

Lake Sampala Timber & Land
Madison County

Florida Forever Project Evaluation Report

Prepared by:
Division of State Lands
Office of Environmental Services

Submitted to the Acquisition and Restoration Council
April 8, 2022



Acquisition Type: Less-than-Fee
Acres: 1,317
Just Value: \$901,275
Application Date: October 31, 2021
Project Sponsor: Landowner (Chad Pettinato)

Executive Summary

The Lake Sampala Timber & Land Florida Forever project contains four parcels of land totaling approximately 1,317 acres. The project is located in Madison County and is just north of County Road (CR) 360. The nearest city is Madison. According to the property tax appraiser, the project has a total tax assessed value of \$901,275. The Lake Sampala Timber & Land project is proposed as a less-than-fee acquisition.

The majority of the property is disturbed wetlands. Altered landcover types cover approximately 40% of the project area and include pine plantation (17%) and successional hydric forest (21%). These areas would have historically been considered mesic flatwoods or basin swamp. Basin swamp and shrub bog are also prevalent throughout the project with varying degrees of alteration. The Lake Sampala Timber & Land project is a part of the San Pedro Bay ecosystem and is located on the southeastern portion of Lake Sampala. The project's location makes it important to aquifer recharge and a significant wildlife corridor. Currently, the land is utilized for private recreation and timber production.

Rare animals documented or reported within the proposed project area include Florida black bear (*Ursus americanus floridanus*), eastern diamondback rattlesnake (*Crotalus adamanteus*), and American alligator (*Alligator mississippiensis*). The project also contains habitat ideal for rare species such as the eastern indigo snake (*Drymarchon couperi*) and wood stork (*Mycteria americana*). There are no cultural resources recorded within the project area. However, there are two historic structures and 35 archaeological sites located within a 5-mile radius of the project site.

If approved for addition to the 2023 Florida Forever Priority List, the 1,317 acres of Lake Sampala Land and Timber project should be considered as an amendment to the San Pedro Bay Florida Forever project boundary. All of the 1,317 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 on January 27, 2022. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

If acquired, the Lake Sampala Timber and Land project will provide protection of timberland and natural wetland systems that provide valuable wildlife habitat for imperiled species such as the Florida black bear and protect the water quality of the Econfina River and San Pedro Bay. Increase the amount of protected acreage at Sampala Lake and its related ecosystems, and provide a corridor for wildlife.

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.
- Increase the amount of forestland available for sustainable management of natural resources.
- Conserve and protect a portion of Florida's rural landscape in order to provide and enhance wildlife corridors for rare and imperiled species.
- Provide surface and groundwater protection and protect natural floodplain functions.

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Lake Sampala Timber and Land proposal comprises 1,317 acres (1,346 GIS acres) in south-central Madison County approximately nine miles southwest of the town of Madison. The proposed property is adjacent to the southern border of two conservation easements monitored by Florida Forest Service (FFS): Koblegard Agricultural and Conservation Easement and Sampala Lake ARCCO Agricultural and Conservation Easement. These properties along with the Lake Sampala Timber and

Land property are sandwiched between Hixtown Swamp and Sand Pedro Bay Florida Forever projects in the upper reaches of the Econfina watershed near the divide with the Aucilla watershed just a few miles to the north and west.

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 January 27, 2022, by FNAI staff Dan Hipes and Frank Price, along with the Acquisition and Restoration Council (ARC) liaison staff and the landowners.

The Lake Sampala Timber and Land proposal lies primarily in the Ocala Uplift Physiographic District characterized by limestone sinks and rolling plains with limestone near the surface. Elevations on the property range from approximately 100 ft to 125 ft above sea level.

Wet flatwoods accounts for the vast majority of the area, covering approximately one third of the property. Basin swamp and shrub bog also cover substantial portions of the property, each accounting for approximately ten percent of the area. Other wetland communities covering small proportions of the property include basin marsh (5%), and swamp lake (or possibly sinkhole lake; <1%). Altered landcover types cover approximately 40% of the proposed property, dominated by two types that are approximately equal in areal coverage: pine plantation (17%) and successional hydric forest (21%). The latter is primarily former basin swamp that has been clearcut or selectively cut resulting in an early successional wetland community. The pine plantation primarily includes former mesic flatwoods, but also includes some wet flatwoods and possibly former upland hardwood forest. Other altered landcover types with limited extent are successional hardwood forest (3%), roads (1%), improved pasture (1%), and clearing/food plot (<1%). Two small structures, a cabin/lodge and a pole barn, are present on the property. No other improvements are evident.

Nearly all of the area identified on site as wet flatwoods has been at least partially cut, but not replanted. There is no evidence of recent fire. There is a sparse canopy of mature slash pine (*Pinus elliotii*), and occasional pond cypress (*Taxodium ascendens*). There is a moderate sub-canopy of loblolly bay (*Gordonia lasianthus*). There is a dense tall shrub layer of titi (*Cyrilla racemiflora*), loblolly bay, sweetbay (*Magnolia virginiana*), and southern bayberry (*Morella cerifera*). The short shrub layer is very dense, dominated by fetterbush (*Lyonia lucida*) and titi. Laurel greenbriar (*Smilax laurifolia*) is an abundant woody vine. Small patches of Japanese climbing fern (*Lygodium japonicum*; FISC category I) was observed along the road at several locations within the wet flatwoods.

Basin swamp within the Lake Sampala Timber and Land property has a sparse canopy dominated by pond cypress, but also includes an occasional slash pine. The moderately dense sub-canopy layer includes young pond cypress as well as red maple (*Acer rubrum*), loblolly bay, and sweetgum (*Liquidambar styraciflua*). The moderately dense shrub layer is dominated by fetterbush, but also includes common persimmon (*Diospyros virginiana*), Virginia willow (*Itea virginica*), and sawtooth blackberry (*Rubus pensilvanicus*). The herbaceous layer within the basin swamp is variable and patchy; common species are Virginia chain fern (*Woodwardia virginica*), sedge (*Carex sp.*), flatsedge (*Cyperus sp.*), waterlily (*Nymphaea sp.*), panic grass (*Panicum sp.*), and sphagnum moss (*Sphagnum sp.*).

Shrub bog covers a large portion of the lake basin in the northern portion of the property. The field assessment team observed peripheral areas of this dense and generally inaccessible vegetative community. There is essentially no canopy, but a few pond cypress and slash pine are present along the fringe and possibly scattered within. There is a dense layer of titi over an equally dense layer of fetterbush. Sphagnum moss was common on the edge in standing water and is likely present throughout this community. Few other species are likely present.

Basin marsh also covers a large portion of the lake basin at the north end of the property, accounting for approximately 5% of the total area of the property. Most of the marsh is inaccessible and obscured from view by shrub bog; however, a small trail at the marsh edge allowed a narrow view for the assessment team. Vegetation is present in large patches. Maidencane (*Panicum hemitomon*) dominated the view at the assessment location. White water lily (*Nymphaea odorata*) was also present. Large patches of shrubs, (presumably buttonbush (*Cephalanthus occidentalis*)) can be seen on aerial photography. Other patches of unidentified emergent herbaceous vegetation are also evident. This lake appears to be late in the natural cycle of filling in with organic material. The owner stated that he talked to people who remember the lake having much more open water.

A few small depression marshes were visited during the field assessment of the Lake Sampala Timber and Land proposal. There was a moderate patchy short shrub layer of sawtooth blackberry and St. John's wort (*Hypericum fasciculatum*). The herbaceous layer was dense, but composed primarily of weedy species including bluestem grasses (*Andropogon spp.*), woolgrass (*Scirpus cyperinus*), flatsedges (*Cyperus spp.*), falsefenne (*Eupatorium leptophyllum*), and witchgrass (*Dichanthelium sp.*).

The property has a small fringe of upland hardwood forest that extends off of the property. There was a diverse canopy layer of hardwood trees including white oak (*Quercus alba*), swamp chestnut oak (*Quercus michauxii*), and water oak (*Quercus nigra*). There was a sparse sub-canopy composed of American beech (*Fagus grandifolia*), sweetgum, sweetbay, spruce pine (*Pinus glabra*), and water oak. The sparse shrub layer included needle palm (*Rhapidophyllum hystrix*), bluestem palmetto (*Sabal minor*) and Elliotts blueberry (*Vaccinium elliotii*; AKA *V. corymbosum*). No herbaceous vegetation was observed in the brief search of the area. It is possible that in the past this upland hardwood community extended further into the property or was present in other areas within the property and is now part of pine plantation.

Two small swamp lakes/sinkhole lakes guarded by a dense thicket of titi and fetterbush were identified but not observed during the field assessment. A photograph of the larger of the two lakes shows an outer zone of buttonbush with some maidencane. Both of these species are typical of swamp lakes. Aerial imagery shows a high percentage of open water within both lakes. No evidence of disturbance can be seen.

Successional hydric forest primarily includes areas where merchantable timber was removed but the area was not planted. These areas include wet flatwoods and basin swamp. The vegetation is quite variable in structure, depending on time since harvest, but generally has a sparse canopy of slash pine or pond cypress. There is often a dense tall shrub layer of loblolly bay and titi. The short shrub layer is generally very dense, dominated by fetterbush. The herbaceous layer is generally absent. Sphagnum moss is common in areas not covered by leaf litter. Laurel greenbrier often forms a dense network through the shrub layer creating a nearly impenetrable thicket.

Pine plantation observed during the field assessment was slash pine on former mesic flatwoods and in a precommercial stage of growth (mostly young trees). There is often a sub-canopy layer of sweetgum, and water oak. Tall shrubs include large gallberry (*Ilex coriacea*) (in wet areas), gallberry (*Ilex glabra*), southern bayberry (*Morella cerifera*), and water oak. The short shrub layer was dominated by fetterbush and saw palmetto (*Serenoa repens*). The herbaceous layer was sparse, dominated by bluestem grass. No wiregrass was observed on the property.

The largest block of successional hardwood forest was not visited during the field assessment; however, several small fringes to pine plantation that are likely similar were observed. These areas had a moderately dense canopy, sub-canopy, and shrub layer of water oak, and sweetgum. Other shrubs included saw palmetto, beautyberry (*Callicarpa americana*), elderberry (*Sambucus canadensis*) and highbush blueberry (*Vaccinium corymbosum*). Herbaceous cover was not present in the observed areas and is generally absent in this landcover type as a result of low light penetration to the ground and high leaf litter cover.

The small area of improved pasture was not visited during the field assessment. It is part of a larger bahia grass (*Paspalum notatum*) pasture that extends off of the property. The pasture appears on aerial photography to be well-maintained with no shrub intrusion. A few small clearings/food plots were observed during the field assessment. They are managed for wildlife forage. Game feeders also were present at several locations. The small area (<1 acre) identified as developed includes a small dwelling and pole barn surrounded by mown lawn. 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
wet flatwoods	429	32%
basin swamp	148	11%
shrub bog	141	10%
basin marsh	69	5%
swamp lake	2	<1%
upland hardwood forest	<1	<1%
successional hydric forest	278	21%
pine plantation	226	17%
successional hardwood forest	25	2%
road	15	1%
improved pasture	9	<1%
clearing	3	<1%
developed	1	<1%
Totals	1347	100%

Florida Fish and Wildlife Conservation Commission (FWC)

The property is owned by the Lake Sampala Timber and Land, LLC, and is bordered on the north by Adams Ranch and the Sampala Lake Ranch. The east and west boundaries are numerous rural residential and agricultural properties. The south boundary is also rural residential and agricultural properties and CR 14. Established conservation areas nearby include Hixtown Swamp to the north, and the adjacent agricultural and conservation easements properties .

The Lake Sampala property was acquired in June 2021 from Hatfield Family Trust. The family managed the property for recreation and some pine production. Since acquisition, Lake Sampala Timber and Land, LLC, has continued managing the uplands for recreation and pine production. The project application states that the current owners intend to continue silvicultural operations and maintain the current hunting program.

Approximately 20% of the property is comprised of forested uplands and the balance in various wetland communities including lakes, marshes, cypress domes, and other forested wetlands. During the field review, all pine and mixed pine hardwood stands visited had a dense midstory of woody shrubs and lacked herbaceous groundcover. There was no evidence of prescribed fire and significant vegetation management would be needed to introduce fire to the property.

There is limited potential for listed plant and animal species that depend on fire-maintained pine forests with healthy herbaceous ground cover. Habitat for game species, such as white-tailed deer (*Odocoileus virginianus*) and wild turkey (*Meleagris gallopavo osceola*), and common non-game species is adequate.

The flatwoods can provide more benefit for wildlife, but this would require a significant investment in understory management, timber thinning, and reintroducing prescribed fire. Moving to longer rotations

with periodic thinning and the use of prescribed fire can be very effective in improving habitat quality while maintaining timber production.

The Florida Fish and Wildlife Conservation Commission's (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 7.2. Approximately 85% is identified as Priority 1 or 2 (of 5) for the Critical Lands and Waters Identification Project. All the area is within Priority 5 (of 5) of the Florida Ecological Greenways Network. The National Wetlands Inventory (NWI) data shows 84% classified as wetlands.

Approximately 80% of the property lies within a designated FWC Strategic Habitat Conservation Area (SHCA) for species including the Cooper's hawk (*Accipiter cooperii*) and American swallow-tailed kite (*Elanoides forficatus*). The FWC GIS Environmental Resources Analysis containing more detailed information concerning the FWC's FLAM analysis, focal species data, SHCA data, wildlife observation data, etc. is provided as an addendum to this assessment.

The Lake Sampala Timber and Land property in its current condition will provide some value as a less-than-fee acquisition for the State of Florida. The primary benefit initially is protection of the wetlands and providing water quality and quantity benefits. If current silvicultural practices are continued, little improvement in upland wildlife habitat can be expected.

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, 1,317 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, 1,317 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 terrestrial vertebrates 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 1,239 acres (92% of site) of Strategic Habitat Conservation Areas. This is divided between Priority 5 (63% of site) and Priority 3 (29% of site) areas.

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 Lake Sampala Timber and Land proposal. Overall, the site contains approximately 1,193 acres (89% of site) of rare species habitat. The habitat is divided between Priority 4 and Priority 5 (each with 31% of site), and Priority 6 (27% of 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>Drymarchon couperi</i>	eastern indigo snake	G3	827
<i>Mycteria americana</i>	wood stork	G4	787

**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 1,342 acres (100%) of the proposed project contributes to protection of ecological greenways, all of which is within 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 FFME lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Lake Sampala Timber and Land proposal contains 429 acres of wet flatwoods (32% of site) and < 1 acre of upland hardwood forest.

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 Lake Sampala Timber and Land proposal, along with adjacent conservation lands would not contribute to a contiguous landscape-sized protection area of >50,000 acres. However, the proposal is adjacent to Sampala Lake ARCCO Agricultural and Conservation Easement and Koblegard Agricultural and Conservation Easement, both monitored by the FFS.

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 within the proposed area. This may reflect lack of biological surveys and the absence of submission of data by others. The Florida black bear is considered common in the region of the property by the FWC 2018 range estimate. The application notes a few rare species observed on site (Table 2). Wading birds are likely to forage in the wetlands on the site.

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 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 or reported on site					
none					
Rare animals documented on site					
<i>Ursus americanus floridanus</i>	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on site by applicant					
<i>Crotalus adamanteus</i>	eastern diamondback rattlesnake	G4	S3	N	N
<i>Alligator mississippiensis</i>	American alligator	G5	S4	SAT	FT(S/A)

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.

Approximately 500 acres of successional hydric forest and planted pine provide an opportunity for restoration within the Lake Sampala Timber and Land proposal. The plantation as well as the former wet flatwoods portion of the successional hydric forest would benefit from prescribed fire. Thinning and some other form of fuel reduction may be necessary to safely burn these areas. Large portions of the successional hydric forest would benefit simply from time to allow reestablishment of the basin swamp canopy (mostly pond cypress). Ditches are associated with nearly all of the roads on site. It is not clear to what extent the ditches affect the large wetland systems on the property, but they do not appear to have the intent of pulling water off of the property.

Measure C4:

The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 1,310 acres (98%) of the proposed project may contribute to the protection of natural floodplain function. This area is divided between Priority 2 (74% of site), Priority 1 (17% of site), and Priority 3 (6% 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 1,328 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 entirely in Priority 7. 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 1,136 acres (85%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 2 (64% of site), Priority 1 (17% of site), and Priority 3 (3% of site). 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 one acre requires invasive species control. Japanese climbing fern was observed onsite and covers less than one acre.

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 is within the Econfina River Basin and is comprised of property that appears to have little to no development within or around the project area. All but a small portion (<10%) is in a Zone A flood plain with a majority of that area shown as a wetland in the NWI layer. The northern property line runs through Lake Sampala and a good portion of the property is labeled as Sampala swamp. There does not appear to be a creek or stream draining the project area although the area is connected during 100-year flood events and contributes to the headwaters of the Econfina. The estimated area available for natural retention is approximately 3/4 of the property. There are significant natural resources present (lakes and/or ponds, swamps, and wetlands) such that protecting the site can provide benefits of retention and natural storage in the project area. The project currently provides substantial water retention and storage that can be improved with water storage projects. The proximity to other conservation lands enhances the ability of the project to be used by wildlife for a corridor.

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 project is not within a District water supply plan. However, hydrologic restoration in San Pedro Bay is within the District’s Florida Forever Plan. This project was not specifically mentioned in the plan, in spite of this, as this project is near the perimeter of San Pedro Bay, a project such as this would be considered when determining locations for restoration.

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 not in a restoration plan area, but the property would provide surface and ground water protection.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Lake Sampala

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	4
DEP Florida Aquifer Vulnerability (FAVA)	4,7,10	10
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	0
DEP BMAPs	10	0
DEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	22

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

Measures E1-E3

The Lake Sampala 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.

The Lake Sampala Land and Timber Florida Forever project would not meet Measure F1 as project contains no archaeological sites recorded or known to exist.

Measure F2:

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

The Lake Sampala Land and Timber Florida Forever project would not meet Measure F2 as project contains no archaeological sites recorded or known to exist.

CULTURAL RESOURCES:

There are no cultural resources recorded or known to exist on this Florida Forever project. To date, no portion of this property has been professionally surveyed for archaeological and/or historical sites. The site file shows two historic structures, 35 archaeological sites, and no resource groups as being located within a five-mile radius of this property.

FIELD OBSERVATIONS:

There were no archaeological or historical resources observed on the project and the landowners are unaware of any unrecorded resources known to exist on Lake Sampala Land and Timber. There is potential for sites to exist given the proximity to Lake Sampala; however, given that the much of the uplands have been subject to intensive silvicultural practices, any unrecorded sites that may exist could potentially be damaged.

The dangers to all archaeological resources on the project come in the form of ground disturbance from 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 landowners to be made aware of their responsibility to not willingly disturb or destroy any existing or newly discovered cultural resources protected on their property. Should any artifacts be discovered on the project in the future, the Division of Historical Resources (DHR) recommends leaving them in place and contacting one of DHR's archaeologists.

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 196 acres (15% of site) could be available for sustainable forest management, divided between Priority 3 (149 acres) and Priority 5 (48 acres). Prioritization is based on four criteria set by the 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.

Measure G3:

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

The FFME reports approximately 28 acres (2%) would provide forestland to maintain natural groundwater recharge functions.

Measure G4:

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

Approximately 138 acres of the existing forestland could be restored by spraying the hardwoods in the pine stands, implementing exotic plant species control and the reintroduction of prescribed fire.

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, Jurisdictional and Sovereignty Lands, Legal Issues

The property can be accessed from a public road. 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 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 Lake Sampala Timber & Land Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs

Low Potential: The 1,347-acre tract southeast of Sampala Lake, which serves as a conservation link between Sampala Lake Ranch and Adams Ranch; is mostly forested but includes some open-water and herbaceous acreage. The uplands consist of Loblolly pine plantation and forested mixed hardwood- coniferous hammocks. The wetlands consist of hydric pine flatwoods, cypress swamps,

freshwater marshes, titi swamps and some open waters of Sampala Lake. This tract is part of the larger San Pedro Bay ecosystem, resting on the southeast side of Sampala Lake, this property aids in aquifer recharge, working timber lands with wildlife corridors that connect the Hixtown Swamp, Adams and Koblegard lands to the north and the San Pedro Bay conservation land to the south. Sampala Lake has an abundance of wildlife habitat. This tract is home to the Florida black bear, Eastern diamondback rattlesnake, American alligator, whitetail deer, turkey, and various waterfowl and wading birds.

The project property provides expansion of and connectivity to existing and proposed conservation lands. This property will serve as the connection between the Hixtown Swamp, Adams, and Koblegard lands totaling over 28,000 acres and the 45,000-acre San Pedro Bay project, which is home to multiple rare species and is important to the aquifer recharge and headwaters of the Econfinia River.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces

Low Potential: The property could be subject to possible deforestation to enable more intensive agricultural uses. The project property is currently used for timber production. Property rights can be acquired by the state to restrict any future development including construction for residential or commercial uses, and mining. The landowner would retain all rights for agricultural uses.

Potential for Being Subdivided

Low Potential: The subject property has low potential for being subdivided. The future land use designation is Agricultural-1, which allows residential use at a density of one dwelling unit per 40 acres. The project site is not near urban services such as water, sewer, and solid waste.

Zoning and Densities within the Project Boundaries

The County stated it does not have zoning map, the County uses its Future Land Use Map in lieu of a zoning map.

Existing Land Uses and Future Land Use Designations

Much of the site is wetland. There are limited uplands and much of that area is used for silviculture or crops. The Future Land Use designation is Agricultural-1, which allows for one dwelling unit per 40 acres, and Agricultural-2, which allows for one dwelling unit per 10 acres.

Development Potential

Low Potential: The site has very low density and is not proximate to urban services or major roads. Further, the site contains extensive wetlands with a limited amount of uplands suitable for development.

Transportation Planning Issues

The proposed project is located in the Florida Department of Transportation's (FDOT) District 2 (Madison County). FDOT finds no adverse impacts from this proposal.

ACKNOWLEDGEMENTS

Staff in DEP DSL and FNAI determined the final project recommendations. Sine Murray and Hannah Turbiville in DSL 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 & Zachary Butler
- Department of Economic Opportunity – Barbara Powell
- DEP Division of State Lands, Bureau of Appraisal – Jay Scott & Amy Phillips

- Florida Fish and Wildlife Conservation Commission – Laramie Ferry, Scotland Talley, & Matthew Pollock
- Florida Natural Areas Inventory – Dan Hipes & Nathan Pasco
- DEP Division of Environmental Assessment and Restoration – Kevin Coyne
- Florida Department of Transportation – Jennifer Carver
- Suwanee River Water Management District – William McKinstry

APPENDICES

Appendix A:

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

Lake Sampala Timber and Land: Florida Forever Measure Evaluation 20220223

GIS ACRES = 1,346

MEASURES	Resource Acres ¹	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	393	29%
Priority 4	0	0%
Priority 5	846	63%
Total Acres	1,239	92%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	414	31%
Priority 5	411	31%
Priority 6	368	27%
Total Acres	1,193	89%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	1,342	100%
Total Acres	1,342	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)	429	32%
Upland Hardwood Forest (G5)	<1	<1%
Total Acres	429	32%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	0	
G3	0	
G4	1	
G5	0	
Total	1	
C4: Natural Floodplain Function		
Priority 1	234	17%
Priority 2	997	74%
Priority 3	78	6%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	1,310	98%

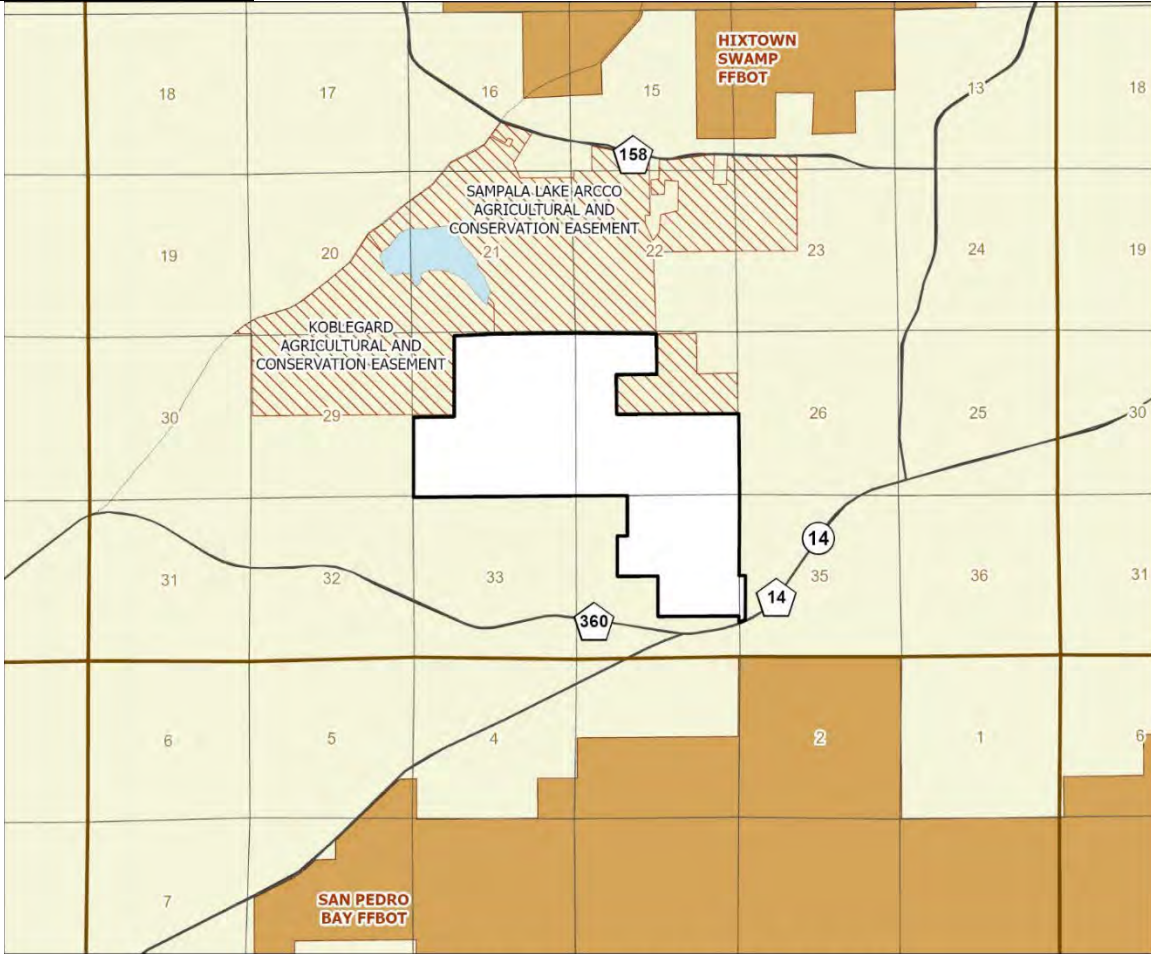
MEASURES (continued)	Resource Acres ¹	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%
Priority 7	1,328	99%
Total Acres	1,328	99%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	233	17%
Priority 2	861	64%
Priority 3	42	3%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	1,136	85%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	4	< 1%
Priority 3	221	16%
Priority 4	976	73%
Priority 5	141	11%
Priority 6	0	0%
Total Acres	1,342	100%
E2: Recreational Trails (miles)		
<small>(prioritized trail opportunities from Office of Streamways and Trails & UIC - Florida)</small>		
Land Trail Priorities	0.0	
Land Trail Opportunities	0.0	
Total Miles	0.0	
F2: Arch. & Historical Sites (number)		
	0	0 sites
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	149	11%
Priority 4	0	0%
Priority 5 - Potential Pinelands	48	4%
Total Acres	196	15%
G3: Forestland for Recharge		
	28	2%

¹Acres 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

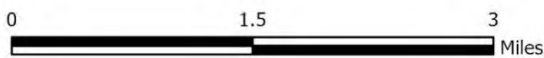
B1: Florida Forever map



**LAKE SAMPALA TIMBER AND LAND
FLORIDA FOREVER PROPOSAL**

MADISON COUNTY

-  Proposed Florida Forever BOT Project
-  Florida Forever BOT Projects
-  Other Conservation Lands

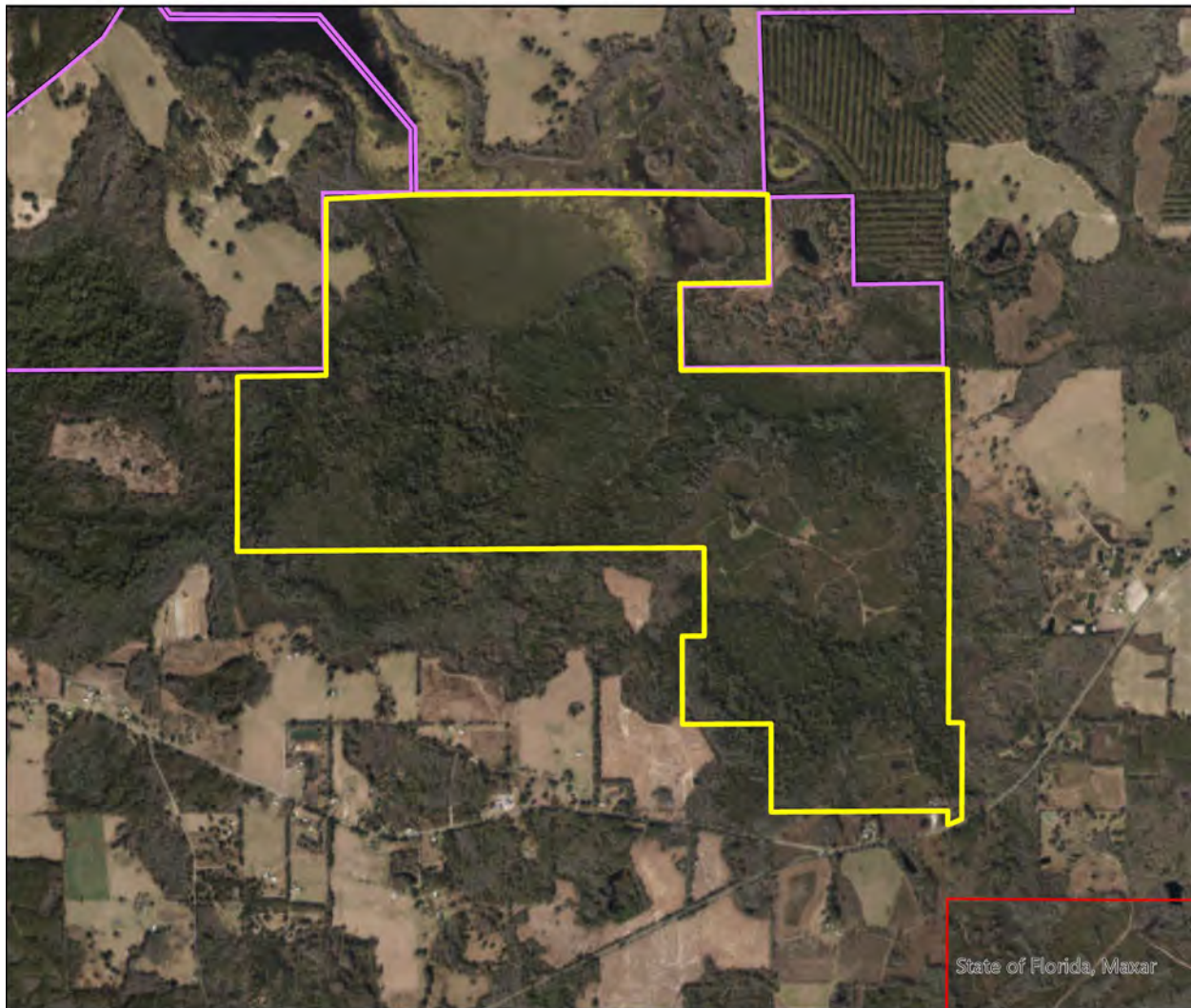


FEBRUARY 2022

B2: Aerial map

Lake Sampala Timber and Land Florida Forever Proposal

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

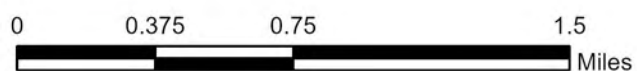


Map Produced by: N. Pasco, February 2022

Background: World Imagery Resolution = 0.3 meter



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Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

MADISON COUNTY

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Madison	27-1S-08-0741-000-000	LAKE SAMPALA TIMBER & LAND COMPANY LLC	440	\$305,000.00	\$28,971.00	Essential
Madison	28-1S-08-0742-000-000	LAKE SAMPALA TIMBER & LAND COMPANY LLC	560	\$300,000.00	\$20,995.00	Essential
Madison	34-1S-08-0775-000-000	LAKE SAMPALA TIMBER & LAND COMPANY LLC	310	\$292,710.00	\$58,307.00	Essential
Madison	35-1S-08-0781-001-000	LAKE SAMPALA TIMBER & LAND COMPANY LLC	7.13	\$3,565.00	\$143.00	Essential
TOTALS			1317.13	\$901,275.00		

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

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. Depression marsh (disturbed) within pine plantation



3. Successional hydric forest along small unnamed blackwater stream



4. Basin Marsh at the edge of Lake Sampala



5. Pine plantation