Green Swamp

Partnerships & Regional Incentives Lake, Pasco, Polk

Year Added to Priority List	2015
Project Acres	269,287
Acquired Acres	108,074
Cost of Acquired Acres	\$60,573,086
Remaining Project Acres	161,213
2020 Assessed Value of Remaining Acres	\$1,434,264,836

Purpose for State Acquisition

The mosaic of cypress swamps, pine forests, and pastures known as the Green Swamp is vital to the water supply of central Florida. The Green Swamp gives rise to four major river systems and is important for maintaining the flow of water from the Florida Aquifer. By preserving the combination of land uses in this region, the Green Swamp will protect the Floridan Aquifer and the several rivers, preserve a large area for wildlife to inhabit and use as wildlife corridors, and provide areas for public recreation in the rapidly growing region between Tampa and Orlando. The project may also help complete the Florida National Scenic Trail, a statewide non-motorized trail that crosses several Florida Forever project sites.

General Description

The Green Swamp is a critical hydrological resource. It encompasses the headwaters of four major rivers; the Withlacoochee, Ocklawaha, Hillsborough and Peace; and has the highest groundwater elevation in the Peninsula. It is therefore critical to the recharge of the Florida Aquifer. For this reason, it has been designated as an Area of Critical State Concern. The Green Swamp has the size and the wildlife resources to qualify as a WMA, thereby preserving a large area for wildlife and public recreation in the part of the state between Tampa and Orlando. The area is a complex ecosystem of disturbed uplands and wetlands intermixed with high-quality swamps. It is estimated that 90 percent of the native upland vegetation in this project has been disturbed by agriculture and development, but the project does contain some uplands with 15 distinct natural communities and other community types. These include scrub, sandhill, and pine flatwoods, which are natural communities underrepresented in state conservation holdings.

Geographically, the Green Swamp project is located within the Green Swamp Area of Critical State Concern but does not include the entire Area of Critical State Concern. The project extends from the southwest corner of the City of Clermont, west and south to US Highway 98, south to Polk City, almost to Haines City on the southeast side, and east to Lake Louise State Park. Biologically, at least six rare plants and 17 rare animals have been documented within the project boundary. Based on habitat, there is potential for 35 rare species to occur within the project, especially within the Pine Island Recharge section. Historically, a total of 23 sites are listed in the Florida Master Site files in the project area. Extensive lakes and wetlands suggest a moderate to high potential for archeological and historical sites that have not yet been discovered in the portion of the project formerly identified as the Pine Island Recharge area, which is bordered in the southeast by the Hilochee WMA, and to the northeast by Lake Minnehaha. Florida Highway 50 serves as the northern border of this project.

Score
G3/S2?
G3/S3
G3/S3
G5/S2
G5/S3
G5T4/S4
G3G4T1/S1
G2G3T1T2/S1
G2/S2
G2/S2
G2G3/S2
G2G3/S2S3

FNAI Element Occurrence Summary

Public Use

Portions of the project will become a WMA and a state park, providing such activities as hunting, hiking and nature appreciation. The project will also include numerous conservation easements. For the lessthan-fee acquisitions, the degree and type of public use will be negotiated with the landowners and is expected to be minimal. Monitoring easements and agreements will be done by OES.

Acquisition Planning

1992

A large Green Swamp project was added to the CARL list in 1992. That project was associated with the Green Swamp Land Authority (GSLA). It worked with SWFWMD in acquired lands within the boundary.

1999

In 1999, the GSLA's responsibilities were passed to DEP.

2011

In 2011, the project was reduced in size to eliminate isolated and otherwise unmanageable parcels and divided into four projects. Those four projects were placed on the list, and the single Green Swamp project was removed from the list. The Green Swamp project described here comprises less acreage than the original 1992 Green Swamp project. Descriptions and maps of each of the four areas that had



been considered projects follow the overarching project description, as they provide more detailed information on resources and management.

2015

In December 2015, the ARC voted to combine the four Green Swamp projects on the priority list and create a single Green Swamp project. This 266,895-acre project was placed and ranked in the Partnerships and Regional Initiatives category. It includes all lands found within the 2011 Florida Forever project boundaries of the Green Swamp-Hilochee Corridor, the Green Swamp-Peace River Headwaters, the Green Swamp-Pine Island Recharge, and the Green Swamp-Withlacoochee Headwaters. The descriptions of the four sites that were combined in 2015 have been retained here to better inform future pursuits for acquisition within this extremely large project.

Hilochee Corridor

General Description

The Green Swamp-Hilochee Corridor portion is the easternmost of the four sub-units in the Green Swamp Florida Forever Project. Covering 91,456 acres in northern Polk and southern Lake Counties, it has 5,138 parcels with multiple owners. About 39 percent of the lands in its boundary (36,000 acres) has been acquired for conservation.

Hydrologically and geologically, this section of the Green Swamp is split north to south into two major drainage basins. The western basin drains north and west to the Withlacoochee River, and the eastern basin drains north and east into the Palatlakaha River and ultimately into the St. Johns River. Another sliver of the area joins the drainage basin to the Kissimmee River drainage to the east and south. For the most part, elevations range between 120 and 175 feet above mean sea level (MSL). The marshes and swamps are generally lower than 120 feet MSL.

Five rare plants are documented within the boundary. Ten rare animal species are documented on site (see FNAI Elements). From an urban planning perspective, this area has a moderate potential for being developed, subdivided or losing significant natural attributes or open spaces. The potential for development and loss of open space is highest on the uplands adjacent to the US 27 corridor on the Lake Wales Ridge.

Florida Highway 50 serves as the northern border of this project.

Management Policy Statement

Plans are to manage the Green Swamp-Hilochee Corridor to conserve and protect lands within areas of critical state concern; conserve and protect significant habitat for native species or endangered or threatened species; provide areas, including recreational trails, for natural, resource-based recreation; and conserve, protect, manage, or restore important ecosystems, landscapes and forests in a manner to enhance or protect significant surface water, coastal, recreational, timber, fish or wildlife resources that local or state regulatory programs cannot adequately protect.



The 84-acre portion of the Green Swamp-Hilochee Corridor within the optimum boundary of Lake Louisa State Park will be managed consistent with the goals and objectives in the approved Unit Management Plan. General management recommendations are restoration and enhancement of natural systems, maintenance of water quality, and public resource-based recreational use and resource education and interpretation.

Manager(s)

FWC is recommended as the manager for most of the area acquired in fee simple. DRP will manage the Overstreet Ranch and the area within the optimum boundary of Colt Creek and Lake Louisa State Parks. Land purchased in less-than-fee will be monitored by OES.

Archeological and historic sites will be managed in coordination with DHR. DRP anticipates any shift from protection and restoration efforts with limited public uses to a broader public use with more infrastructure will require a greater intensity of management.

Management Prospectus Qualifications for state designation

The Hilochee Corridor has the size and wildlife resources to qualify as a WMA. Its variety of land uses helps protect the Floridan Aquifer and the headwaters of several rivers that start in this region. The corridor preserves a large area for wildlife and provides areas for public recreation in a fast-growing region between Tampa and Orlando.

Conditions affecting intensity of management

The Hilochee Corridor requires resource-management methods for its natural areas, including prescribed fire where appropriate. Other areas may require ecological restoration of ground cover, control of invasive species, and reforesting. These will be especially important to achieve the objectives of conserving habitats and populations of imperiled or rare species. Because of the importance of landscape ecology, a land use change near a managed area may affect efforts to reach resource conservation goals of the area, and the overall effective ness of the necessary resource-management. Biotic monitoring is necessary to achieving resource-management goals. Infrastructure development will be appropriate to allow public access, and to provide facilities, security, and property management.

Management implementation, Public access, Site security and Protection of infrastructure

When acquired, FWC will develop a management plan describing the goals and objectives to implement future resource management. The plan would also establish current and future roles of cooperating entities. Long-range goals will stress ecosystem management and protecting and managing rare or imperiled species. FWC will assess the wildlife resources and provide planning support to enhance rare and imperiled species management and recovery of imperiled species. Prescribed fire and other resource-management activities will maintain and restore natural communities and vegetation to benefit native wildlife. Essential roads will be maintained; and unnecessary roads, fire lanes and hydrologic disturbance will be abandoned or restored as practical. Generally, development of facilities is



to be kept to the minimum level necessary to assure protection of resources and to ensure the recreational experience. Where possible, such development would be confined to areas of previous disturbance. DRP's resource management activities in the first year will concentrate on site security, protecting natural and cultural resources, and developing a resource inventory. Particular emphasis will be given to the monitoring of public land and water-use planning and regulatory activities to ensure that adequate consideration is given to maintaining the quality of the water resources and any adjacent lake or other waters designated as Outstanding Florida Waters.

Revenue-generating potential

Revenue could include sales of various permits and recreation use fees, and fees from ecotourism activities if such activities could be economically developed. Area regulations would be developed to identify the necessary permits and fees. The long-term value of this ecosystem to human health and local and regional land and water resources are thought to be significant. DRP expects no significant revenue to be generated from this property immediately after fee title acquisition, and the amount of any future revenue will depend on the nature and extent of public use and development.

Cooperators in management activities

FWC will cooperate in managing the Hilochee Corridor of the Green Swamp with SWFWMD, FFS, Lake and Polk Counties.

Management Cost Summary

FWC	In US Dollars (2011)
Resource Management	
Exotic Species Control	\$37,186
Prescribed Burning	\$111,221
Cultural Resource Management	\$1,794
Timber Management	\$7,176
Hydrological Manager	\$193,739
Other	\$805,332
Resource Management Subtotal	\$1,156,447
Administration	
General Administration	\$10,636
Administration Subtotal	\$10,636
Support	
Land Management Planning	\$103,285
Land Management Reviews	\$20,133
Training/Staff Development	\$5,339
Vehicle Purchase	\$68,433
Vehicle Operation/Maintenance	\$53 <i>,</i> 816
Other	\$13,274
Support Subtotal	\$284,281
Capital Improvements	
New Facility Construction	\$89 <i>,</i> 694
Facility Maintenance	\$311,312
Capital Improvements Subtotal	\$401,006
Visitor Services/Recreation	
Info/Education/Operations	\$60,032
Visitor Services/Recreation Subtotal	\$60,032
Law Enforcement	
Resources Protection	\$40,501
Law Enforcement Subtotal	\$40,501
FWC Projections Total	\$1,932,903
agement Prospectus as originally submitted	

Source: Management Prospectus as originally submitted

Peace River

General Description

This portion is 39,977 contiguous acres and is composed of 15 distinct natural communities and other landcover. It is primarily basin swamps, depression marshes, pine flatwoods, pastures, and other agricultural lands. Pine flatwoods are underrepresented in state conservation holdings. About 51 percent of the area is in natural condition, while 49 percent is disturbed (ruderal, improved and semi-improved pasture and about 400 acres of pine plantation). Geographically, it is between Dean Still Road and Interstate 4. It is bounded on its east, north, and west sides with the Hilochee Corridor and the



Withlacoochee River Headwaters. State Road 33 bisects the proposal from north to south. Old Grade Road (County Road 557) serves as the area's eastern edge.

Hydrologically, most of the site is within the south Withlacoochee River watershed and drains northward. The land is mostly flat, ranging between 120 and 130 feet above MSL, though in the northwest corner, where the land slopes down towards the river, the elevation drops to 115 MSL. Most of the area (99 percent or more) meets the Florida Forever Evaluation's Measures for Surface Water Protection and Aquifer Recharge.

Historically, there are 15 archaeological sites, one historic structure, and one resource group listed in the Florida Master Site files. The hydrology and minimal elevation changes suggest a low potential for significant archaeological and historical sites that have not been discovered.

No rare species have been documented within this area. Based on habitat, there is potential for several rare species to occur here. About 98 percent of the area meets the Florida Forever Evaluation's Measures for Ecological Greenways; and 82 percent is within FWC's Strategic Habitat Conservation Area.

From an urban planning perspective, this portion has a moderate potential for being developed or subdivided, and a moderate-low potential for loss of significant natural attributes or open spaces. The current and future land uses are mostly agricultural and rural residential. It is a short drive from Lakeland, Polk City, Auburndale, and Lake Alfred.

A disjunct portion of Hilochee WMA and some of General James A. Van Fleet State Trail is within the boundary. It also includes FDEP Green Swamp Land Authority (GSLA) Land Protection Agreements, and Green Swamp Conservation Easements.

Management Policy Statement

Green Swamp lands acquired through alternatives to fee-simple should be managed to accomplish the following: conserve and protect lands within areas of critical state concern; conserve and protect significant habitat for native species or endangered or threatened species; and conserve, protect, manage, or restore important ecosystems, landscapes and forests in a manner that enhances or protects significant surface water, coastal, recreational, timber, fish or wildlife resources.

Management Prospectus Qualifications for state designation

Green Swamp is essential to a clean adequate water supply for Central Florida.

Conditions affecting intensity of management

The intensity of management will be decided in the negotiation of the agreement or conservation easement.

Management implementation, Public access, Site security and Protection of infrastructure

The landowner will provide security and infrastructure protection.



Revenue-generating potential

There is no revenue-generating potential for this portion of the Green Swamp.

Management costs and sources of revenue

OES is responsible for periodic monitoring of land use agreements and conservation easements.

Pine Island Recharge

General Description

The Pine Island Recharge area has 13 distinct natural communities and other landcover types. Natural communities make up about half of the proposal; and various types of agricultural, rural residential, and mined lands make up the remainder. The natural communities are almost entirely wetlands. Several large lakes and numerous basin swamps and depression marshes are interspersed in a complex mosaic with the disturbed landcover types. Geographically, the Pine Island Recharge Area is south of SR 50, north of CR 474, and west of Lakes Minnehaha and Louisa. Much like the Hilochee Corridor, it is bounded to the west, south and southeast by two other portions of the Green Swamp Florida Forever project (Green Swamp-Hilochee Corridor and Green Swamp-Withlacoochee River Headwaters). Its boundary is contiguous with five publicly managed conservation areas. Hydrologically, it is split lengthwise (north south) into two major drainage basins. Almost three-quarters of this area is in the Ocklawaha River watershed, draining east and northeast. The remaining quarter is the Withlacoochee River watershed which drains west. The northern portion of the Pine Island Recharge includes an area identified as the Groveland Karst Region; it is sandhill karst with solution basins, a region of the most active collapsed sinkhole development, and the principle recharge area of the Floridan aquifer. Most of the area (98 percent) meets the Florida Forever Evaluation's Measures for Aquifer Recharge.

Eight archaeological sites are listed in the Florida Master Site files within this area, but its extensive lakes and wetlands suggest a moderate to high potential for significant archaeological and historical sites that have not been discovered yet.

Few rare species have been documented within this area (see FNAI Elements). Based on habitat, there is potential for all 36 of the rare species identified for the original Green Swamp project to occur here.

About 94 percent of the area meets the Florida Forever Evaluation's Measure for Ecological Greenways and 10 percent is within a FWC Strategic Habitat Conservation Area.

From an urban planning perspective, the Pine Island Recharge has a moderate potential for being developed or subdivided or losing significant natural attributes or open spaces. It is a short drive from Clermont and the Disney World complex. Development potential is higher on the north side near Groveland and Clermont. It is located within an Area of Critical State Concern. The current and future land uses are mostly agricultural and low-density residential, but a portion of the area just south of Grove land is designated for one dwelling unit per five acres.



Management Policy Statement

The Green Swamp lands acquired through alternatives to fee-simple should be managed to accomplish the following: conserve and protect lands within areas of critical state concern; conserve and protect significant habitat for native species or endangered/threatened species; and conserve, protect, manage, or restore important ecosystems, landscapes and forests in a manner that enhances or protects significant surface water, coastal, recreational, timber, fish or wildlife resources.

Management Prospectus Qualifications for state designation

The Green Swamp-Pine Island Recharge Area land is essential to a clean, adequate water supply for Central Florida.

Conditions affecting intensity of management

The intensity of management will be decided in the negotiation of the agreement or easement.

Management implementation, Public access, Site security and Protection of infrastructure

The landowner will provide security and infrastructure protection.

Revenue-generating potential

There is no revenue-generating potential for the Pine Island Recharge area.

Management costs and sources of revenue

OES is responsible for periodic monitoring of land use agreements and conservation easements.

Withlacoochee River Headwaters

General Description

The Withlacoochee River Headwaters has 103,458 acres, composed of 13 distinct natural communities and four other landcover types. The natural communities include pine flatwoods, scrub, and sandhill, which are underrepresented in state conservation holdings. About 61 percent of the area is in natural condition, while 39 percent is disturbed (most in improved and semi-improved pasture and smaller acreages in ruderal and pine plantation). Geographically, this area is located between SR 50 on the north and US 98 on the south. It is close to Lakeland and Clermont. Its northwestern boundary is contiguous with the Withlacoochee State Forest and SWFWMD-managed Green Swamp land. To the east and the south are the other three sections of the Green Swamp Florida Forever project. The western two-thirds is characterized by low, rolling limestone plains. The land surface of the remaining third is comprised of sandhills and karst solution features with the Green Swamp region in the southeast being lower and closer to the water table. It is also a moderate distance to the Disney World complex.

Hydrographically, most of this portion of the overall Green Swamp Florida Forever is within the Withlacoochee River watershed. A small portion along the southern boundary is within the Hillsborough River watershed to the southwest. The Withlacoochee River bisects the area along the Lake-Polk County



line; the river westward forms a significant portion of the western boundary. Elevations range from knolls greater than 140 feet above MSL to less than 100 feet above MSL, but most of the area is below 115 feet MSL. Six rare plants and 17 rare animals are documented as occurring within this portion of the Green Swamp project, mostly associated with existing conservation lands in the southwestern part. (See FNAI Elements.)

From an urban planning perspective, the Withlacoochee River Headwaters has a moderate potential for being developed, subdivided, or losing significant natural attributes or open spaces. Development potential is higher on the south end, in the vicinity of Lakeland and Polk City. The Withlacoochee River Headwaters is within an Area of Critical State Concern.

Management Policy Statement

The Withlacoochee River Headwaters area will be managed to accomplish the following: conserve and protect lands within areas of critical state concern; conserve and protect significant habitat for native species or endangered or threatened species; provide areas, including trails, for natural resource-based recreation; and conserve, protect, manage, or restore important ecosystems, landscapes, and forests in a manner that enhances or protects significant surface water, coastal, recreational, timber, fish and wildlife resources that local or state regulatory programs cannot adequately protect.

Management Prospectus Qualifications for state designation

The Withlacoochee River Headwaters has the size and wildlife resources to qualify as a WMA. Its mosaic of land uses would help protect the Floridan Aquifer and the headwaters of several rivers that start in this region. It would preserve a large area for wildlife and provide areas for public recreation in a fast-growing region between Tampa and Orlando.

Conditions affecting intensity of management

For FWC-managed lands, environmentally sensitive areas, such as erosion-prone sites, important habitats, and outstanding natural areas and wetlands, if acquired, would be identified, appropriately managed, and protected.

The Green Swamp-Withlacoochee River Headwaters includes natural areas requiring application of resource management methods, such as prescribed fire, where appropriate. Other areas may require restoring ground cover, controlling invasive species, and reforesting. Such resource management actions may be necessary to accomplish restoration to attain a specific-desired, future condition. This is especially important for conservation of habitats and populations of imperiled or rare species. Due to the importance of landscape ecology, land use changes in the vicinity of a managed area may affect attainment of resource conservation goals for the area and the overall effectiveness of necessary resource management goals. Also, development of facilities is to be kept to the minimum level necessary to assure protection of the resources and compatible recreational experiences. To the extent



possible, any such development would be confined to areas of previous disturbance. DRP's management costs will increase when parcels near Colt Creek State Park are acquired and will increase over time as work shifts from protection and restoration to broader public use. FFS restoration efforts will focus on introducing prescribed fire; removing offsite pine species and exotic species; restoring native groundcovers and possibly wetlands.

Management implementation, Public access, Site security and Protection of infrastructure

If acquired, a management plan will be developed by FWC describing the management goals and objectives necessary for resource management. The management plans will establish the current and future roles of cooperating entities including governmental agencies, non-governmental organizations, and other stakeholders. Long-range plans would stress ecosystem management and the protection and management of rare and imperiled species. If acquired, quantified vegetation management objectives may be developed to guide management for actively managed natural communities. FWC would assess the condition of wildlife resources and provide planning support to enhance rare and imperiled species management and recovery of imperiled species within the land acquired within the Withlacoochee River Headwaters and managed by FWC. Prescribed fire and other resource management activities will maintain and restore natural communities and vegetation types to benefit native wildlife resources Programs providing multiple fish and wildlife based public outdoor recreational uses will be considered for implementation if land within the Withlacoochee Headwaters is acquired. These potential public outdoor fish- and-wildlife-based recreational uses will enhance public understanding of the region while providing recreation. Essential roads will be maintained to provide all weather public access and management operations. Unnecessary roads, fire lanes, and hydrological disturbances will be abandoned or restored as practical. Infrastructure development will be appropriate to allow public access and provide facilities, security, and management of the property. Archaeological and historic sites would be managed in coordination with DHR. DRP will develop short-term management goals of security, protection of resources, and resource inventory for its parcels. FFS proposes to manage parcels within the optimum boundary of the Withlacoochee State Forest as a state forest. Burn goals of FFS will be to eventually establish an all- season prescribed burning program.

Revenue-generating potential

Revenue from FWC-managed conservation lands, such as an acquisition within the Withlacoochee River Headwaters for a WMA, could include selling permits and recreation fees, and ecotourism activities, if such activities could be economically developed. Area regulations would be developed to identify the necessary and required permits, fees, and regulations. The long-term value of ecosystem services to local and regional land and water resources, and to human health, are thought to be significant. DRP expects no significant revenue immediately after acquisition. Future revenue will depend on the nature and extent of public use.



Cooperators in management activities

FWC will cooperate with other governmental agencies including SWFWMD; SJRWMD; FFS; and Lake, Pasco and Polk Counties in management of the property. DRP plans to cooperate with state agencies in their management.

Management costs and sources of revenue*

Below is FWC's estimate of costs to operate/manage the area yet to be acquired within the Green Swamp- Withlacoochee River Headwaters that is outside the Colt Creek State Park and the Withlacoochee State Forest optimal boundaries. Costs listed below are projected estimates necessary to fully implement management activities within the area and reflect an estimate of the potential annual operating budget.

Management Cost Summary

FFS Costs	In US Dollars (2011)
Salary (4 FTE positions)	\$132,141
Expense	\$315,000
Operation Capital Outlay	\$188,600
FFS Projections	\$635,741
Annagement Prospectus as originally submitted	

Source: Management Prospectus as originally submitted

Management Cost Summary

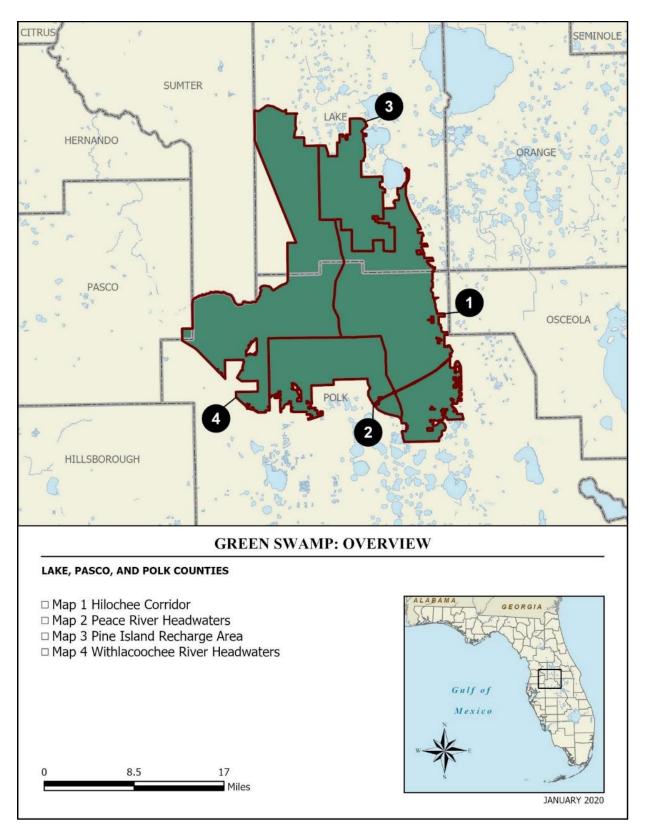
FDEP/DRP	In US Dollars (2011)
Salary (1 FTE position)	\$33,000
Expense	\$10,000
Operating Capital Outlay	\$25,000
Outsourcing	\$0
FDEP/DRP Projections	\$68,000

Source: Management Prospectus as originally submitted

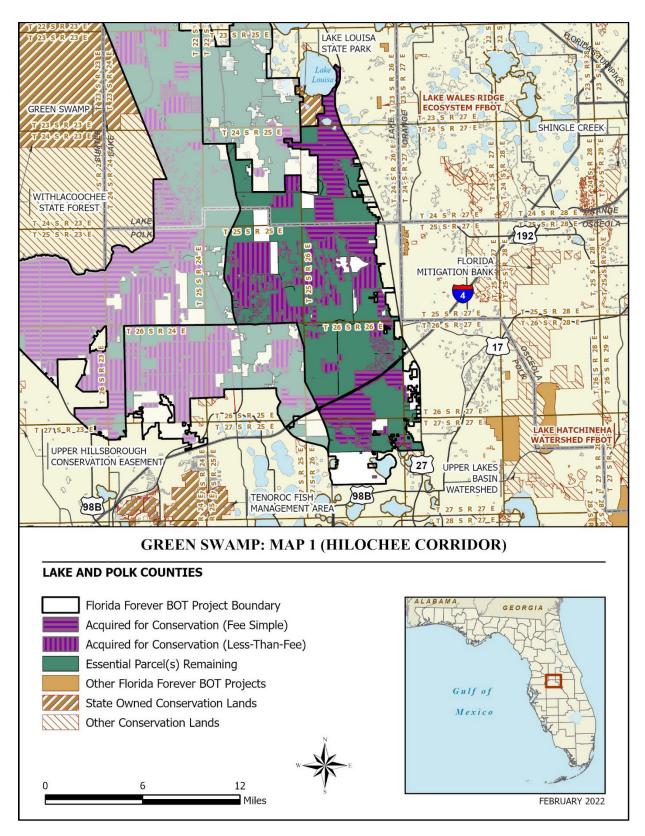
FWC Projections in US Dollars (2011) **Resource Management Exotic Species Control** \$37,186 Prescribed Burning \$111,221 \$1,794 **Cultural Resource Management Timber Management** \$7,176 Hydrological Manager \$193,739 Other \$805,332 **Resource Management Subtotal** \$1,156,447 Administration **General Administration** \$10,636 Administration Subtotal \$10,636 Support \$103,285 Land Management Planning \$20,133 Land Management Reviews Training/Staff Development \$5,339 Vehicle Purchase \$68,433 Vehicle Operation/Maintenance \$53,816 Other \$13,274 Support Subtotal \$284,281 Capital Improvements New Facility Construction \$89,694 **Facility Maintenance** \$311,312 **Capital Improvements Subtotal** \$401,006 Visitor Services/Recreation Info/Education/Operations \$60,032 \$60,032

Management Cost Summary

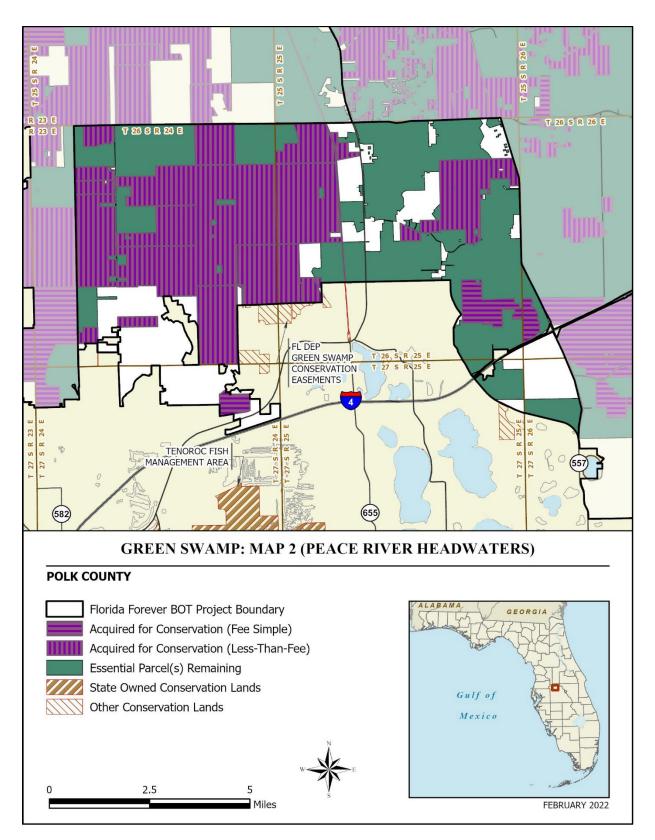
Visitor Services/Recreation Subtotal\$60,032Law EnforcementResources Protection\$40,501Law Enforcement Subtotal\$40,501FWC Projections Total\$1,932,90Source: Management Prospectus as originally submitted



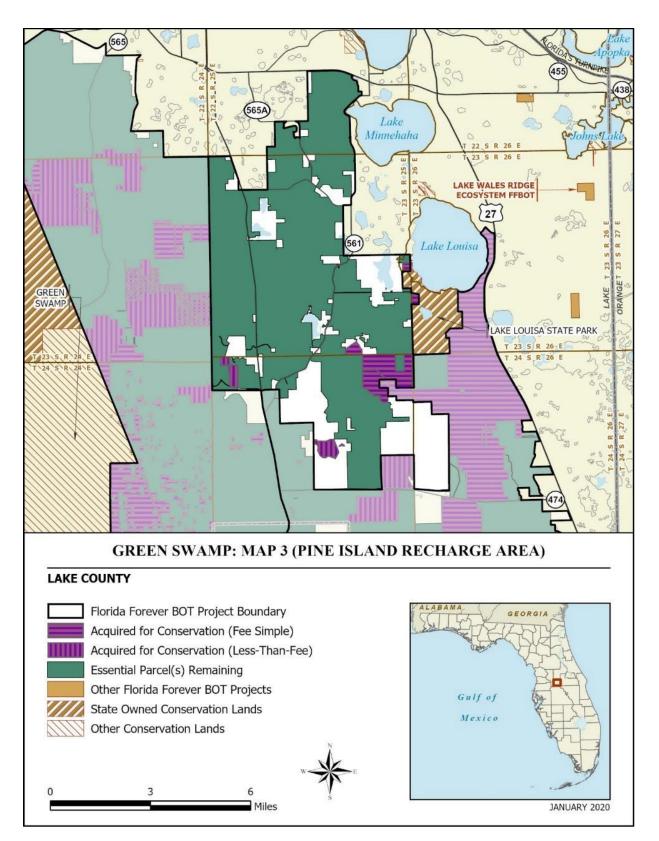
Map 1: FNAI, January 2020



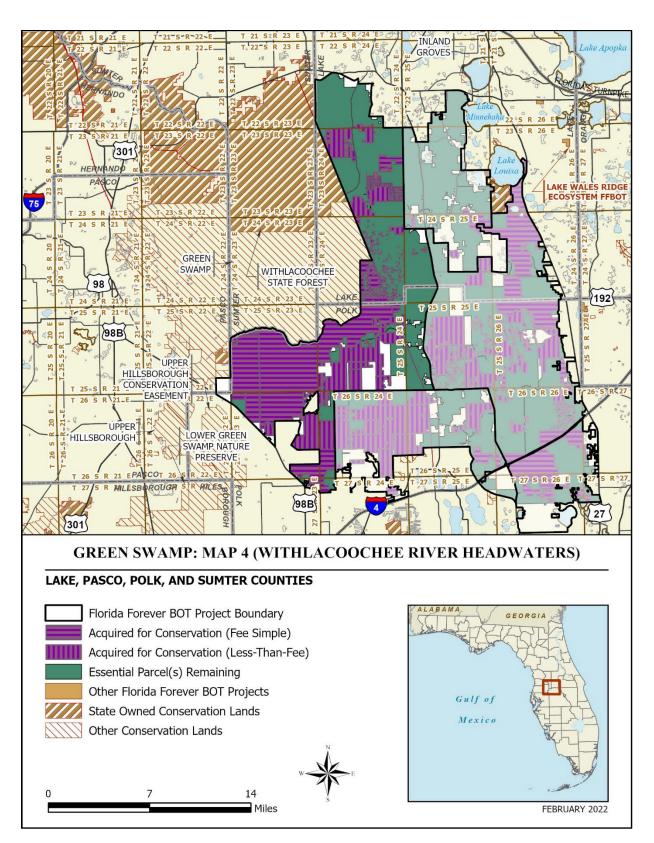
Map 2: FNAI, February 2022



Map 3: FNAI, February 2022



Map 4: FNAI, January 2020



Map 5: FNAI, February 2022