantations. Table 1 provides a list of the landcover types identified on the proposal and their approximate acreages.

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

Community or Landcover	Acres	Percent of Proposal
basin swamp	441	48%
basin marsh	182	20%
bottomland forest	143	15%
upland pine	103	11%
upland hardwood forest	5	1%
depression marsh	2	<1%
pine plantation	47	5%
clearing	1	<1%
Totals	925	100%

Florida Fish and Wildlife Conservation Commission (FWC)

The property consists of a 945-acre parcel in Leon County that contains the northern half of Foshalee Slough and an upland buffer. Foshalee Slough is an intact, mostly forested depression wetland that is hydrologically connected to Lake Iamonia during flood events. The southern half of Foshalee Slough is included in an existing Florida Forever project; therefore, this proposal presents an opportunity to protect the entire slough. Additional conservation easements border or are nearby this proposal, providing a corridor for wildlife and protecting a substantial portion of the Red Hills region from encroaching development.

Wood stork, snowy egret, and white ibis (*Eudocimus albus*) are examples of wading bird species reported to occur on the property. The wood stork is Federally designated as Threatened. The snowy egret and white ibis are included in Florida’s State Wildlife Action Plan (SWAP) and Imperiled Species Management Plan. Other species of listed wading birds that could potentially occur on the property include little blue heron (*Egretta caerulea*) and tricolored heron (*Egretta tricolor*). Examples of waterfowl observed during the site assessment include wood duck (*Aix sponsa*) and blue-winged teal (*Anas discors*). Other species inhabiting the slough that will benefit from the protections of an easement include the purple gallinule (*Porphyrio martinicus*), which is a SWAP species, American alligator (*Alligator mississippiensis*), and various species of snakes, turtles, amphibians, and fish.

Since the property is proposed as a less-than-fee acquisition, current management practices and uses of the property would continue. The property is managed primarily for northern bobwhite (*Colinus virginianus*), a species that was observed during the site assessment. As such, the manager conducts frequent prescribed burns to maintain habitat. Maintaining the approximately 107 acres of upland pine and sandhill with frequent prescribed fire benefits many wildlife species in addition to bobwhite, such as the Bachman’s sparrow and red-headed woodpecker, which are SWAP species reported to occur on site. The land manager allows fire from the uplands to burn into the wetlands and there are no firebreaks around the slough or a 1.5-acre ephemeral wetland near the western boundary. This practice helps maintain ecotones by preventing woody species from encroaching into the wetlands. The manager has also conducted some brush mowing near the slough to reduce woody species.

The property is mainly used for hunting northern bobwhite and waterfowl. Other species taken include white-tailed deer (*Odocoileus virginianus*), wild turkey (*Meleagris gallopavo*), and alligator. The manager monitors population trends in some species, such as bobwhite and alligator. The manager controls bobwhite predators, such as raccoon (*Procyon lotor*) and opossum (*Didelphis marsupialis*), and several traps were observed along the slough during the field tour.

Other management practices include silviculture and planting food plots. Feral hogs (*Sus scrofa*) are problematic in plantings and are controlled through hunting and trapping. The property contains approximately 48 acres of pine plantation, planted in slash and longleaf.

The Florida Cooperative Land Cover version 3.4 lists numerous natural communities occurring on the areas including basin swamp (42%), marshes (18%), freshwater forested wetlands (14%), high pine and scrub (10%), cypress (6%), and tree plantations (6%). For a complete list, see the attached Florida Fish and Wildlife Conservation Commission (FWC) GIS Environmental Resources Analysis.

The FNAI Element Occurrence database shows five records within the boundary for rare wildlife or plant species including eastern diamondback rattlesnake (*Crotalus adamanteus*), gopher tortoise (*Gopherus polyphemus*), hyssopleaf hedgenettle (*Stacys lythroides*), little blue heron, and white ibis. The GIS model shows the property as Potential Habitat for southern hognose snake (*Heterodon simus*), red-cockaded woodpecker and Tallahassee hedge-nettle.

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 a 0-10; a rank of 10 being of greatest value. The mean FLAM score for this property is 7.3. Approximately 91% is identified as Priority 1 or 2 (of 5) for the Critical Lands and Waters Identification Project. All the area is within Priority 2 (of 5) of the FEGN. The National Wetlands Inventory data shows 81% classified as wetlands.

Approximately 58% lies within a designated FWC Strategic Habitat Conservation Area (SHCA) for species including Cooper's hawk (*Accipiter cooperii*) and American swallow-tailed kite (*Elanoides forficatus*). All the area is within "Rare" bear range. The GIS analysis contains more detailed information.

The proposal presents an opportunity to buffer and protect Foshalee Slough in its entirety and add additional acreage to an existing Florida Forever project. Establishing this property as a conservation easement would benefit numerous fish and wildlife species that inhabit the slough, including imperiled species by maintaining the hydrological connection to Lake Iamonia, protecting water quality, and protecting potential roost sites from logging (e.g., mature bald cypress growing along the slough). Land managers are currently implementing some management practices that benefit wildlife on the area and establishing the property as an easement would support the continuation of these practices.

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 interest is acquired, 945 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.

If interest is acquired, 945 acres would be protected through the use of alternatives to fee simple acquisition.

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 33 wildlife species on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measure Evaluation (FFME) (Appendix A) reports the site contains approximately 918 acres (99% of site) of Strategic Habitat Conservation Areas. This is divided between Priority 5 (59% of site) and Priority 3 (41% of site).

Measure B2:

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

An analysis of priority conservation areas based on Florida Forever Conservation Needs Assessment data may be found in the FFME. Habitat conservation priorities for 281 of Florida’s rarest species were mapped and divided into six priority classes. The FFME shows the acres for each priority class found on the Foshalee Slough proposal. Overall, the site contains approximately 613 acres (66% of site) of rare species habitat. The habitat is mostly divided between Priority 5 (53% of the site), Priority 6 (9%), with the remainder in Priorities 3 and 4 (both 2% 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.

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

Scientific Name	Common Name	Global Rank	Acres
<i>Stachys lythroides</i>	Tallahassee hedge-nettle	G5T1Q	36
<i>Dryobates borealis</i>	red-cockaded woodpecker	G3	94
<i>Mycteria americana</i>	wood stork	G4	514

**For 281 species with the greatest conservation need.*

Measure B3:

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

The FFME reports approximately 925 acres (100%) of the proposed project contributes to protection of ecological greenways with all of the acreage falling 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 FFME lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Foshalee Slough proposal contains 103 acres of upland pine (11% of the site) and 5 acres of upland hardwood forest (1% of the 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 Foshalee Slough proposal would not contribute to a contiguous landscape-sized protection area of >50,000 acres. However, it is adjacent to the Foshalee Plantation Conservation Easement managed by TTRS. Several larger conservation lands, such as the TTRS and several other conservation easements managed by TTRS, are in the general vicinity, but disjunct from the proposal.

Measure B6:

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

The FNAI database contains no specific records of rare species of animals or plants on within the proposed area, although this reflects lack of biological surveys and the absence of submission of data by others. The application notes several rare species observed on site, as well as a few others with potential to occur. Other rare species are known from the region, including an older record of the rare plant hyssopleaf hedgenettle (*Stachys lythroides*, G5T1Q, S1, N, E*) just north of the eastern corner of the proposal, which has a high potential of being present on the property and would benefit from focused rare species surveys. During the site inspection, the team heard a Bachman’s sparrow singing. According to the applicant, there is an active red cockaded woodpecker cavity tree within a half mile of the proposal, and large longleaf pines on the property would be suitable habitat for this species.

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, as well as species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision. Rarity rankings are listed in the following order: FNAI global (G, T) and state (S) ranks, federal status, state status. Species ranks and conservation status are described in Appendix D.

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

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
Rare plants documented or reported on site					
None					
Rare animals documented on site					
<i>Peucaea aestivalis</i>	Bachman’s sparrow	G3	S3	N	N
Additional rare animals reported on site by applicant					
<i>Achalarus lyciades</i>	hoary edge	G5	S1	N	N
<i>Egretta thula</i>	snowy egret	G5	S3	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 proposal contains most of the northern half of Foshalee Slough, which receives flood waters from the Ochlockonee River via Lake Iamonia and, during droughts, may provide water back to the lake. Protection through conservation easement could ensure that the cypress timber resources in the slough are not exploited. Restoration may be limited for the site since the proposal is for less-than-fee acquisition. According to the land manager, the upland natural areas are burned every two years. Continued frequent fire and the discontinued use of lanes cut through the areas would be beneficial to this community. If open lanes are desired, the use of mowed, not chopped, methods should be employed to reduce the disturbance to the ground and soil layers. Monitoring and eradication of invasive plant species would be beneficial. The problem appears to be minor and very manageable at this time; Chinese privet and Japanese climbing fern, both Category I invasive species (Florida Invasive Species Council) were noted during the site visit.

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.

The project area is within the Ochlockonee River and Bay Watershed as identified in the Northwest Florida Water Management District's (NFWFMD) Ochlockonee River and Bay Surface Water Improvement and Management (SWIM) Plan (2017). The SWIM plan does not identify specific capital improvements for the watershed; thus, the measure value is not applicable. The Foshalee Slough project is, however, consistent with the "Strategic Land Conservation" project identified in the plan. The project does not address capital improvements identified in regional stormwater plans or other restoration plans.

Measure C4:

The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 766 acres (83%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly divided between Priority 2 (43% of site), Priority 1 (29% of site), and Priority 3 (10% of site), with the remainder in Priority 4 (1% of site). 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 925 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 (44% of site), Priority 5 (32% of site), and Priority 6 (17% of site), with the remainder in Priority 2 (7% of site). 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 740 acres (80%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 2 (44% of site), Priority 1 (29% of site), and Priority 3 (7% of site), and Priority 1 (7% of site), with the remainder in Priority 4 (< 1% of site).

Measure C11:

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

Upland invasive exotic plants are controlled (treated with herbicide) within the proposed project. During the site visit, Japanese climbing fern was observed along much of the road system(s) and within the commercial pine stands. Additionally, Chinese privet was identified in low numbers.

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 project would protect approximately 765 acres of wetlands. These provide a number of functions, including water storage and recharge, water quality protection, nutrient cycling, flood protection, and fish and wildlife habitat. The NFWFMD has not developed a regional or district water supply plan for the water supply planning region encompassing Leon County. The project is, however, protective of water resources as outlined in the districtwide Water Supply Assessment (NFWFMD 2018) and the Ochlockonee River and Bay SWIM plan (NFWFMD 2017).

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 NFWFMD has not developed a regional or district water supply plan for the water supply planning region encompassing Leon County.

Measure D3:

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

The property is in a restoration plan area (Wakulla Springs Basin Management Action Plan [BMAP]), and the property would provide surface and ground water protection.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Foshalee Slough.

Categories	Scoring Criteria	Project Score
DEP 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	0
DEP Florida Aquifer Vulnerability (FAVA)	4,7,10	7
DEP Special Nutrient Impaired WBIDs	9	0
DEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	8
DEP Springsheds or within 5 miles	10, 7	10

Categories	Scoring Criteria	Project Score
DEP BMAPs	10	10
DEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	35

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

Measures E1-E3

The Foshalee Slough project is proposed for less-than-fee acquisition with no public access.

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.

As a Less-Than-Fee project, the Foshalee Slough Florida Forever project would not increase 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; however, through the conservation easement agreement, the Foshalee Slough project would preserve and protect a number of very significant historic and archaeological sites that are listed in the Florida Master Site File and eligible for the National Register of Historic Places.

Measure F2:

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

As a Less-Than-Fee project, Foshalee Slough would not meet Measure F2, as the number and percentage of historic and archaeological properties on the project would remain privately owned.

CULTURAL RESOURCES:

The Foshalee Slough Florida Forever project is fully contained within the recorded Resource Group Foshalee Plantation/Cherokee Plantation (LE5072), which was recorded and proposed in 1986 by the Historic Tallahassee Preservation Board for inclusion in the National Register of Historic Places (NRHP). The nomination application has yet to be reviewed by the State Historic Preservation Officer (SHPO). According to the author of the proposal form, Kevin McGorty (1986), Foshalee Plantation (which originally included what is now Cherokee Plantation) was proposed for inclusion in the NRHP based upon its significance of “being one of the oldest quail preserves in Leon County still in continuous use.” Contributing resources to the proposed NRHP district include a number of buildings associated with the plantation’s use as a winter retreat and twentieth century quail plantation by the Whitney, Clark, and later Ireland and Ingalls families.

While this NRHP proposal and associated recorded Resource Group focus on the historic structures of Foshalee Plantation and its agricultural and recreational use in the twentieth century, the area that comprises the proposed Florida Forever boundary contains evidence of the pre-Columbian inhabitants of the Red Hills region in three recorded archaeological sites that lie within or intersect the project boundary (LE101, LE102, and LE105). Each of these sites were reported to the State (then the Florida Division of Archives, History and Record Management) by the spouse of a former land manager. All of the information recorded in the Florida Master Site File for the sites is based upon her observation of

lithic and ceramic artifacts found on the ground surface, and each site has been recorded as a “general vicinity” site, denoting the fact that they have not been formally bounded or confirmed by a professional archaeologist.

Owing to the long history of land use as a game preserve, the project has the potential to hold some of the best preserved archaeological deposits in Leon County, and as the project area has never been subject to archaeological survey, there are likely additional as-yet-unrecorded archaeological resources present. For thousands of years prior to the first European settlers the Red Hills were occupied by pre-Columbian peoples, perhaps most notably by people of the Swift Creek and Fort Walton cultures. The latter of these is understood as Florida’s expression of the much larger Mississippian culture that connected people from the Gulf of Mexico to the Great Lakes through their religious practices and material culture. Fort Walton culture shares the characteristic Mississippian traits of maize agriculture, similar Mississippian religious iconography, and large platform mound building as seen at the Lake Jackson Mounds. Foshalee Slough no doubt provided an important travel corridor between the mound complex at Lake Jackson and other Fort Walton sites surrounding Lake Iamonia.

FIELD OBSERVATIONS:

Based upon observations in the field, it appears that the archaeological sites within the project that have been reported are located in areas that are cultivated as food plots or to produce game feed. Given that their locations were originally reported in the 1970’s, it would appear that these areas have been continuously used in the same manner by ensuing land managers. Foshalee plantation staff confirmed that these areas routinely yield artifacts. Although, its recorded boundaries intersect the project area, the site recorded as LE101 likely lies outside of the boundaries of the project. This discrepancy is due to the fact that it was recorded as a General Vicinity site and the polygon representing the site intersects the boundary; however, inspection of the landform suggests the site is concentrated in the upland area outside of the project boundaries.

The only site that is located wholly within the project boundaries, LE105, is today in an area that has been planted in pine trees. Inspection of a food plot within the general vicinity polygon revealed ceramic sherds and lithics on the recently plowed surface. There appears to have been some significant ground disturbance associated with the planting of pine trees in this area, although it is likely that some intact buried archaeological deposits still exist.

The dangers to all archaeological resources on the project come in the form of ground disturbance from agricultural or silvicultural practices and artifact collecting. Should this project be acquired as Less-Than-Fee, it is recommended that all known unrecorded cultural resources are recorded in the Florida Master Site File noting their current condition and for conservation easement land owners to be made aware of their responsibility to not willingly disturb or destroy those resources protected on their property. Should any artifacts be discovered on the project in the future, DHR recommends leaving them in place and contacting one of DHR’s archaeologists.

Table 5. Recorded Historical Resources for Foshalee Slough Florida Forever Project

Site Name	Site Number	FMSF Category	Site Type
Foshalee 9	8LE00102	Archaeological Site	Prehistoric Artifact Scatter
Foshalee 12	8LE00105	Archaeological Site	Prehistoric Artifact Scatter
Foshalee Plantation/ Cherokee Plantation	8LE05072	Resource Group	Mixed District - Twentieth Century Hunting Plantation

Florida Master Site File 2022

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 149 acres (16% of site) could be available for sustainable forest management, primarily in Priority 2 (138 acres), and the remainder in Priority 3 (7 acres) and Priority 5 (4 acres). Prioritization is based on 4 criteria set by the Florida Forest Service (FFS): 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. Approximately 54.58 acres are currently in production, with an additional 89.85 acres with the potential to have economic return if planted at a denser rate.

Measure G3:

The number of acres of forestland acquired that will serve to maintain natural groundwater recharge functions.

The FFME reports approximately 45 acres (5%) would provide forestland to maintain natural groundwater recharge functions.

Measure G4:

The percentage and number of acres identified for restoration actually restored by reforestation.

Around 5 acres (3%) have been reforested into longleaf pine, although small amounts of mature longleaf pine exist in some of these stands. The majority of the pine present is loblolly pine. Suggested restoration would be to plant both longleaf and wiregrass after the pine plantation stands have reached their rotation and introduce wiregrass (*Aristida stricta*) into the open loblolly and longleaf stands. A continuation of the burning regime is also necessary to keep the current native grasses thriving and hardwood encroachment down both within the stand and the edge of the hardwood stands.

It would not be difficult to restore most of this proposed conservation area due to the number of wetland acres already intact. Restoration efforts would primarily focus on upland pine restoration by continuing the prescribed fire program currently in place, treating the invasive exotics annually, and planting longleaf pine after the loblolly pine already established have been harvested. Planting longleaf pine allows for keeping a fire rotation and eventually leading to a multi-aged timber stand that is self-establishing. Also, planting wiregrass (*Aristida stricta*) in the upland stands would be helpful in establishing a more desirable food source for gopher tortoise and other species.

FLORIDA FOREVER CRITERIA

The proposed project meets the following Florida Forever criteria (section 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 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 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.

MANAGEMENT

If acquired as a perpetual conservation easement, 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 Florida Department of Environmental Protection (DEP), Division of State Lands (DSL), Office of Environmental Services (OES).

FUNDING SOURCES

Florida Forever.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access Issues

This would be a less-than-fee acquisition. The site does not appear to have legal access from a public right of way. Physical access is by private unimproved woods and agricultural roads.

Jurisdictional and Sovereignty Lands Issues

The majority of this project consists of jurisdictional wetlands. The extent and limits would be determined during the appraisal mapping by an environmental scientist. As for sovereignty lands, based on aerial photography and field review, we do not see any that would affect the project.

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 insurance 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 Foshalee Slough Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs

The 945-acre property consists of vacant land under the Agriculture/Silviculture/Conservation future land use category. The property would serve as a large area of open space; however, the site will not have any direct public use or public access to the property.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces

The site has significant natural attributes including wetlands (the property is almost exclusively wetlands), planted and natural uplands, biological diversity and important connections to the Ochlockonee River and Lake Iamonia.

Low potential: All parcels within the project area have the land use designation of Leon County Agriculture/Silviculture/Conservation. The site is bounded to the south by the Red Hills Conservation Florida Forever area, and to the east and west by Conservation lands. There are currently no plans for development or threats to the site which would impact the conservation potential of the site. The

property consists of merchantable timber which could potentially be harvested in the future, however there are no current plans for timber harvesting.

Potential for Being Subdivided

Low Potential: The subject site has two Future Land Use Map designations, Agriculture/Silviculture/Conservation (1 DU/10-acres), and Rural (1 DU/10-acres). Future subdivision of the property would most likely require a Future Land Use Map change to a residential land use category for subdivision to be feasible. There are currently residential developments approximately one mile south of the site, however these homes do not directly abut the property as they are separated by the Red Hills Conservation Florida Forever project area. With the large amount of land in conservation in the area, the site is very unlikely to be subdivided in the future.

Zoning and Densities within the Project Boundaries

The entirety of the project area is designated as Leon County Rural zoning.

Existing Land Uses and Future Land Use Designations

The site is currently managed for wildlife management, hunting, conservation, silviculture, and agriculture. The majority of the site is under the Agriculture/Silviculture/Conservation land use category, with a small portion under the Rural land use category.

Development Potential

Low Potential: The site consists entirely of Agriculture/Silviculture/Conservation land uses which limits development to 1 DU/10-acres. Considering the project site of approximately 945- acres, the site has the potential for 94 dwelling units.

Transportation Planning Issues

The proposed project is located in the Florida Department of Transportation's (FDOT) District 3 (Leon County). FDOT finds no adverse impacts from this proposal.

ACKNOWLEDGEMENTS

Staff in the DSL and FNAI determined the final project recommendations. Sine Murray and Hannah Turbiville in DSL's OES were responsible for the overall coordination of this report, with contributions from the following:

- Florida Department of State, Division of Historical Resources – Joshua Goodwin
- Florida Forest Service – Cat Ingram & Ryan Slyter
- Department of Economic Opportunity – Ben Naselius & Barbara Powell
- DEP Division of State Lands, Bureau of Appraisal – Jay Scott & Amy Phillips
- Florida Fish and Wildlife Conservation Commission – Laramie Ferry & Diane Pepe
- Florida Natural Areas Inventory – Kim Alexander & Nathan Pasco
- DEP Division of Environmental Assessment and Restoration – Kevin Coyne
- Florida Department of Transportation – Jennifer Carver
- Northwest Florida Water Management District – Linda Chaisson

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by FNAI

Foshalee Slough: Florida Forever Measure Evaluation 20220217

GIS ACRES = 925

MEASURES	Resource Acres ^a	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	376	41%
Priority 4	0	0%
Priority 5	541	59%
Total Acres	918	99%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	23	2%
Priority 4	19	2%
Priority 5	488	53%
Priority 6	85	9%
Total Acres	613	66%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	925	100%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	925	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)	103	11%
Mesic/Wet Flatwoods (G4)	0	0%
Upland Hardwood Forest (G5)	5	1%
Total Acres	108	12%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	0	
G3	0	
G4	0	
G5	0	
Total	0	
C4: Natural Floodplain Function		
Priority 1	264	29%
Priority 2	398	43%
Priority 3	91	10%
Priority 4	13	1%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	766	83%

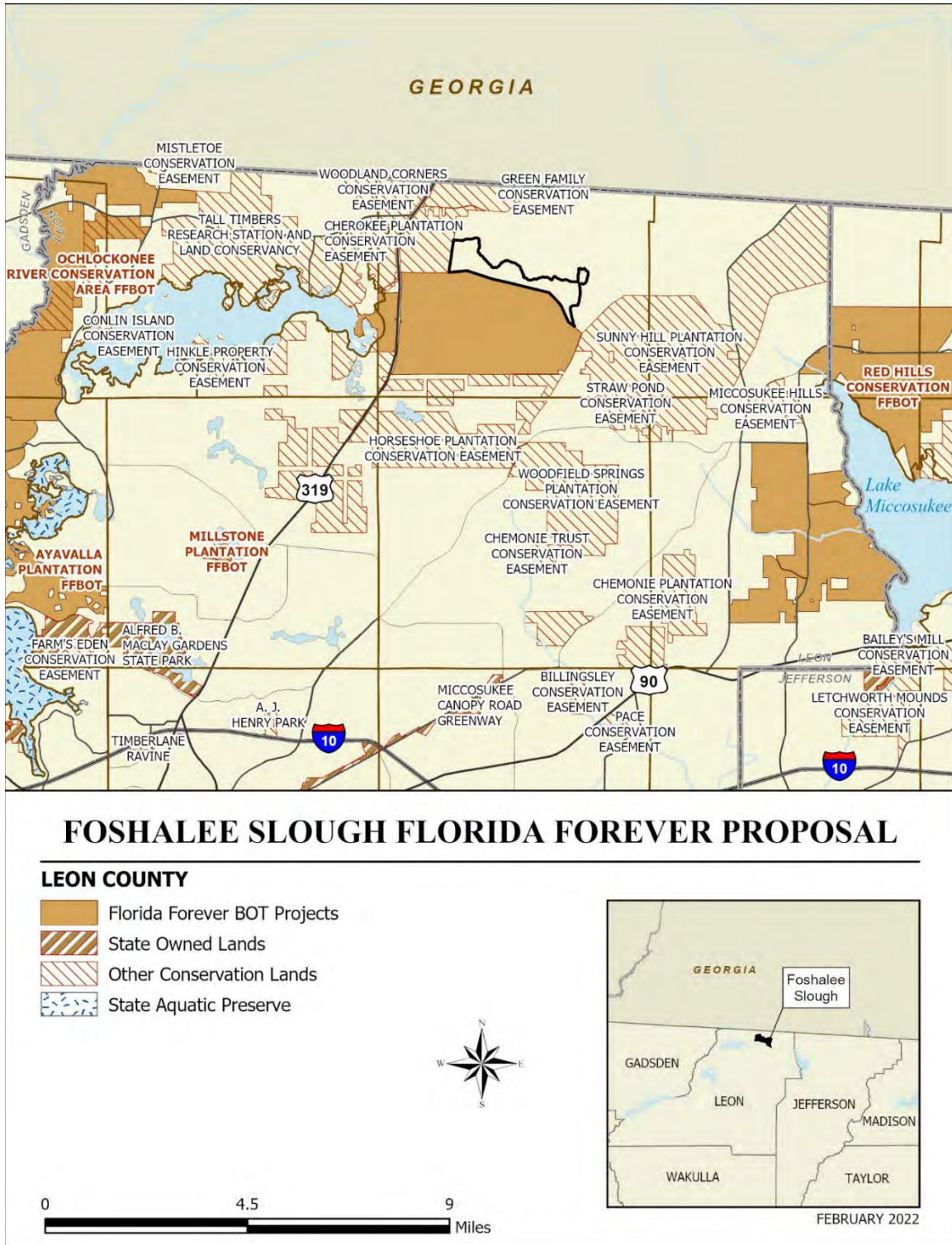
MEASURES (continued)	Resource Acres ^a	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	62	7%
Priority 3	0	0%
Priority 4	410	44%
Priority 5	297	32%
Priority 6	156	17%
Priority 7	0	0%
Total Acres	925	100%
G7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	264	29%
Priority 2	411	44%
Priority 3	84	7%
Priority 4	2	< 1%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	740	80%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	288	29%
Priority 4	527	57%
Priority 5	130	14%
Priority 6	0	0%
Total Acres	925	100%
E2: Recreational Trails (miles)		
<small>(prioritized trail opportunities from Office of Greenways and Trails & Univ. Florida)</small>		
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	138	15%
Priority 3	7	< 1%
Priority 4	0	0%
Priority 5 - Potential Pinelands	4	< 1%
Total Acres	149	16%
G3: Forestland for Recharge	45	5%

^aAcres 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 FNAI

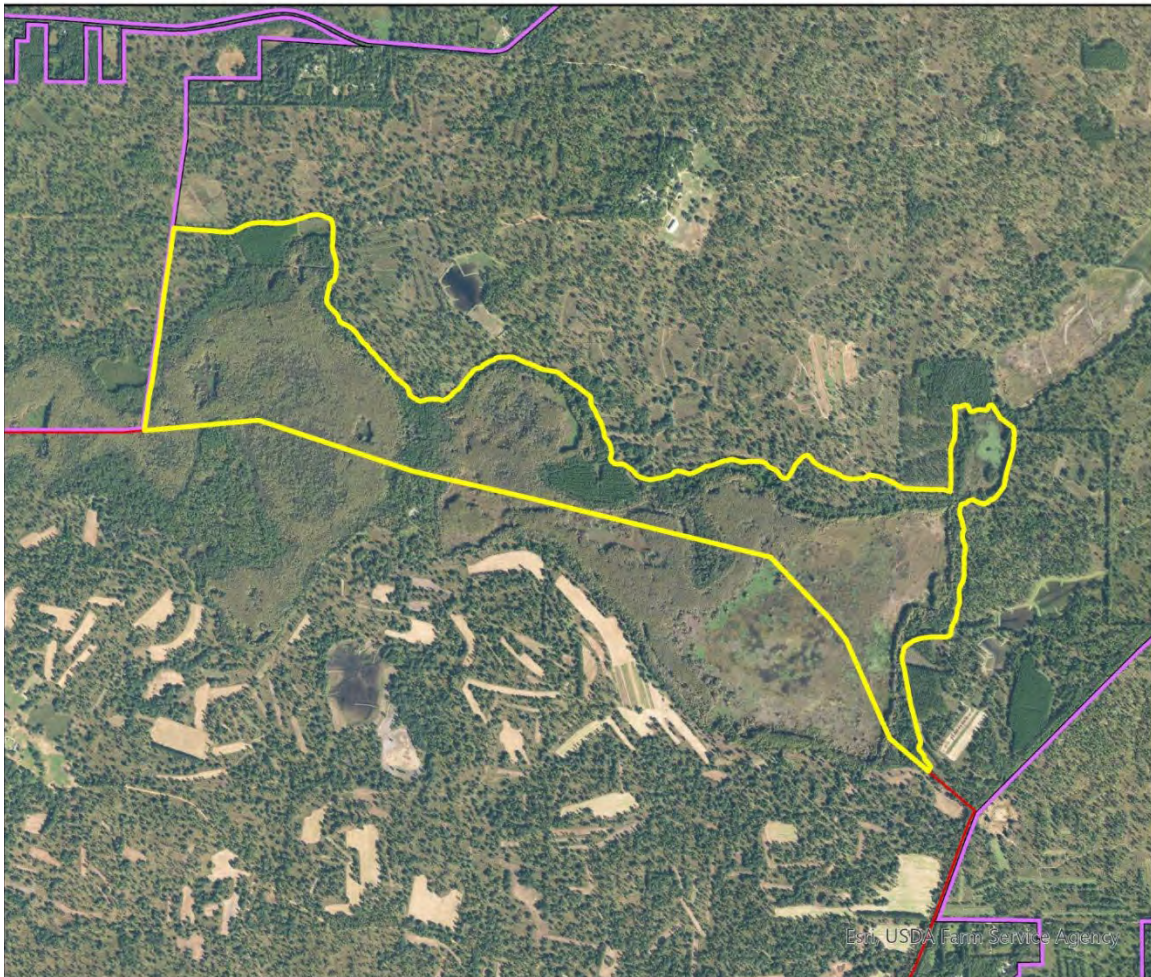
B1: Florida Forever map



B2: Aerial map

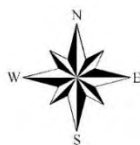
Foshalee Slough Florida Forever Proposal

FLORIDA FOREVER BOARD OF TRUSTEES PROPOSED PROJECT BOUNDARY AS OF FEBRUARY 2022



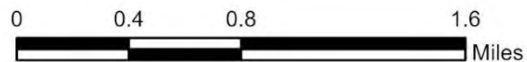
Map Produced by: N. Pasco, February 2022

Background: World Imagery Resolution = 0.3 meter



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

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**Appendix C:
PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY**

LEON COUNTY

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Leon	1814202040000	Ireland Melville Trust	1392.19	\$5,966,757.00	\$1,588,852.00	Essential
Leon	1816202010000	Ireland Kate Estate	147.143	\$588,572.00	\$42,796.00	Essential
Leon	1820200040000	Ireland Melville Trust	809.69	\$3,238,760.00	\$156,073.00	Essential
Leon	1823200040000	Ireland Melville Trust	259.73	\$1,038,920.00	\$81,180.00	Essential
Leon	1823202020000	Ireland Melville Trust	318.45	\$1,273,800.00	\$79,618.00	Essential
Leon	1826200060000	Ireland Melville Trust	195.26	\$781,040.00	\$54,104.00	Essential
TOTALS			3122.46	\$12,887,849.00		

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

2019-04-19

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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(SIA) = 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



1. Foshalee Slough



3. Upland pine



4. Basin swamp



5. Depression marsh



6. Basin Marsh