OKALOACOOCHEE SLOUGH
STATE FOREST
2025 LAND MANAGEMENT PLAN

EXHIBITS

Exhibit A

Ten-Year Management Accomplishment Summary

Okaloacoochee Slough State Forest

10-Year Accomplishments

Site Preparation	Number	Acres
Chop Single Pass	1,425	N/A
Disk/Raking	N/A	181
Mowing	N/A	555
Other	N/A	6

Planting	Number	Acres
Slash Containerized	32500	525
Longleaf Bareroot	32500	525
Other (Cypress)	4,000	10

Seedling Survival Checks	Number	Acres
Checks	N/A	535

Timber Stand Improvement	Number	Acres
Herbicide	N/A	329
Mowing	N/A	362
Chopping	N/A	430

Timber Sales	Number	Acres
Marking	N/A	2
Cruising	N/A	236

Timber Inventory	Number	Acres
Inventory	N/A	13,765
Plots	N/A	428

Invasive Species Control	Number	Acres
Brazilian Pepper	N/A	8,309.21
Caesar Weed	N/A	5,100.34
Camphor Tree	N/A	0.5
Cogon Grass	N/A	8,944.26
Japanese Climbing Fern	N/A	2,997.86
Jaragua	N/A	50.5
Melaleuca	N/A	5,776.98
Other	N/A	7,121.90

Primrose Willow	N/A	83.55
Scleria	N/A	1,137.80
Torpedo Grass	N/A	4,057.83

Fire	Number	Acres
Wildfire	10	285
Prescribed Burning	N/A	27,130

Recreation	Number	Acres
Day Use Estimated Forest Visitors	1,058,926	N/A
Overnight Primitive Camping	15,860	N/A
Annual Entrance Pass	27	N/A
Commercial Vendor Permits	2	N/A

Roadwork	Number	Miles
Roads Constructed	N/A	9
Roads Graded	N/A	581

Boundary Maintenance	Number	Miles
Maintenance / Marking	N/A	150

I&E Activities	Number	Acres
Programs / Tours	40	N/A
Radio / TV Articles	39	N/A
Education / Research	36	N/A

Other Activities	Number	Acres	Miles
Road Mowed	N/A	1,181	N/A
Site Maintenance - Mowing	N/A	2,231	N/A
Trails Maintained	N/A	N/A	187
Field Mowed	N/A	19	N/A
Firelines Maintained	N/A	N/A	870.5
Archaeological Sites Recorded	6	N/A	N/A
Archaeological Sites Monitored	6	N/A	N/A
Hogs Trapped	10	N/A	N/A

Exhibit B

Boundary and Road Map

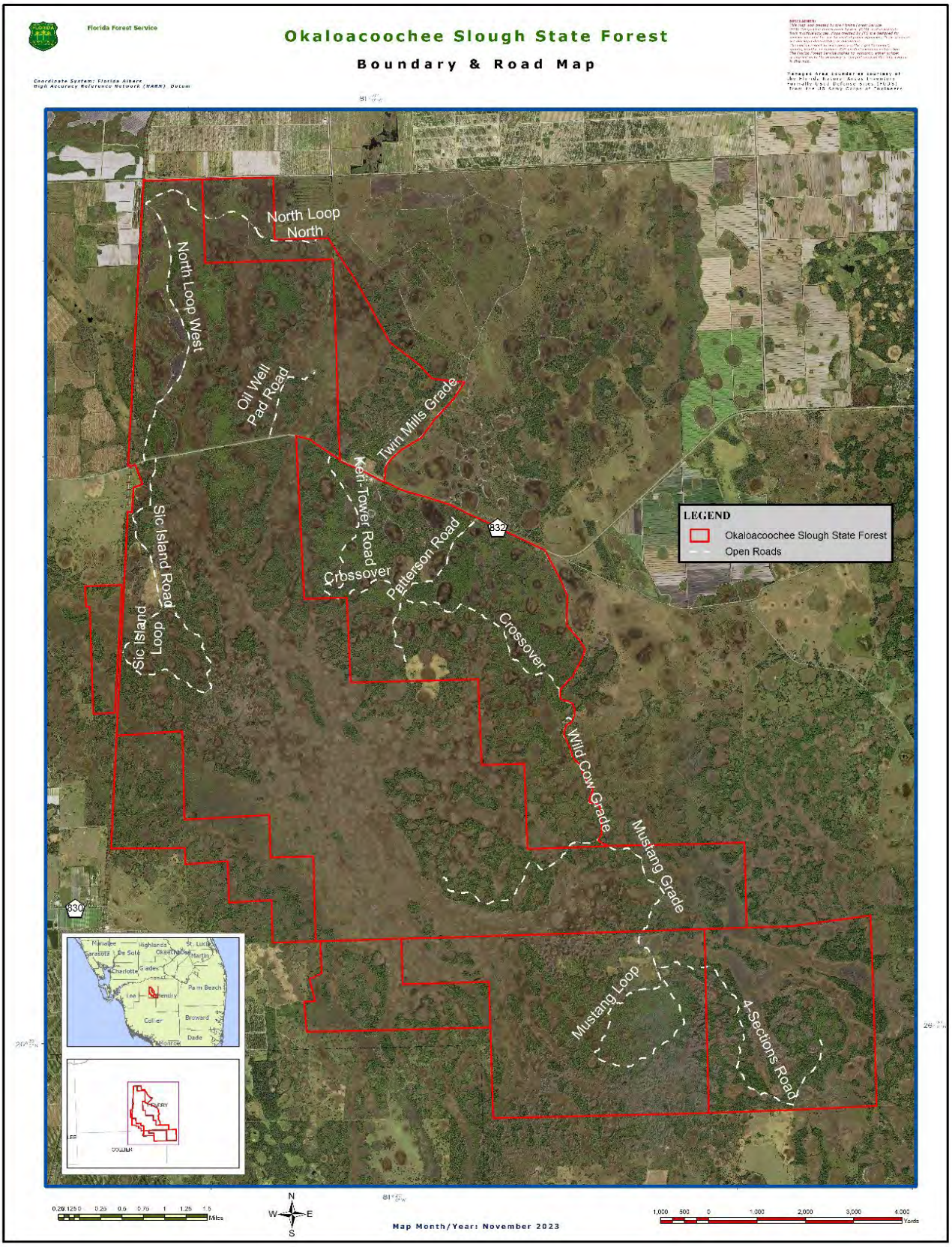

Florida Forest Service
Okaloacoochee Slough State Forest
Boundary & Road Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
North Loop North
North Loop West
Oil Well Pad Road
Twin Mills Grade
Kelt-Tower Road
Crossover
Patterson Road
Crossover
Sic Island Road
Sic Island Loop
Wild Cow Grade
Mustang Grade
Mustang Loop
4-Sections Road
832
830
LEGEND
Okaloacoochee Slough State Forest
Open Roads
Miles
Yards
N
W
E
S
Map Month/Year: November 2023

Exhibit C

Optimal Management Boundary Map

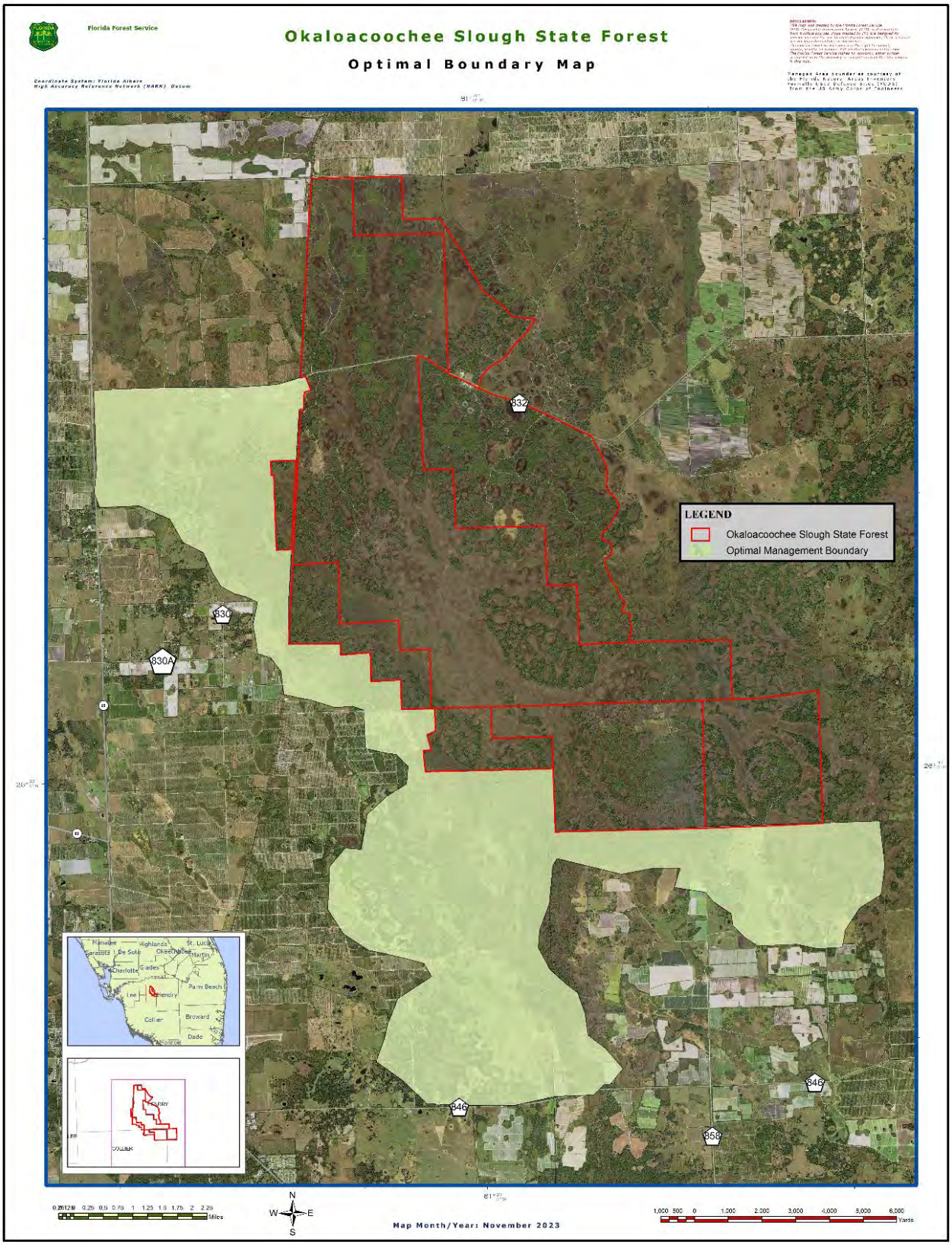

Florida Forest Service
Okaloacoochee Slough State Forest
Optimal Boundary Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
LEGEND
Okaloacoochee Slough State Forest
Optimal Management Boundary
832
830
830A
846
846
856
Map Month/Year: November 2023

Exhibit D

Facilities, Recreation, and Improvements Map

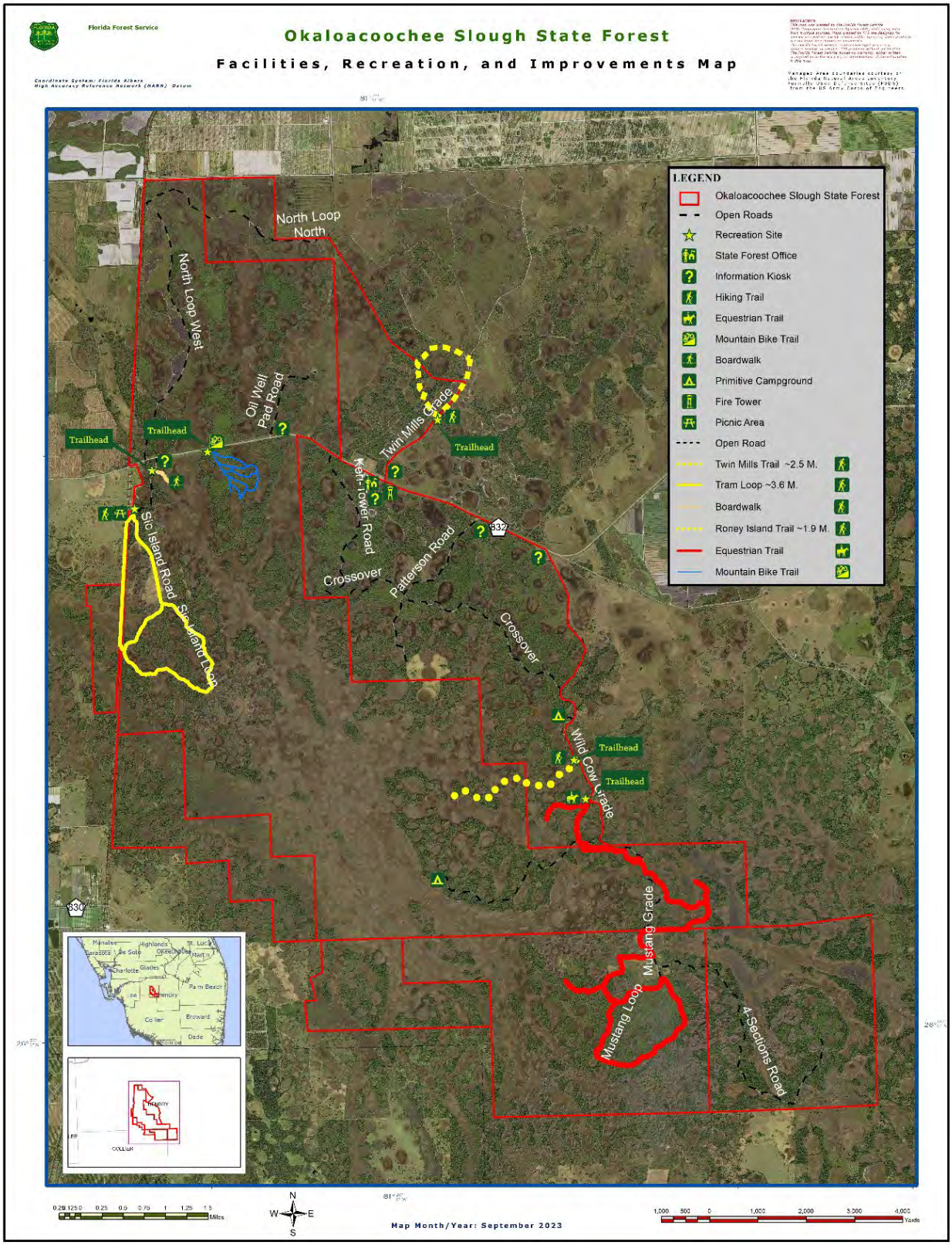

Florida Forest Service
Okaloacoochee Slough State Forest
Facilities, Recreation, and Improvements Map
LEGEND
Okaloacoochee Slough State Forest
Open Roads
Recreation Site
State Forest Office
Information Kiosk
Hiking Trail
Equestrian Trail
Mountain Bike Trail
Boardwalk
Primitive Campground
Fire Tower
Picnic Area
Open Road
Twin Mills Trail ~2.5 M.
Tram Loop ~3.6 M.
Boardwalk
Roney Island Trail ~1.9 M.
Equestrian Trail
Mountain Bike Trail
North Loop North
North Loop West
Oil Well Pad Road
Twin Mills Grade
Trailhead
Trailhead
Trailhead
Kelt Tower Road
Crossover
Patterson Road
Crossover
Sic Island Road
Sic Island Loop
Wild Cow Grade
Trailhead
Trailhead
Mustang Grade
Mustang Loop
4 Sections Road
837
837
Map Month/Year: September 2023

Exhibit E

Tract and Acreage Map

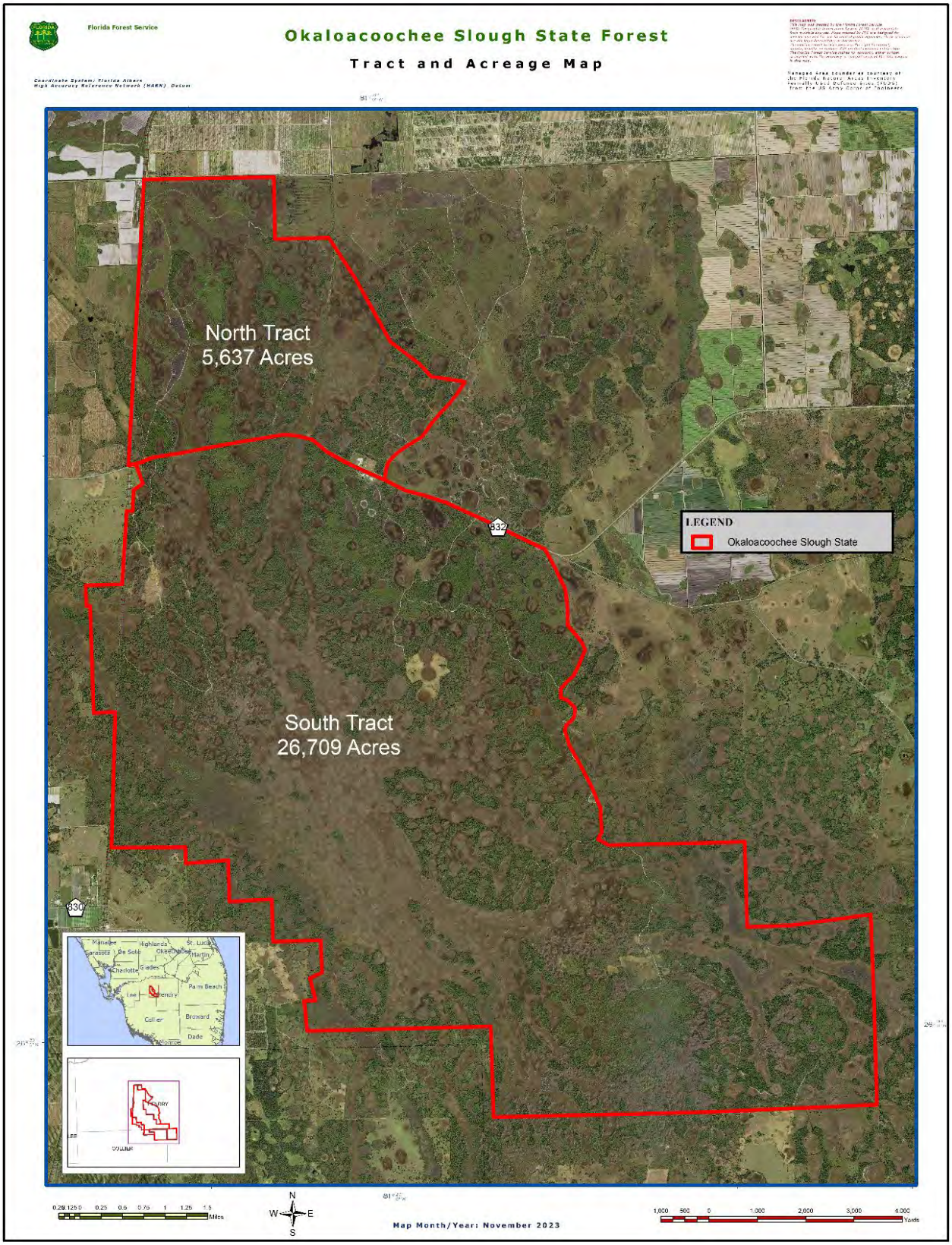

Florida Forest Service
Okaloacoochee Slough State Forest
Tract and Acreage Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
North Tract
5,637 Acres
South Tract
26,709 Acres
LEGEND
Okaloacoochee Slough State
832
830
Miles
Map Month/Year: November 2023
Yards

Exhibit F

Proximity
to
Significant Managed Lands Map

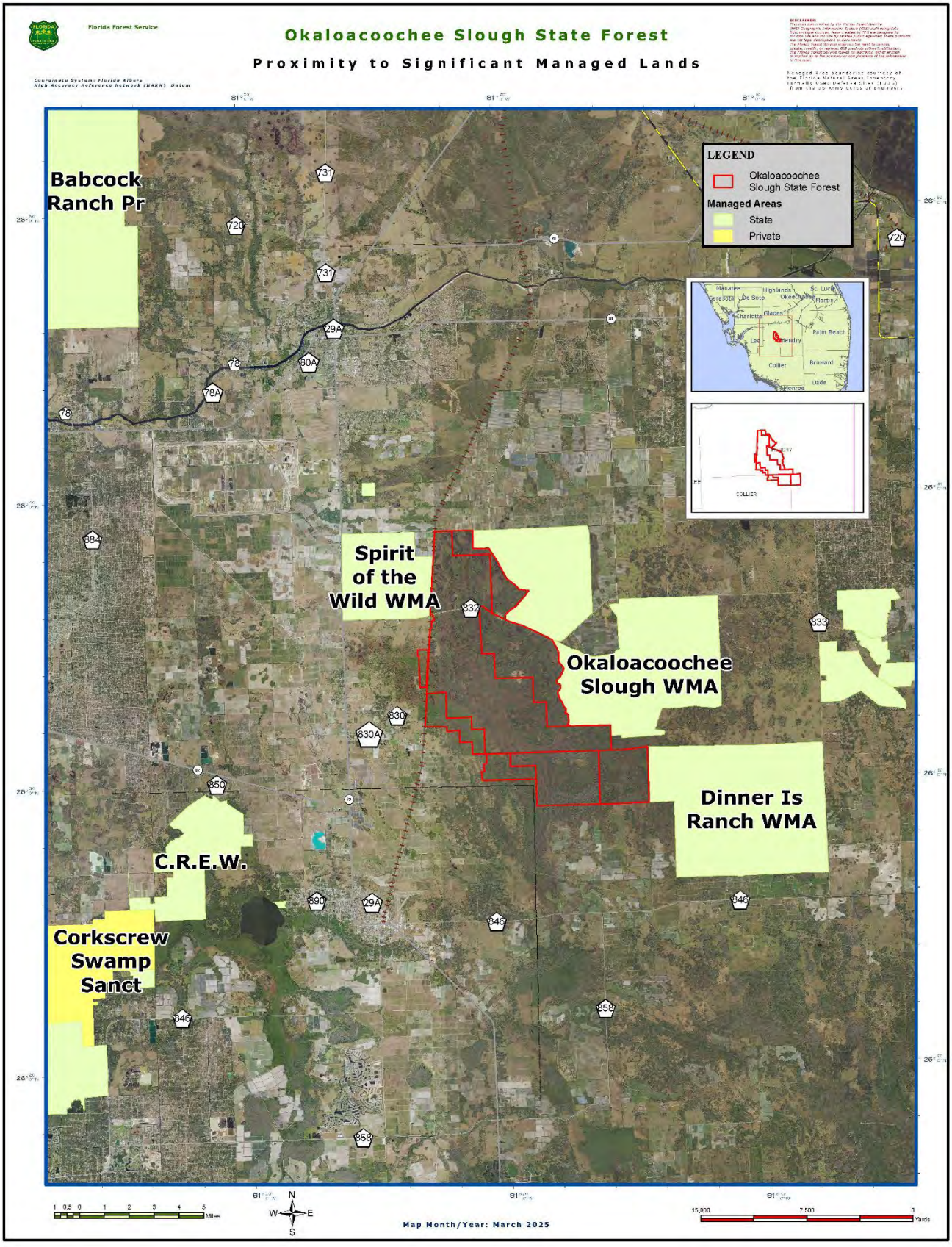

Florida Forest Service
Okaloacoochee Slough State Forest
Proximity to Significant Managed Lands
Babcock Ranch Pr
Spirit of the Wild WMA
Okaloacoochee Slough WMA
Dinner Is Ranch WMA
C.R.E.W.
Corkscrew Swamp Sanct
LEGEND
Okaloacoochee Slough State Forest
Managed Areas
State
Private
Miles
Yards
Map Month/Year: March 2025

Exhibit G

Division of Historical Resources

Report on Archaeological
and
Historical Sites

This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at CompliancePermits@dos.MyFlorida.com for project review information.

June 14, 2023

Emily Marsh
Land Management Planner
Florida Forest Service
Florida Department of Agriculture and Consumer Services

In response to your request on June 14, 2023, the Florida Master Site File lists four archeological sites and two resource groups recorded for the Okaloacoochee Slough State Forest's managed area.

This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.

- **Because vandalism and looting are common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.**
- **While many of our records document historically significant resources, the documentation of a resource at the Florida Master Site File does not necessarily mean the resource is historically significant.**

#

- **Federal, state and local laws require formal environmental review for most projects. This search DOES NOT constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at** CompliancePermits@dos.MyFlorida.com

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

Eman M. Vovsi, Ph.D.
Florida Master Site File
Eman.Vovsi@DOS.MyFlorida.com

Florida Master Site File

Created: 6/14/2023

AR=4
SS=0
CM=0
RG=2
BR=0
Total=6

Cultural Resource Roster

SiteID	Type	Site Name	Address	Additional Info	SHPO Eval	NR Status
CR00885	RG	Corduroy Road, Okaloacoochee Slough	Immokalee	Linear Resource		
HN00112	AR	Gumbo Limbo Hammock	Immokalee			
HN00113	AR	Lambers	Immokalee			
HN00152	AR	Dipping Trough, Okaloacooche Slough	Felda			
HN00264	AR	OK SAW MILL	Immokalee			
HN00361	RG	Goodno Drainage Canal	LaBelle	Linear Resource	Not Eligible	

Exhibit H

Management Procedures
for
Archaeological and Historical Sites and Properties
on
State Owned or Controlled Lands

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties
(revised June 2021)

These procedures apply to state agencies, local governments, and non-profits that manage state-owned properties.

A. Historic Property Definition

Historic properties include archaeological sites and historic structures as well as other types of resources. Chapter 267, Florida Statutes states: " *'Historic property' or 'historic resource' means any prehistoric district, site, building, object, or other real or personal property of historical, architectural, or archaeological value, and folklife resources. These properties or resources may include, but are not limited to, monuments, memorials, Indian habitations, ceremonial sites, abandoned settlements, sunken or abandoned ships, engineering works, treasure trove, artifacts, or other objects with intrinsic historical or archaeological value, or any part thereof, relating to the history, government, and culture of the state."*

B. Agency Responsibilities

Per Chapter 267, *F.S.* and state policy related to historic properties, state agencies of the executive branch must provide the Division of Historical Resources (Division) the opportunity to comment on any undertakings with the potential to affect historic properties that are listed, or eligible for listing, in the National Register of Historic Places, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the undertaking. (267.061(2)(a))

State agencies must consult with the Division when, as a result of state action or assistance, a historic property will be demolished or substantially altered in a way that will adversely affect the property. State agencies must take timely steps to consider feasible and prudent alternatives to the adverse effect. If no feasible or prudent alternatives exist, the state agency must take timely steps to avoid or mitigate the adverse effect. (267.061(2)(b))

State agencies must consult with Division to establish a program to locate, inventory and evaluate all historic properties under ownership or controlled by the agency. (267.061(2)(c))

State agencies are responsible for preserving historic properties under their control. State agencies are directed to use historic properties available to the agency when that use is consistent with the historic property and the agency's mission. State agencies are also directed to pursue preservation of historic properties to support their continued use. (267.061(2)(d))

C. Statutory Authority

The full text of Chapter 267, F.S. and additional information related to the treatment of historic properties is available at:

https://dos.myflorida.com/historical/preservation/compliance-and-review/regulations-guidelines/

D. Management Implementation

Although the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual and do not include detailed project information. Specific information for individual projects must be submitted to the Division for review and comment.

Managers of state lands must coordinate any land clearing or ground disturbing activities with the Division to allow for review and comment on the proposed project. The Division's recommendations may include, but are not limited to: approval of the project as submitted, recommendation for a cultural resource assessment survey by a qualified professional archaeologist, and modifications to the proposed project to avoid or mitigate potential adverse effects.

Projects such as additions or alterations to historic structures as well as new construction must also be submitted to the Division for review. Projects involving structures fifty years of age or older must be submitted to the Division for a significance determination. In rare cases, structures under fifty years of age may be deemed historically significant.

Adverse effects to historic properties must be avoided when possible, and if avoidance is not possible, additional consultation with the Division is necessary to develop a mitigation plan. Furthermore, managers of state property should make preparations for locating and evaluating historic properties, both archaeological sites and historic structures.

E. Archaeological Resource Management (ARM) Training

The ARM Training Course introduces state land managers to the nature of archaeological resources, Florida archaeology, and the role of the Division in managing state-owned archaeological resources. Participants gain a better understanding of the requirements of state and federal laws with regard to protecting and managing archaeological sites on state managed lands. Participants also receive a certificate recognizing their ability to conduct limited monitoring activities in accordance with the Division's Review Procedure, thereby reducing the time and money spent to comply with state regulations. Additional information regarding the ARM Training Course is available at:

https://dos.myflorida.com/historical/archaeology/education/arm-training-courses/

F. Matrix for Ground Disturbance on State Lands

The matrix is a tool designed to help streamline the Division's Review Procedure. The matrix allows state land managers to make decisions about balancing ground disturbance and stewardship of historic resources. The matrix establishes types of undertakings that are either minor or major disturbances and then guides the land manager to consult the Division, conduct ARM-trained project monitoring, or proceed with the project. Additional information regarding the matrix is available at:

https://dos.myflorida.com/historical/archaeology/education/dhr-matrix-for-ground-disturbance-on-state-lands/

G. Human Remains Treatment

Chapter 872, *Florida Statutes* makes it illegal to willfully and knowingly disturb human remains. In the event human remains are discovered, cease all activity in the area that may disturb the remains. Leave the bones and nearby items in place. Immediately notify law enforcement or the local district medical examiner of the discovery and follow the provisions of Chapter 872, FS. Additional information regarding the treatment of human remains and cemeteries is available at:

https://dos.myflorida.com/historical/archaeology/human-remains/
https://dos.myflorida.com/historical/archaeology/human-remains/abandoned-cemeteries/what-are-the-applicable-laws-and-regulations/

II. Division of Historical Resources Review Procedure

Projects on state owned or controlled properties may submit projects to the Division for review using the streamlined State Lands Consultation Form. The form provides instructions to submit projects for review and outlines the necessary information for the Division to complete the review process. The State Lands Consultation Form and additional information about the Division's review process is available at:

https://dos.myflorida.com/historical/preservation/compliance-and-review/state-lands-review/

* * *

Questions relating to the treatment of archaeological and historic resources on state lands should be directed to:

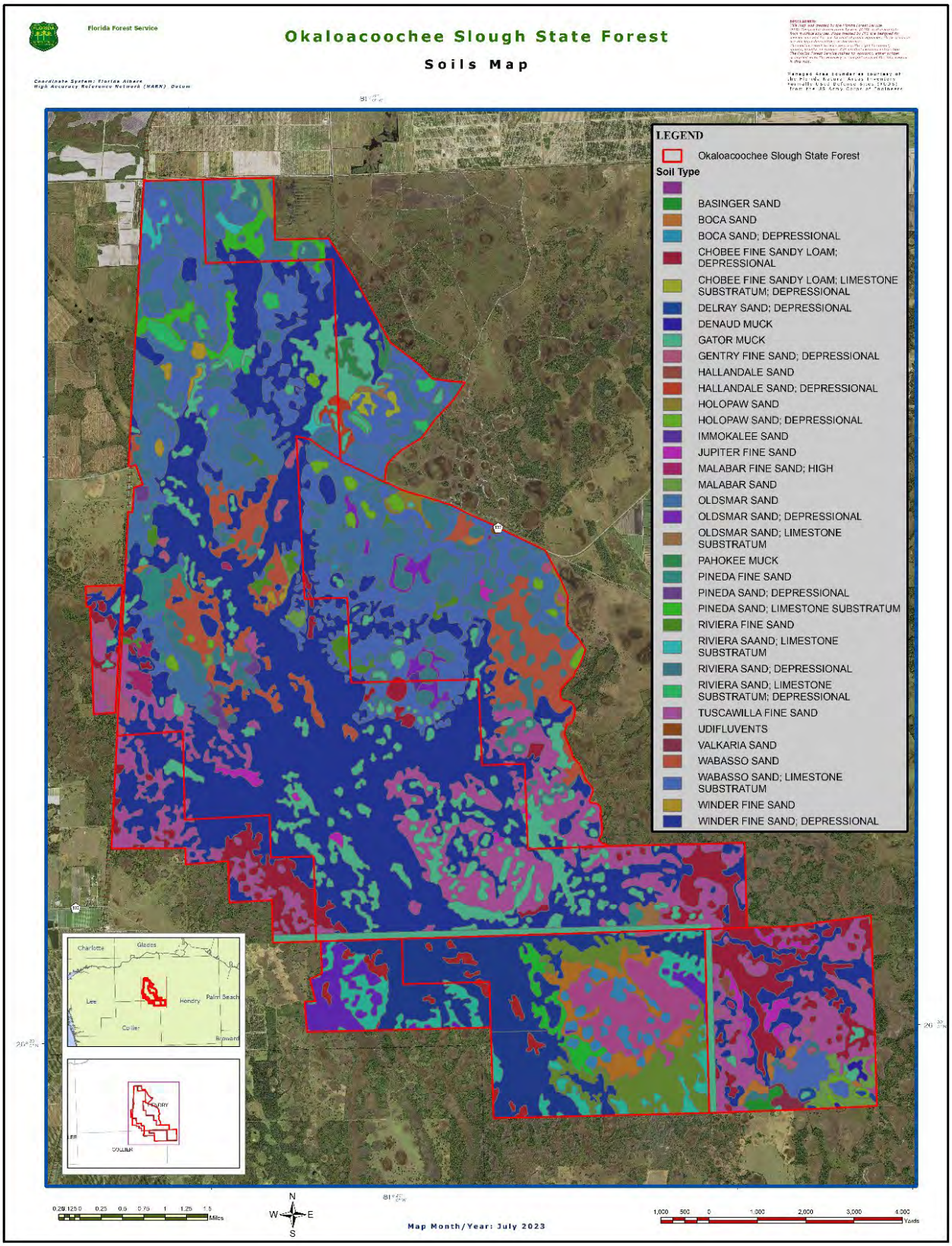
Compliance and Review Section
Bureau of Historic Preservation
Division of Historical Resources
R. A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250

StateLandsCompliance@dos.myflorida.com

Phone: (850) 245-6333
Toll Free: (800) 847-7278
Fax: (850) 245-6435

Exhibit I

Soil Types Map
and
Descriptions


Florida Forest Service
Okaloacoochee Slough State Forest
Soils Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
LEGEND
Okaloacoochee Slough State Forest
Soil Type
BASINGER SAND
BOCA SAND
BOCA SAND; DEPRESSIONAL
CHOBEE FINE SANDY LOAM; DEPRESSIONAL
CHOBEE FINE SANDY LOAM; LIMESTONE SUBSTRATUM; DEPRESSIONAL
DELRAY SAND; DEPRESSIONAL
DENAUD MUCK
GATOR MUCK
GENTRY FINE SAND; DEPRESSIONAL
HALLANDALE SAND
HALLANDALE SAND; DEPRESSIONAL
HOLOPAW SAND
HOLOPAW SAND; DEPRESSIONAL
IMMOKALEE SAND
JUPITER FINE SAND
MALABAR FINE SAND; HIGH
MALABAR SAND
OLDSMAR SAND
OLDSMAR SAND; DEPRESSIONAL
OLDSMAR SAND; LIMESTONE SUBSTRATUM
PAHOKEE MUCK
PINEDA FINE SAND
PINEDA SAND; DEPRESSIONAL
PINEDA SAND; LIMESTONE SUBSTRATUM
RIVIERA FINE SAND
RIVIERA SAAND; LIMESTONE SUBSTRATUM
RIVIERA SAND; DEPRESSIONAL
RIVIERA SAND; LIMESTONE SUBSTRATUM; DEPRESSIONAL
TUSCAWILLA FINE SAND
UDIFLUVENTS
VALKARIA SAND
WABASSO SAND
WABASSO SAND; LIMESTONE SUBSTRATUM
WINDER FINE SAND
WINDER FINE SAND; DEPRESSIONAL
Charlotte
Glades
Lee
Hendry
Palm Beach
Collier
Broward
0.25 0.125 0 0.25 0.5 0.75 1 1.25 1.5
Miles
N
W
E
S
1,000 500 0 1,000 2,000 3,000 4,000
Yards
Map Month/Year: July 2023

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Collier County Area, Florida

Map Unit: 16—Oldsmar fine sand, 0 to 2 percent slopes

Component: Oldsmar (85%)

The Oldsmar component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Malabar (5%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Basinger (3%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Nettles (3%)

Generated brief soil descriptions are created for major soil components. The Nettles soil is a minor component.

Component: Cypress Lake (2%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Pineda (2%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Map Unit: 22—Chobee, Winder, Gator soils, frequently ponded, 0 to 1 percent slopes

Component: Chobee (31%)

The Chobee component makes up 31 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Gator (28%)

The Gator component makes up 28 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material over sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Winder (26%)

The Winder component makes up 26 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pineda (8%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Riviera (7%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Map Unit: 23—Holopaw-Okeelanta, frequently ponded, assocaition, 0 to 1 percent slopes

Component: Holopaw, limestone substratum (48%)

The Holopaw, limestone substratum component makes up 48 percent of the map unit. Slopes are 0 to 1 percent. This component is on marine terraces on coastal plains, depressions. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 50 to 79 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Okeelanta (42%)

The Okeelanta component makes up 42 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material over sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Gator (5%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Basinger (5%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Map Unit: 25—Cypress Lake-Riviera-Copeland fine sands, frequently ponded, association, 0 to 1 perent slopes

Component: Cypress Lake (31%)

The Cypress Lake component makes up 31 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 49 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Riviera, limestone substratum (30%)

The Riviera, limestone substratum component makes up 30 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 31 to 80 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Copeland (29%)

The Copeland component makes up 29 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October, November. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 10 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Dania (3%)

Generated brief soil descriptions are created for major soil components. The Dania soil is a minor component.

Component: Basinger (3%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Gator (2%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Brynwood (2%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Map Unit: 28—Pineda-Riviera fine sands association, 0 to 2 percent slopes

Component: Pineda (45%)

The Pineda component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Riviera (40%)

The Riviera component makes up 40 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Malabar (5%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Cypress Lake (3%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Pinellas (3%)

Generated brief soil descriptions are created for major soil components. The Pinellas soil is a minor component.

Component: Oldsmar (3%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Basinger (1%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Map Unit: 29—Wabasso fine sand, 0 to 2 percent slopes

Component: Wabasso (85%)

The Wabasso component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Myakka (4%)

Generated brief soil descriptions are created for major soil components. The Myakka soil is a minor component.

Component: Riviera (4%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Component: Basinger (3%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Malabar (2%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Felda (1%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Component: Pinellas (1%)

Generated brief soil descriptions are created for major soil components. The Pinellas soil is a minor component.

Map Unit: 31—Hilolo, Jupiter, Jenada fine sands and 0 to 2 percent slopes

Component: Hilolo, limestone substratum (31%)

The Hilolo, limestone substratum component makes up 31 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces, coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 30 to 80 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Jupiter (30%)

The Jupiter component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 5 to 18 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Jenada (29%)

The Jenada component makes up 29 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 14 to 46 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pineda (5%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Holopaw (5%)

Generated brief soil descriptions are created for major soil components. The Holopaw soil is a minor component.

Map Unit: 37—Tuscawilla fine sand, 0 to 2 percent slopes

Component: Tuscawilla (90%)

The Tuscawilla component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 7 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Wabasso (10%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Map Unit: 43—Winder, Riviera, limestone substratum, and Chobee soils, frequently ponded, 0 to 1 percent slopes

Component: Winder (33%)

The Winder component makes up 33 percent of the map unit. Slopes are 0 to 1 percent. This component is on marshes on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Riviera, limestone substratum (30%)

The Riviera, limestone substratum component makes up 30 percent of the map unit. Slopes are 0 to 1 percent. This component is on marshes on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 31 to 80 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Chobee (27%)

The Chobee component makes up 27 percent of the map unit. Slopes are 0 to 1 percent. This component is on marshes on marine terraces on coastal plains. The parent material consists of loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Boca (5%)

Generated brief soil descriptions are created for major soil components. The Boca soil is a minor component.

Component: Gator (5%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Hendry County, Florida

Map Unit: 1—Cypress Lake sand, 0 to 2 percent slopes

Component: Cypress Lake (85%)

The Cypress Lake component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 13 to 58 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pineda (4%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Riviera (4%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Component: Brynwood (4%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Component: Wabasso (3%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Map Unit: 2—Pineda sand, limestone substratum

Component: Pineda, limestone substratum (80%)

The Pineda, limestone substratum component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on drainageways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer, bedrock, lithic, is 40 to 80 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during June, July, August, September. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pineda (5%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Malabar (5%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Riviera (5%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Component: Boca (5%)

Generated brief soil descriptions are created for major soil components. The Boca soil is a minor component.

Map Unit: 4—Oldsmar sand, 0 to 2 percent slopes

Component: Oldsmar (85%)

The Oldsmar component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Immokalee (6%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: Basinger (3%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Basinger (3%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Holopaw (3%)

Generated brief soil descriptions are created for major soil components. The Holopaw soil is a minor component.

Component: Cypress Lake (2%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Tequesta (1%)

Generated brief soil descriptions are created for major soil components. The Tequesta soil is a minor component.

Map Unit: 6—Wabasso sand, 0 to 2 percent slopes

Component: Wabasso (85%)

The Wabasso component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer, strongly contrasting textural stratification, is 9 to 50 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Brynwood (6%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Component: Cypress Lake (5%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Pineda (4%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Map Unit: 7—Immokalee sand, 0 to 2 percent slopes

Component: Immokalee (85%)

The Immokalee component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Valkaria (5%)

Generated brief soil descriptions are created for major soil components. The Valkaria soil is a minor component.

Component: Oldsmar (4%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Pomello (3%)

Generated brief soil descriptions are created for major soil components. The Pomello soil is a minor component.

Component: Satellite (2%)

Generated brief soil descriptions are created for major soil components. The Satellite soil is a minor component.

Component: Felda (1%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Map Unit: 8—Malabar sand, 0 to 2 percent slopes

Component: Malabar (85%)

The Malabar component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Holopaw (5%)

Generated brief soil descriptions are created for major soil components. The Holopaw soil is a minor component.

Component: Basinger (4%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Oldsmar (3%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Cypress Lake (3%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Map Unit: 9—Riviera fine sand, 0 to 2 percent slopes

Component: Riviera (80%)

The Riviera component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Wabasso (8%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Pinellas (4%)

Generated brief soil descriptions are created for major soil components. The Pinellas soil is a minor component.

Component: Brynwood (4%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Component: Floridana (2%)

Generated brief soil descriptions are created for major soil components. The Floridana soil is a minor component.

Component: Oldsmar (2%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Map Unit: 10—Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes

Component: Pineda (45%)

The Pineda component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pineda, wet (40%)

The Pineda, wet component makes up 40 percent of the map unit. Slopes are 0 to 1 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Felda (6%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Component: Wabasso (3%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Valkaria (2%)

Generated brief soil descriptions are created for major soil components. The Valkaria soil is a minor component.

Component: Brynwood (2%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Component: Cypress Lake (2%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Map Unit: 12—Winder fine sand, 0 to 2 percent slopes

Component: Winder (85%)

The Winder component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Wabasso (4%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Malabar (4%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Basinger (4%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Holopaw (3%)

Generated brief soil descriptions are created for major soil components. The Holopaw soil is a minor component.

Map Unit: 13—Gentry fine sand, depressional

Component: Gentry (90%)

The Gentry component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Chobee, depressional (3%)

Generated brief soil descriptions are created for major soil components. The Chobee, depressional soil is a minor component.

Component: Delray (3%)

Generated brief soil descriptions are created for major soil components. The Delray soil is a minor component.

Component: Winder, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Winder, depressional soil is a minor component.

Component: Gator (2%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Map Unit: 14—Wabasso sand, limestone substratum, 0 to 2 percent slopes

Component: Wabasso, limestone substratum (85%)

The Wabasso, limestone substratum component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 13 to 54 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Cypress Lake (6%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Brynwood (3%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Component: Gator (3%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Gentry (3%)

Generated brief soil descriptions are created for major soil components. The Gentry soil is a minor component.

Map Unit: 17—Basinger sand, 0 to 2 percent slopes

Component: Basinger (85%)

The Basinger component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Holopaw (6%)

Generated brief soil descriptions are created for major soil components. The Holopaw soil is a minor component.

Component: Malabar (5%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Pompano (3%)

Generated brief soil descriptions are created for major soil components. The Pompano soil is a minor component.

Component: Anclote (1%)

Generated brief soil descriptions are created for major soil components. The Anclote soil is a minor component.

Map Unit: 19—Gator muck, frequently ponded, 0 to 1 percent slopes

Component: Gator (83%)

The Gator component makes up 83 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material over sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Terra Ceia (5%)

Generated brief soil descriptions are created for major soil components. The Terra Ceia soil is a minor component.

Component: Chobee (4%)

Generated brief soil descriptions are created for major soil components. The Chobee soil is a minor component.

Component: Tequesta (4%)

Generated brief soil descriptions are created for major soil components. The Tequesta soil is a minor component.

Component: Felda (3%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Component: Pompano (1%)

Generated brief soil descriptions are created for major soil components. The Pompano soil is a minor component.

Map Unit: 21—Holopaw sand, 0 to 2 percent slopes

Component: Holopaw (84%)

The Holopaw component makes up 84 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Basinger (6%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Riviera (4%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Component: Oldsmar (3%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Cypress Lake (2%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Gentry (1%)

Generated brief soil descriptions are created for major soil components. The Gentry soil is a minor component.

Map Unit: 22—Valkaria sand

Component: Valkaria (82%)

The Valkaria component makes up 82 percent of the map unit. Slopes are 0 to 2 percent. This component is on drainageways on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during June, July, August, September. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pompano (3%)

Generated brief soil descriptions are created for major soil components. The Pompano soil is a minor component.

Component: Malabar (3%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Basinger (3%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Immokalee (3%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: Pineda (3%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Myakka (3%)

Generated brief soil descriptions are created for major soil components. The Myakka soil is a minor component.

Map Unit: 23—Brynwood sand, wet, 0 to 2 percent slopes

Component: Brynwood (85%)

The Brynwood component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 7 to 20 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Jupiter (5%)

Generated brief soil descriptions are created for major soil components. The Jupiter soil is a minor component.

Component: Cypress Lake (5%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Wabasso, limestone substratum (3%)

Generated brief soil descriptions are created for major soil components. The Wabasso, limestone substratum soil is a minor component.

Component: Riviera, limestone substratum (2%)

Generated brief soil descriptions are created for major soil components. The Riviera, limestone substratum soil is a minor component.

Map Unit: 27—Riviera sand, limestone substratum

Component: Riviera, limestone substratum (83%)

The Riviera, limestone substratum component makes up 83 percent of the map unit. Slopes are 0 to 2 percent. This component is on drainageways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer, bedrock, lithic, is 50 to 80 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Gator (3%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Gentry (3%)

Generated brief soil descriptions are created for major soil components. The Gentry soil is a minor component.

Component: Boca (3%)

Generated brief soil descriptions are created for major soil components. The Boca soil is a minor component.

Component: Wabasso, limestone substratum (2%)

Generated brief soil descriptions are created for major soil components. The Wabasso, limestone substratum soil is a minor component.

Component: Winder (2%)

Generated brief soil descriptions are created for major soil components. The Winder soil is a minor component.

Component: Holopaw, limestone substratum (2%)

Generated brief soil descriptions are created for major soil components. The Holopaw, limestone substratum soil is a minor component.

Component: Pineda, limestone substratum (2%)

Generated brief soil descriptions are created for major soil components. The Pineda, limestone substratum soil is a minor component.

Map Unit: 28—Cypress Lake sand, frequently ponded, 0 to 1 percent slopes

Component: Cypress Lake (77%)

The Cypress Lake component makes up 77 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 13 to 58 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Gator (3%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Holopaw (3%)

Generated brief soil descriptions are created for major soil components. The Holopaw soil is a minor component.

Component: Okeelanta (3%)

Generated brief soil descriptions are created for major soil components. The Okeelanta soil is a minor component.

Component: Pineda (3%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Basinger (3%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Malabar (3%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Brynwood (3%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Component: Riviera (2%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Map Unit: 29—Oldsmar sand, limestone substratum

Component: Oldsmar, limetone substratum (87%)

The Oldsmar, limetone substratum component makes up 87 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer, bedrock, lithic, is 60 to 73 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Hallandale (3%)

Generated brief soil descriptions are created for major soil components. The Hallandale soil is a minor component.

Component: Riviera, limestone substratum (2%)

Generated brief soil descriptions are created for major soil components. The Riviera, limestone substratum soil is a minor component.

Component: Holopaw, limestone substratum (2%)

Generated brief soil descriptions are created for major soil components. The Holopaw, limestone substratum soil is a minor component.

Component: Malabar (2%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Pineda, limestone substratum (2%)

Generated brief soil descriptions are created for major soil components. The Pineda, limestone substratum soil is a minor component.

Component: Immokalee (2%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Map Unit: 32—Riviera sand, frequently ponded, 0 to 1 percent slopes

Component: Riviera (85%)

The Riviera component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Chobee (5%)

Generated brief soil descriptions are created for major soil components. The Chobee soil is a minor component.

Component: Wabasso (4%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Malabar (3%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Brynwood (3%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Map Unit: 33—Holopaw sand, frequently ponded, 0 to 1 percent slopes

Component: Holopaw (88%)

The Holopaw component makes up 88 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Basinger (7%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Riviera (5%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Map Unit: 34—Chobee fine sandy loam, limestone substratum, depressional

Component: Chobee, depressional, limestone subst. (80%)

The Chobee, depressional, limestone subst. component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer, bedrock, lithic, is 40 to 79 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 9 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Dania (4%)

Generated brief soil descriptions are created for major soil components. The Dania soil is a minor component.

Component: Gentry (4%)

Generated brief soil descriptions are created for major soil components. The Gentry soil is a minor component.

Component: Winder, depressional (4%)

Generated brief soil descriptions are created for major soil components. The Winder, depressional soil is a minor component.

Component: Gator (4%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Jupiter (4%)

Generated brief soil descriptions are created for major soil components. The Jupiter soil is a minor component.

Map Unit: 37—Tuscawilla fine sand, 0 to 2 percent slopes

Component: Tuscawilla (84%)

The Tuscawilla component makes up 84 percent of the map unit. Slopes are 0 to 2 percent. This component is on low broad flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is occasionally ponded. A seasonal zone of water saturation is at 3 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 15 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Chobee, flooded (4%)

Generated brief soil descriptions are created for major soil components. The Chobee, flooded soil is a minor component.

Component: Tequesta (4%)

Generated brief soil descriptions are created for major soil components. The Tequesta soil is a minor component.

Component: Wabasso (4%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Jupiter (2%)

Generated brief soil descriptions are created for major soil components. The Jupiter soil is a minor component.

Component: Cypress Lake (2%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Map Unit: 42—Riviera sand, limestone substratum, depressional

Component: Riviera, depressional, limestone subst. (80%)

The Riviera, depressional, limestone subst. component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer, bedrock, lithic, is 40 to 80 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Boca, depressional (3%)

Generated brief soil descriptions are created for major soil components. The Boca, depressional soil is a minor component.

Component: Hallandale, depressional (3%)

Generated brief soil descriptions are created for major soil components. The Hallandale, depressional soil is a minor component.

Component: Gentry (3%)

Generated brief soil descriptions are created for major soil components. The Gentry soil is a minor component.

Component: Gator (3%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Winder, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Winder, depressional soil is a minor component.

Component: Malabar, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Malabar, depressional soil is a minor component.

Component: Holopaw, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Holopaw, depressional soil is a minor component.

Component: Pineda, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Pineda, depressional soil is a minor component.

Map Unit: 44—Jupiter fine sand, 0 to 2 percent slopes

Component: Jupiter (80%)

The Jupiter component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 7 to 18 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Cypress Lake (5%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Brynwood (5%)

Generated brief soil descriptions are created for major soil components. The Brynwood soil is a minor component.

Component: Chobee, limestone substratum (5%)

Generated brief soil descriptions are created for major soil components. The Chobee, limestone substratum soil is a minor component.

Component: Oldsmar, limestone substratum (2%)

Generated brief soil descriptions are created for major soil components. The Oldsmar, limestone substratum soil is a minor component.

Component: Tequesta (2%)

Generated brief soil descriptions are created for major soil components. The Tequesta soil is a minor component.

Component: Tequesta (2%)

Generated brief soil descriptions are created for major soil components. The Tequesta soil is a minor component.

Component: Dania (1%)

Generated brief soil descriptions are created for major soil components. The Dania soil is a minor component.

Map Unit: 45—Pahokee muck, drained, 0 to 1 percent slopes

Component: Pahokee, drained (90%)

The Pahokee, drained component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material over limestone. Depth to a root restrictive layer, bedrock, lithic, is 36 to 51 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Cypress Lake (6%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Dania, drained (2%)

Generated brief soil descriptions are created for major soil components. The Dania, drained soil is a minor component.

Component: Lauderhill, drained (2%)

Generated brief soil descriptions are created for major soil components. The Lauderhill, drained soil is a minor component.

Map Unit: 50—Delray sand, depressional

Component: Delray (82%)

The Delray component makes up 82 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Gentry (6%)

Generated brief soil descriptions are created for major soil components. The Gentry soil is a minor component.

Component: Holopaw, depressional (6%)

Generated brief soil descriptions are created for major soil components. The Holopaw, depressional soil is a minor component.

Component: Okeelanta, drained (6%)

Generated brief soil descriptions are created for major soil components. The Okeelanta, drained soil is a minor component.

Map Unit: 51—Malabar fine sand, high, 0 to 2 percent slopes

Component: Malabar, high (85%)

The Malabar, high component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Oldsmar (5%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Felda (4%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Component: Pineda (4%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Basinger (2%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Basinger (2%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Map Unit: 57—Chobee fine sandy loam, frequently ponded, 0 to 1 percent slopes

Component: Chobee (88%)

The Chobee component makes up 88 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Tequesta (3%)

Generated brief soil descriptions are created for major soil components. The Tequesta soil is a minor component.

Component: Winder (3%)

Generated brief soil descriptions are created for major soil components. The Winder soil is a minor component.

Component: Gator (3%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Placid (3%)

Generated brief soil descriptions are created for major soil components. The Placid soil is a minor component.

Map Unit: 58—Oldsmar sand, depressional

Component: Oldsmar, depressional (87%)

The Oldsmar, depressional component makes up 87 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Okeelanta (2%)

Generated brief soil descriptions are created for major soil components. The Okeelanta soil is a minor component.

Component: Holopaw, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Holopaw, depressional soil is a minor component.

Component: Gentry (2%)

Generated brief soil descriptions are created for major soil components. The Gentry soil is a minor component.

Component: Malabar, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Malabar, depressional soil is a minor component.

Component: Gator (2%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Basinger (2%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Riviera, depressional (1%)

Generated brief soil descriptions are created for major soil components. The Riviera, depressional soil is a minor component.

Map Unit: 59—Winder fine sand, frequently ponded, 0 to 1 percent slopes

Component: Winder (85%)

The Winder component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Cypress Lake (4%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Chobee (4%)

Generated brief soil descriptions are created for major soil components. The Chobee soil is a minor component.

Component: Riviera (4%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Component: Okeelanta (3%)

Generated brief soil descriptions are created for major soil components. The Okeelanta soil is a minor component.

Map Unit: 62—Pineda sand, depressional

Component: Pineda, depressional (87%)

The Pineda, depressional component makes up 87 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Holopaw, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Holopaw, depressional soil is a minor component.

Component: Boca, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Boca, depressional soil is a minor component.

Component: Malabar, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Malabar, depressional soil is a minor component.

Component: Gator (2%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Chobee, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Chobee, depressional soil is a minor component.

Component: Valkaria (1%)

Generated brief soil descriptions are created for major soil components. The Valkaria soil is a minor component.

Component: Riviera, depressional (1%)

Generated brief soil descriptions are created for major soil components. The Riviera, depressional soil is a minor component.

Component: Okeelanta, drained (1%)

Generated brief soil descriptions are created for major soil components. The Okeelanta, drained soil is a minor component.

Map Unit: 64—Brynwood sand, frequently ponded, 0 to 1 percent slopes

Component: Brynwood (87%)

The Brynwood component makes up 87 percent of the map unit. Slopes are 0 to 1 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 7 to 20 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pahokee, drained (3%)

Generated brief soil descriptions are created for major soil components. The Pahokee, drained soil is a minor component.

Component: Cypress Lake (3%)

Generated brief soil descriptions are created for major soil components. The Cypress Lake soil is a minor component.

Component: Pineda (3%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Winder (2%)

Generated brief soil descriptions are created for major soil components. The Winder soil is a minor component.

Component: Riviera (2%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Map Unit: 70—Denaud muck

Component: Denaud (85%)

The Denaud component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 55 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 5 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Basinger (2%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Pineda, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Pineda, depressional soil is a minor component.

Component: Holopaw, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Holopaw, depressional soil is a minor component.

Component: Gentry (2%)

Generated brief soil descriptions are created for major soil components. The Gentry soil is a minor component.

Component: Chobee, depressional (2%)

Generated brief soil descriptions are created for major soil components. The Chobee, depressional soil is a minor component.

Component: Delray (2%)

Generated brief soil descriptions are created for major soil components. The Delray soil is a minor component.

Component: Gator (2%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Component: Riviera, depressional (1%)

Generated brief soil descriptions are created for major soil components. The Riviera, depressional soil is a minor component.

Data Source Information

Soil Survey Area: Collier County Area, Florida
Survey Area Data: Version 16, Sep 1, 2022

Soil Survey Area: Hendry County, Florida
Survey Area Data: Version 22, Sep 1, 2022

Exhibit J

Department
of
Environmental Protection

Outstanding Florida Waters

FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

Via Email

June 16, 2023

Ms. Emily Marsh
Land Management Planner, Florida Forest Service
Florida Department of Agriculture and Consumer Services
3125 Conner Boulevard, Suite I-258, Mail Stop C-25
Tallahassee, FL 32399-1650

RE: Okaloacoochee Slough State Forest

Dear Ms. Marsh:

Thank you for your inquiry regarding the surface water quality classifications and Outstanding Florida Waters (OFW) for Okaloacoochee Slough State Forest in Hendry and Collier counties. All of the surface waters within, adjacent to, or within 4 miles of the state forest are classified as Class III waters according to Rule 62-302.400, Florida Administrative Code (F.A.C.). The closest Class I waters are more than 4 miles away for the Caloosahatchee River.

According to our Outstanding Florida Waters layer and Rule, Okaloacoochee Slough State Forest is not designated as an OFW. Additionally, there are no other OFWs in, near, or adjacent to Okaloacoochee Slough State Forest. The closest OFWs are more than 10 miles away.

According to the Florida Natural Areas Inventory Managed Areas data layer, there are several parcels that are adjacent to the state forest that are managed by the FWC. However, none of these parcels are designated as OFWs. Please see the screenshot below for the boundaries of the Okaloacoochee Slough State Forest reflecting that there are no OFWs present.

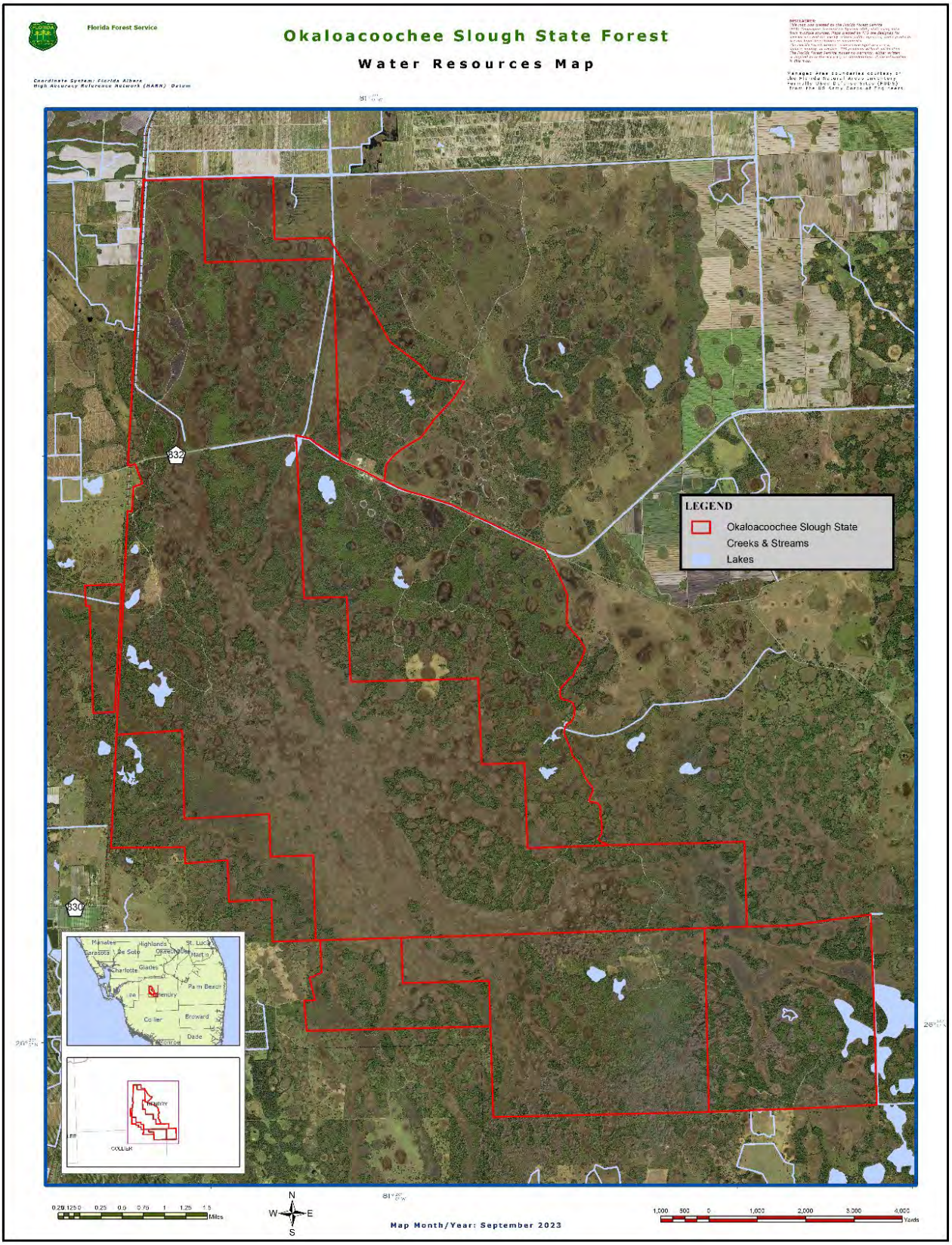
If you have any questions or need additional information about this response, please feel free to contact me via e-mail at Talia.E.Smith-Sickler@FloridaDEP.gov or by phone at 850-245-8068.

Sincerely,

Talia Elisa Smith-Sickler
Standards Development Section
Water Quality Standards Program
Florida Department of Environmental Protection

Exhibit K

Water Resources
and
BMAP Maps


Florida Forest Service
Okaloacoochee Slough State Forest
Water Resources Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
LEGEND
Okaloacoochee Slough State
Creeks & Streams
Lakes
832
830
Manatee
Highlands
St. Lucie
Sarasota
De Soto
Okeechobee
Martin
Charlotte
Glades
Palm Beach
Hendry
Collier
Broward
Dade
COLLIER
N
W
E
S
0 0.25 0.5 0.75 1 1.25 1.5 Miles
1,000 500 0 1,000 2,000 3,000 4,000 Yards
Map Month/Year: September 2023

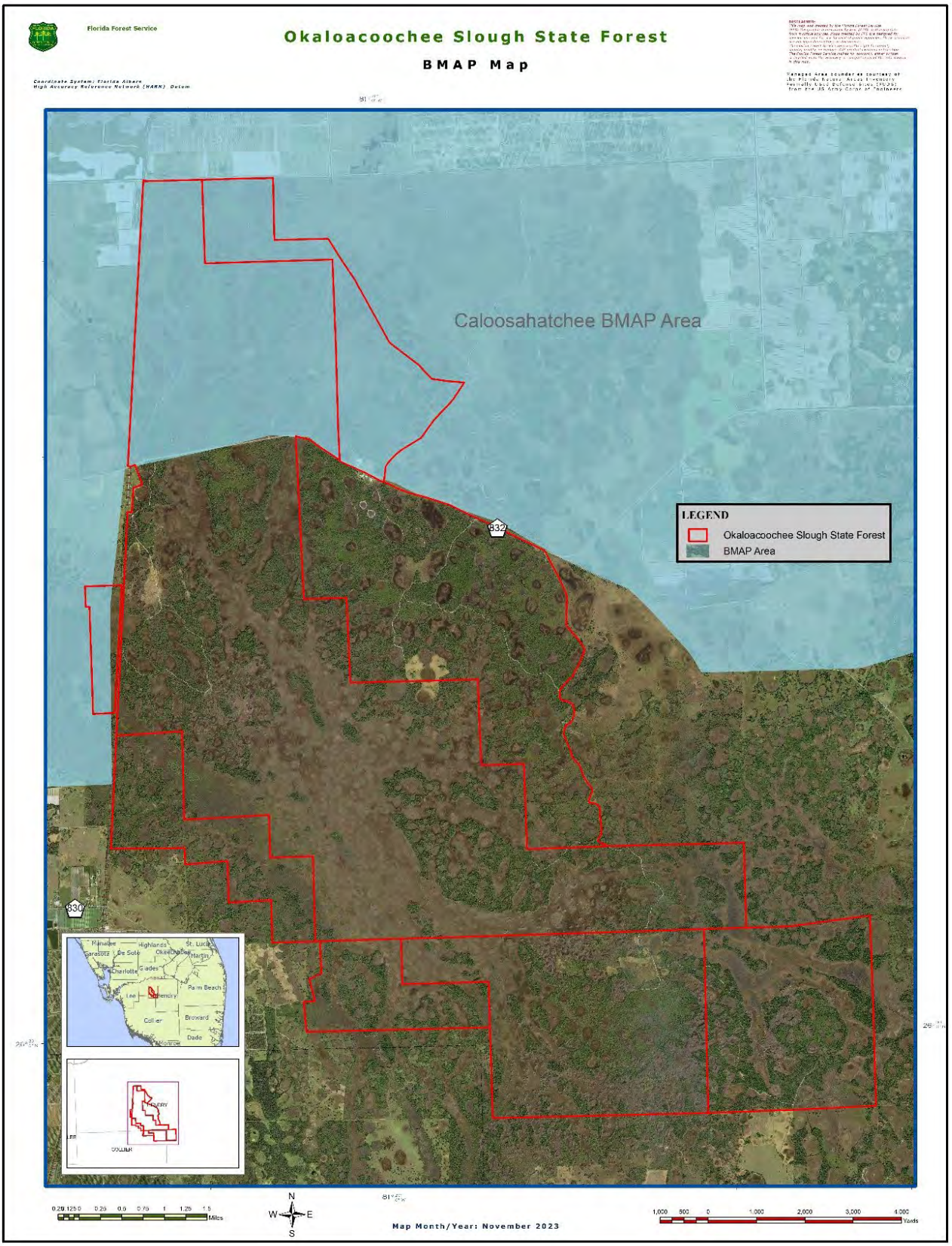

Florida Forest Service
Okaloacoochee Slough State Forest
BMAP Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
Caloosahatchee BMAP Area
LEGEND
Okaloacoochee Slough State Forest
BMAP Area
832
830
Manatee
Highlands
St. Lucie
Sarasota
De Soto
Okeechobee
Martin
Charlotte
Glades
Hendry
Palm Beach
Lee
Collier
Broward
Dade
HENDRY
LEE
COLLIER
N
W
E
S
0 0.25 0.5 0.25 0.0 0.75 1 1.25 1.5 Miles
1,000 500 0 1,000 2,000 3,000 4,000 Yards
Map Month/Year: November 2023

Exhibit L

Florida Natural Areas Inventory

Managed Area Data Report

Florida
Natural Areas
Inventory

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

July 11, 2023

Emily Marsh
Florida Forest Service
FL Dept of Agriculture & Consumer Services
3125 Conner Boulevard
Tallahassee, FL 32399-1650

Dear Ms. Marsh,

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). At your request we have produced the following report for your project area.

The purpose of this Standard Data Report is to provide objective scientific information on natural resources located in the vicinity of a site of interest, in order to inform those involved in project planning and evaluation. This Report makes no determination of the suitability of a proposed project for this location, or the potential impacts of the project on natural resources in the area.

Project:	Okaloacoochee Slough State Forest
Date Received:	6/14/2023
Location:	Hendry & Collier Counties

Based on the information available, this site appears to be located in a significant region of natural areas and habitat for several rare species.

Element Occurrences

A search of our maps and database indicates that we currently have many element occurrences mapped in the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

Federally Listed Species

Our data indicate federally listed species are present on or very near this site, specifically Florida Panther (*Puma concolor coryi*) (see enclosed map and tables for details). This statement should not be interpreted as a legal determination of presence or absence of federally listed species on a property.

The element occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, element occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.

Several of the species and natural communities tracked by the Inventory are considered data sensitive. Occurrence records for these elements contain information that we consider sensitive due to collection

Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

CLIP

The enclosed map shows natural resource conservation priorities based on the Critical Lands and Waters Identification Project. CLIP is based on many of the same natural resource data developed for the Florida Forever Conservation Needs Assessment, but provides an overall picture of conservation priorities across different resource categories, including biodiversity, landscapes, surface waters, and aggregated CLIP priorities (that combine the individual resource categories). CLIP is also based primarily on remote sensed data and is not intended to be the definitive authority on natural resources on a site.

For more information on CLIP, visit https://www.fnai.org/services/clip.

Managed Areas

Portions of the site appear to be located within the Okaloacoochee Slough State Forest, managed by the FL Dept. of Agriculture and Consumer Services, Florida Forest Service.

The Managed Areas data layer shows public and privately managed conservation lands throughout the state. Federal, state, local, and privately managed conservation lands are included.

The Inventory always recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/species-communities/tracking-main for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. **The maps contain sensitive environmental information, please do not distribute or publish without prior consent from FNAI.** FNAI data may not be resold for profit.

Thank you for your use of FNAI services. If I can be of further assistance, please contact me at (850) 224-8207 or at kbrinegar@fnai.fsu.edu.

Sincerely,

Kerri Brinegar

Kerri Brinegar
GIS / Data Services

Encl

Okaloacoochee Slough State Forest

Site boundaries are approximate.

Hendry & Collier Counties

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
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Florida Natural Areas Inventory

CLIP v4.0 Resource Priorities

Biodiversity Resource Category
- Priority 1 - highest
- Priority 2
- Priority 3
- Priority 4
- Priority 5

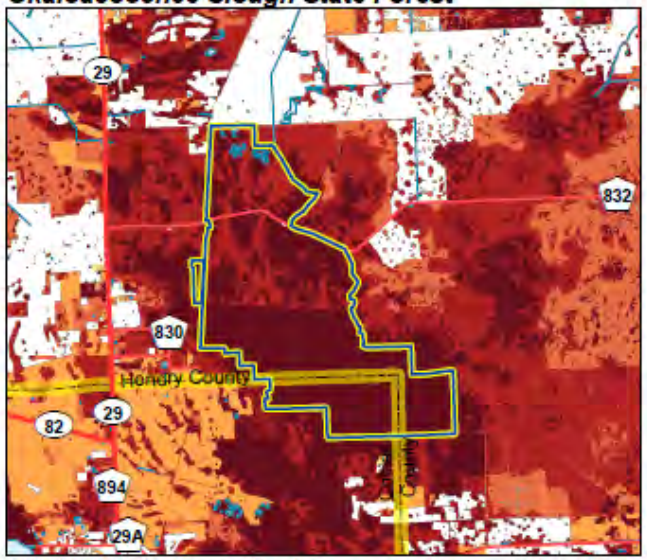
Landscape Resource Category
- Priority 1 - highest
- Priority 2
- Priority 3
- Priority 4
- Priority 5

Surface Water Resource Category
- Priority 1 - highest
- Priority 2
- Priority 3
- Priority 4
- Priority 5

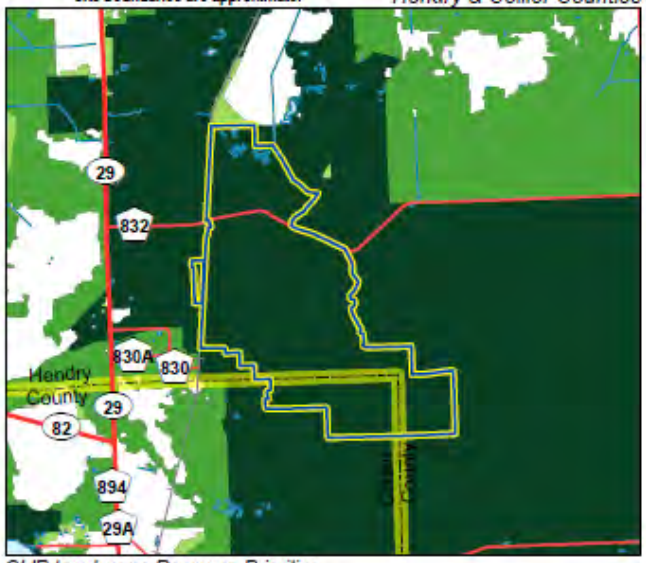
Aggregated CLIP Priorities
- Priority 1 - highest
- Priority 2
- Priority 3
- Priority 4
- Priority 5
- Site Boundary

Map should not be interpreted without accompanying documents.

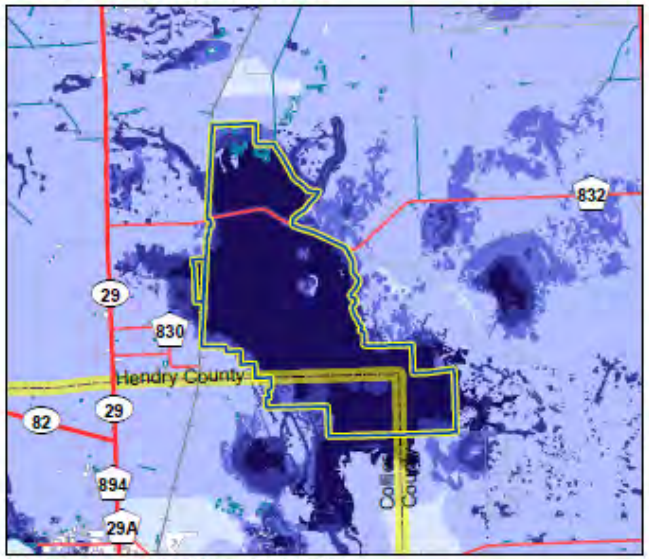
Critical Lands and Waters Identification Project (CLIP) is a cooperative effort between the FSU Florida Natural Areas Inventory, UF Center for Landscape Conservation Planning, and FL Fish & Wildlife Conservation Commission, with additional funding from FL Dept of Environmental Protection and US Fish & Wildlife Service.



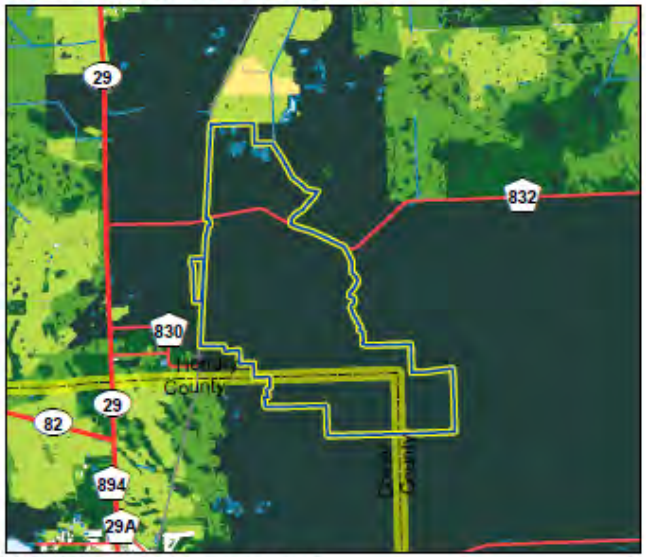
CLIP Biodiversity Resource Priorities



CLIP Landscape Resource Priorities



CLIP Surface Water Resource Priorities



CLIP Aggregated Resource Priorities

0 2.5 5 10 15 20 Miles

Map produced by KAB
7/11/2023

Florida Natural Areas Inventory
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FNAI ELEMENT OCCURRENCE REPORT on or near

Okaloacoochee Slough State Forest

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
ARAMGUAR*49	*Aramus guarauna*	Limpkin	G5	S3	N	N	2006-03-22	2006-03-22: swale, depression marsh, basin marsh, and ruderal communities (F06FNA06FLUS).	2006-03-22: 7 birds observed calling and foraging (F06FNA06FLUS).
CARAPLAN*174	*Caracara plancus*	Crested Caracara	G5	S2	T	FT	1989	No general description given	1989: One nesting territory recorded by J. Layne during GFC population study (U97GFC02).
CHEIPALM*62	*Cheiroglossa palmata*	hand fern	G4	S3	N	E	2015-01-14	High quality hydric hammock in remote corner of WMA.	6 leaf clumps of Ophioglossum observed in two nearby locations in hydric hammock
CHEIPALM*63	*Cheiroglossa palmata*	hand fern	G4	S3	N	E	2015-05-06	Near edge of marsh in fairly open, sunny area in wet flatwoods. Growing with Vitis rotundifolia, Toxicodendron radicans. Burn scars on trees, including host tree. In remote northwest corner of WMA.	Plant vigorous, with about 35 fronds, most are reproductive, on Sabal palmetto; adjacent Sabal has one small vegetative frond (PNDSGUL01FLUS).
COELTUBE*44	*Coelorachis tuberculosa*	Piedmont jointgrass	G3	S3	N	T	2003-01-28	Wet flatwoods	20 plants divided between two locations; in seed,
COLEABSC*106	*Coleataenia abscissa*	cutthroatgrass	G3	S3	N	E	2003-05-13	2003-05-13: improved bahiagrass pasture. 33 acres surrounding population has been herbicided and planted with native seed collected elsewhere on the WMA, on Webb WMA, and Three lakes WMA. A depressional wetland is nearby to the north. Site has been burned	2003-05-13: 100 plants (PNDMCC06FLUS, F05MCC01FLUS). 2003-02-09: 11-50 plants observed.
CROTADAM*394	*Crotalus adamanteus*	Eastern Diamondback Rattlesnake	G3	S3	UR	N	2017-04-30	State forest.	Based on 2 records, but likely a substantial, viable population.
DRYOVILL*20	*Dryobates villosus*	Hairy Woodpecker	G5	S3	N	N	2014-10-13	Adult observed foraging in mesic flatwoods.	One adult observed.
DS*39076	*Data Sensitive Element*	Data Sensitive	G5	S3	N	T	2015-01-14	Data Sensitive	Data Sensitive
DS*40177	*Data Sensitive Element*	Data Sensitive	G5	S3	N	T	2015-03-31	Data Sensitive	Data Sensitive
EGRETHUL*197	*Egretta thula*	Snowy Egret	G5	S3	N	N	1988-05-06	Shrubby marsh (0.5-1 acre) in the NW corner of a cattle pasture; barbed-wire fence surrounding pasture; paved along northern boundary, freshwater marsh and drainage on the north side of the road.	1988/05/06: E. Carter, GFC. SNEG in prenesting and pairing stages. CAEG and TCHE incubating. GLIB egg laying and incubating. "Total" (nests?) = 113.

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Florida Natural Areas Inventory

FNAI ELEMENT OCCURRENCE REPORT on or near

Okaloacoochee Slough State Forest

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
EGRETRIC*199	*Egretta tricolor*	Tricolored Heron	G5	S4	N	ST	1988-05-06	1988-05-06: Shrubby marsh in the corner of a cattle pasture (U97GFC02FLUS).	1988-05-06: E. Carter, GFC. Snowy Egret in prenesting and pairing stages. Cattle Egret and Tri-colored incubating. Glossy Ibis egglaying and incubating. "Total" (nests?) = 113 (U97GFC02FLUS).
GOPHPOLY*1188	*Gopherus polyphemus*	Gopher Tortoise	G3	S3	N	ST	2005	2005: Along a north-south oriented powerline right-of-way. Based on aerial photography and nearby FNAI mapping data (F05FNA04FLUS), habitat is likely mesic flatwoods. No habitat information provided by sources (U05POD01FLUS, PNDPOD02FLUS).	2005: 60 burrows mostly along road side (U05POD01FLUS, PNDPOD02FLUS).
GOPHPOLY*1189	*Gopherus polyphemus*	Gopher Tortoise	G3	S3	N	ST	2005	2005. Along road in mesic flatwoods, based on FNAI natural community mapping data (F05FNA04FLUS). No habitat information provided with tortoise points (U05POD01FLUS, PNDPOD02FLUS).	2005: 3 burrows gps'd at mapped polygon location; one burrow approximately 0.6 aerial mile southwest of these (or 0.8 mile south-southwest along forest road, then approx 30 m east of the road (U05POD01FLUS, PNDPOD02FLUS).
LINUSMAL*10	*Linum carteri var. smallii*	Small's flax	G2T2	S2	N	E	2005-05-02	2005-05-02: in wet praire, disturbed moderately by an ORV trail (F05FNA04FLUS, PNDTAN01FLUS).	2005-05-02: 11-50 plants in flower/bud in an area >10-100 square meters (F05FNA04FLUS, PNDTAN01FLUS).
MATEFLOR*53	*Matelea floridana*	Florida spiny-pod	G2	S2	N	E	2017-05-08	Mesic hammock under very dry conditions with Quercus virginiana, Sabal palmetto; light disturbance from some Schinus terebinthifolius;	12 counted in flower/bud (F17FNA26FLUS)

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Okaloacoochee Slough State Forest

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
MESHAMM*273	Mesic hammock		G3	S3?	N	N	2015-01-14	Mesic hammock on island surrounded by basin marsh. Island also contains hydric hammock and depression marsh. North-south canal and berm divides hammock and forms west boundary of Dinner Island WMA. In remote northwest corner of WMA.	Mesic hammock with numerous tropical plant species and relatively little disturbance. Closed canopy dominated by mature Quercus virginiana, Quercus laurifolia, and Sabal palmetto. Other trees include Persea palustris, Ficus aurea, Morus rubra, Celtis laevigata, Sideroxylon foetidissimum, Chrysophyllum oliviforme, Bursera simaruba, and Colubrina arborescens Shrubs include Serenoa repens, Sabal palmetto, Myrsine cubana, Psychotria sulzneri, Ardisia escalloniodes, Myrcianthes fragrans, Trema micrantha, Cornus foemina, Hamelia patens, and Schinus terebinthifolius, Vines include Vitis rotundifolia, Cissus verticillata, and Berchemia scandens. Herbs include Blechnum serrulatum, Nephrolepis exaltata, Vernonia virginica, Habenaria florbunda, and Urena lobata. Epiphytes include Tillandsia balbisiana, Tillandsia fasciculata, Tillandsia setacea, Tillandsia usneoides, Tillandsia utriculata, Pleopeltis polypodioides, Encylia tampensis, Campyloneurum phyllitidis, and Polystachya concreta.
MYCTAMER*48	*Mycteria americana*	Wood Stork	G4	S2	DL	FT	1974-04-18	No general description given	11 STORKS OBSERVED FORAGING BETWEEN 15-21 DEC 1973, 25 ON 25-26 JAN 1974, 25 ON 9 FEB 1974, 18 ON 23 FEB 1974, 8 ON 15 MAR 1974 AND 4 ON 16-18 APR 1974.. FEEDING SITE ASSOC. WITH NEARBY ROOKERIES; USE OF SITE IS HIGHLY SEASONAL.
MYCTAMER*64	*Mycteria americana*	Wood Stork	G4	S2	DL	FT	1974-02-09	No general description given	3 STORKS OBSERVED FORAGING. FEEDING SITE ASSOC. WITH NEARBY ROOKERIES; USE OF SITE HIGHLY SEASONAL.

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FNAI ELEMENT OCCURRENCE REPORT on or near

Okaloacoochee Slough State Forest

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
MYCTAMER*65	*Mycteria americana*	Wood Stork	G4	S2	DL	FT	1974-05-05	No general description given	212 STORKS OBSERVED FORAGING ON 15-21 DEC 1973, 16 ON 12 JAN 1974, 22 ON 25-26 JAN 1974, 6 ON 23 FEB 1974, AND 7 ON 2,3,5 MAY 1974. . FEEDING SITE ASSOC. WITH NEARBY ROOKERIES; USE OF SITE HIGHLY SEASONAL.
PEUCAEST*109	*Peucaea aestivalis*	Bachman's Sparrow	G3	S3	N	N	2015-03-31	Highly disturbed mesic flatwoods that had formerly been semi-improved pasture that is currently being restored.	One adult heard singing.
PLEGFALC*31	*Plegadis falcinellus*	Glossy Ibis	G5	S3	N	N	1989-02-04	Ditch through improved pasture.	1989-02-04: R. Titus, GFC - 46 birds loafing. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF.
PLEGFALC*32	*Plegadis falcinellus*	Glossy Ibis	G5	S3	N	N	1988-05-06	Shrubby marsh (0.5-1 acre) in the NW corner of a cattle pasture; barbed-wire fence surrounding pasture; paved along northern boundary, freshwater marsh and drainage on the north side of the road.	1988-05-06: E. Carter, GFC, observed GLIB egglaying and incubating. SNEG in prenesting and pairing stages. CAEG and TCHE incubating. "Total" (nests?) = 113.
PUMACORY*1	*Puma concolor coryi*	Florida Panther	G5T1	S1	E	FE	2018-02-27	1990: part of Big Cypress Swamp, includes several water courses, numerous ponds and low "uplands". Diverse habitats include wet and dry prairie, cypress forest (logged), mixed pines, mixed hardwoods; seasonally flooded (PNDMAE01FLUS).	1941-12-14: 1 specimen collected by Ross Allen, no date given, FSM #14699; specimen (FSM #12004) from 14-18 miles southeast of Immokalee, collected by Paul B. Welch (Weiland Welch Ranch). 1979-12-23: road kill from 200 yards north of Alligator Alley (FSM #11915) collected by Frank Weed, Sr. 1980-02-07: road kill from 1 mile south of Sunniland, SR-29, collected by FGFWFC (FSM #11927). 1990: 13 panthers within EO were radio-collared and monitored during 1989 and 1990 by Maehr (U90MAE01FLUS)--panthers in other occurrences also collared. Museum specimens. 2007-04-15: Panthers walked in cement and left tracks on bridge. Prints of both male and female and kitten tracks. Not mapped due to locational uncertainty. 2012: Estimated population size is between 100 and 160 adult and subadult individuals (U12FWC01FLUS). 2018-02-26: one adult and two tracks observed (F18FNA18FLUS).

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Florida Natural Areas Inventory

FNAI ELEMENT OCCURRENCE REPORT on or near

Okaloacoochee Slough State Forest

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
ZEPHSIMP*15	*Zephyranthes simpsonii*	redmargin zephyrlily	G2G3	S2S3	N	T	2006-05-22	Mesic flatwoods	1 flowering plant
ZEPHSIMP*17	*Zephyranthes simpsonii*	redmargin zephyrlily	G2G3	S2S3	N	T	2018-03-12	Semi-improved pasture	101-1000 plants

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Tallahassee, FL 32303
(850) 224-8207
www.fnai.org

Florida Natural Areas Inventory

Florida Natural Areas Inventory

Aggregated Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Documented					
Coelorachis tuberculosa	Piedmont jointgrass	G3	S3	N	T
Coleataenia abscissa	cutthroatgrass		S3	N	E
Crotalus adamanteus	Eastern Diamondback Rattlesnake		S3	N	N
Dryobates villosus	Hairy Woodpecker	G5	S3	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	NR	ST
Linum carteri var. smallii	Small's flax	G2T2	S2	N	E
Matelea floridana	Florida spiny-pod	G2	S2	N	E
Mesic hammock		G3	S3?	N	N
Ophioglossum palmatum	hand fern	G4	S2	N	E
Peucaea aestivalis	Bachman's Sparrow	G3	S3	N	N
Pteroglossaspis ecristata	giant orchid	G2G3	S2	N	T
Puma concolor coryi	Florida Panther	G5T1	S1	E	FE
Tillandsia flexuosa	banded wild-pine	G5	S3	N	T
Zephyranthes simpsonii	redmargin zephyrlily	G2G3	S2S3	N	T
Likely					
Antigone canadensis pratensis	Florida Sandhill Crane	G5T2	S2	N	ST
Aramus guarauna	Limpkin	G5	S3	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S2?	T	FT
Mesic flatwoods		G4	S4	N	N
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3?	S3?	N	N
Mycteria americana	Wood Stork	G4	S2	T	FT
Rostrhamus sociabilis	Snail Kite	G4G5	S2	E	FE
Sciurus niger avicennia	Big Cypress Fox Squirrel	G5T2	S2	N	ST
Potential					
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	ST
Calopogon multiflorus	many-flowered grass-pink	G2G3	S2S3	N	T
Centrosema arenicola	sand butterfly pea	G2Q	S2	N	E
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S1	N	N
Dryobates borealis	Red-cockaded Woodpecker	G3	S2	E, PT	FE
Egretta thula	Snowy Egret	G5	S3	N	N
Egretta tricolor	Tricolored Heron		S4	N	ST
Eumops floridanus	Florida bonneted bat	G1	S1	E	FE
Lechea cernua	nodding pinweed	G3	S3	N	T
Lithobates capito	Gopher Frog	G2G3	S3	N	N
Nemastylis floridana	celestial lily	G2	S2	N	E
Neofiber alleni	Round-tailed Muskrat		S2	N	N
Nolina atopocarpa	Florida beargrass	G3	S3	N	T
Platanthera integra	yellow fringeless orchid	G3G4	S3	N	E
Plegadis falcinellus	Glossy Ibis	G5	S3	N	N
Salix floridana	Florida willow	G2G3	S2S3	N	E
Sciurus niger niger	Southeastern Fox Squirrel	G5T5	S3	N	N
Tephrosia angustissima var. curtissii	coastal hoary-pea	G1T1	S1	N	E
Ursus americanus floridanus	Florida Black Bear	G5T4	S4	N	N

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

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Florida Natural Areas Inventory

Florida Natural Areas Inventory

Managed Area Element Summary

Okaloacoochee Slough State Forest

SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status
PLANTS					
Linum carteri var. smallii	Small's flax	G2T2	S2	N	E
REPTILES					
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G3	S3	UR	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	ST
BIRDS					
Antigone canadensis pratensis	Florida Sandhill Crane	G5T2	S2	N	ST
Aramus guarauna	Limpkin	G5	S3	N	N
Elanoides forficatus	Swallow-tailed Kite	G5	S2	N	N
Mycteria americana	Wood Stork	G4	S2	DL	FT
MAMMALS					
Puma concolor coryi	Florida Panther	G5T1	S1	E	FE
Ursus americanus floridanus	Florida Black Bear	G5T4	S4	N	N

Note: *Summary includes all documented and likely species occurrence records currently in the FNAI database.*

Elements and Element Occurrences

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

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

Element Ranking and Legal Status

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

FNAI GLOBAL ELEMENT RANK

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4 = Apparently secure globally (may be rare in parts of range).
G5 = Demonstrably secure globally.
GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
GX = Believed to be extinct throughout range.
GXC = Extirpated from the wild but still known from captivity or cultivation.
G#? = Tentative rank (e.g., G2?).
G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
G#T#Q = Same as above, but validity as subspecies or variety is questioned.
GU = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
GNA = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
GNR = Element not yet ranked (temporary).
GNRTNR = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4 = Apparently secure in Florida (may be rare in parts of range).
S5 = Demonstrably secure in Florida.
SH = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
SX = Believed to be extirpated throughout Florida.
SU = Unrankable; due to a lack of information no rank or range can be assigned.
SNA = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
SNR = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

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

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

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
E = Endangered: species in danger of extinction throughout all or a significant portion of its range.
E, T = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
E, PDL = Species currently listed endangered but has been proposed for delisting.
E, PT = Species currently listed endangered but has been proposed for listing as threatened.
E, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
T = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
PE = Species proposed for listing as endangered.
PS = - An infraspecific taxon or population has federal status but the entire species does not - status is in only a portion of the species range.
PT = Species proposed for listing as threatened.
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.
DL = Delisted.
UR = Under review.

STATE LEGAL STATUS

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

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

C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service
FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
FXN = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N = Not currently listed, nor currently being considered for listing.

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

E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
CE = Commercially exploited: species native to the state which are subject to being removed in significant numbers from native habitats in the state and sold or transported for sale.
N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

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

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

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

FNAI also uses the following EO ranks:

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

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

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

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

Exhibit M

Florida Fish
and
Wildlife Conservation Commission

Listed Species
Occurrence Records

Florida Fish and Wildlife Conservation Commission

Commissioners
Rodney Barreto
Chairman
Coral Gables

Steven Hudson
Vice Chairman
Fort Lauderdale

Preston Farrior
Tampa

Gary Lester
Oxford

Albert Maury
Coral Gables

Gary Nicklaus
Jupiter

Sonya Rood
St. Augustine

Office of the
Executive Director
Roger Young
Executive Director

Dr. Thomas H. Eason
Assistant Executive Director

Jessica Crawford
Chief of Staff

850-487-3796
850-921-5786 FAX

Managing fish and wildlife resources for their long-term well-being and the benefit of people

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: 850-488-4676

Hearing/speech-impaired:
800-955-8771 (T)
800-955-8770 (V)

MyFWC.com

August 23, 2023

Emily Marsh
Florida Forest Service
3125 Conner Boulevard
Tallahassee, Florida 32399-1650
emily.marsh@fdacs.gov

Dear Ms. Marsh:

This letter is in response to your request for listed species occurrence records and critical habitats for the Okaloacoochee Slough State Forest, located in Hendry County. FWC staff conducted a geographic information system (GIS) analysis of the project area utilizing a variety of internal datasets. The analysis found that the project area contains:

Documented occurrences of the following listed and managed species:

- Eastern indigo snake (*Drymarchon couperi*, Federally Threatened [FT])
- Florida panther (*Puma concolor coryi*, Federally Endangered)
- Wood stork (*Mycteria americana*, FT)
- Gopher tortoise (*Gopherus polyphemus*, State Threatened [ST])
- Little blue heron (*Egretta caerulea*, ST)

Potential habitat for the following listed and managed species:

- Eastern indigo snake
- Wood Stork
- Gopher tortoise
- Audubon's crested caracara (*Polyborus plancus audubonii*, FT)
- Big Cypress fox squirrel (*Sciurus niger avicennia*, ST)
- Florida black bear (*Ursus americanus floridanus*)

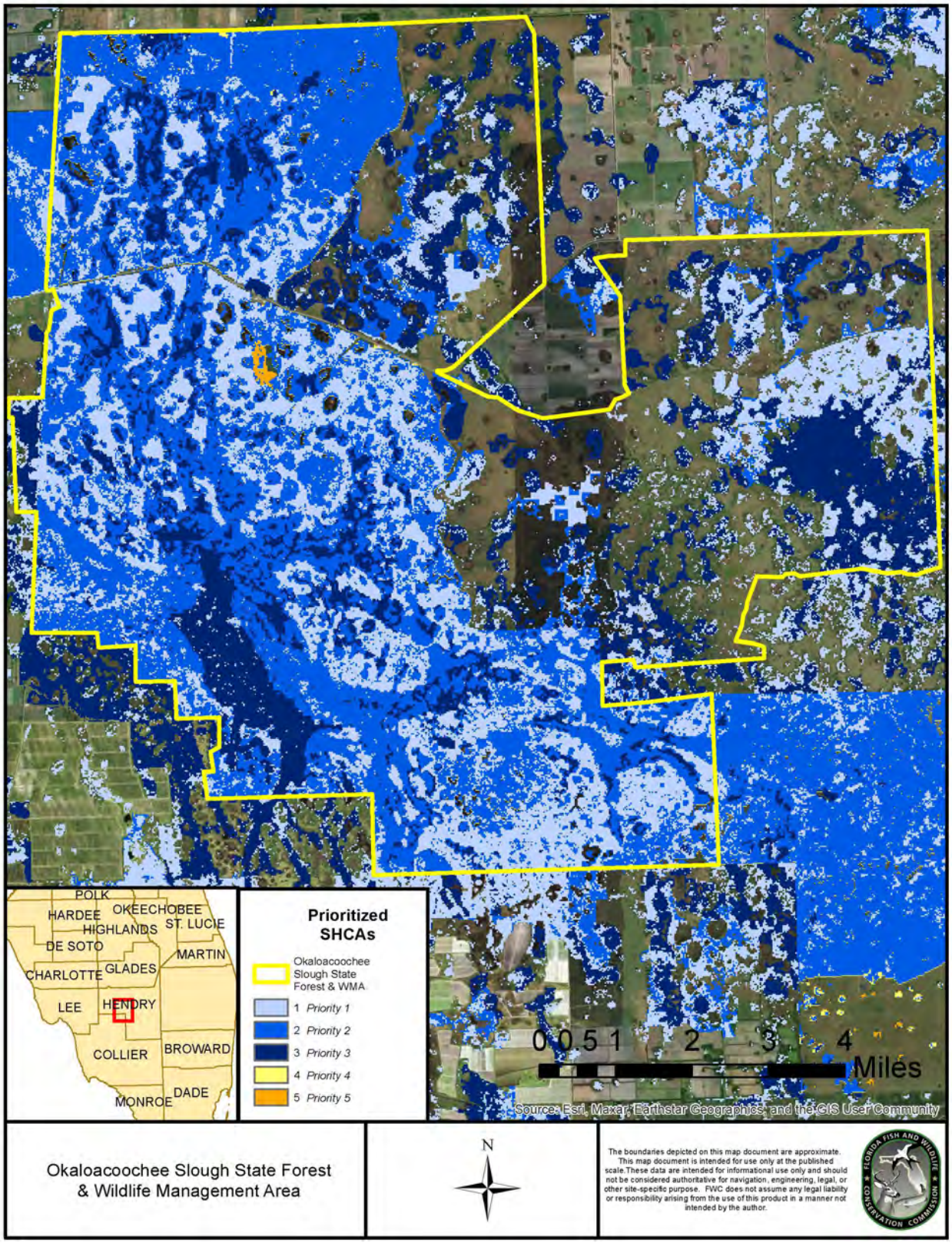
The wildlife occurrence data represents only species recorded by FWC staff and other affiliated researchers and the available databases do not necessarily contain records of all listed species that may occur in a given area. Therefore, the absence of a species in this list does not mean that species does not occur in the area. On-site surveys using appropriate methodologies are always the most reliable method to determine the potential presence of listed species and their habitat.

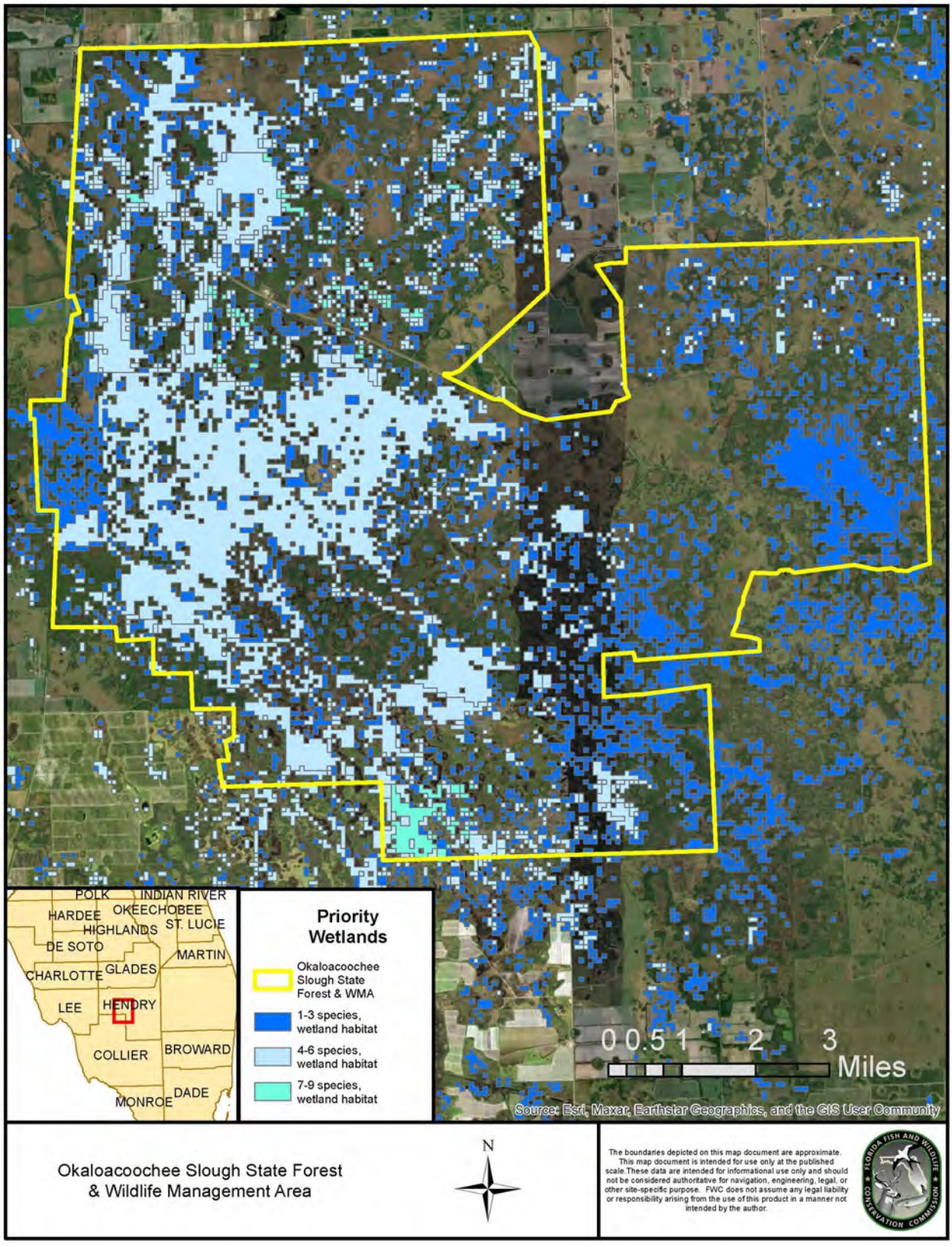
The enclosed maps are based on aggregated species models and include listed species Strategic Habitat Conservation Areas (SHCAs), species richness, and priority wetlands for listed species. These data highlight areas with enhanced value for multiple listed and managed species of wildlife.

For specific technical questions regarding the content of this letter, please contact Alex Flores at 850-488-8783 or by email at Alex.Flores@MyFWC.com. All other inquiries may be sent to ConservationPlanningServices@MyFWC.com.

Sincerely,

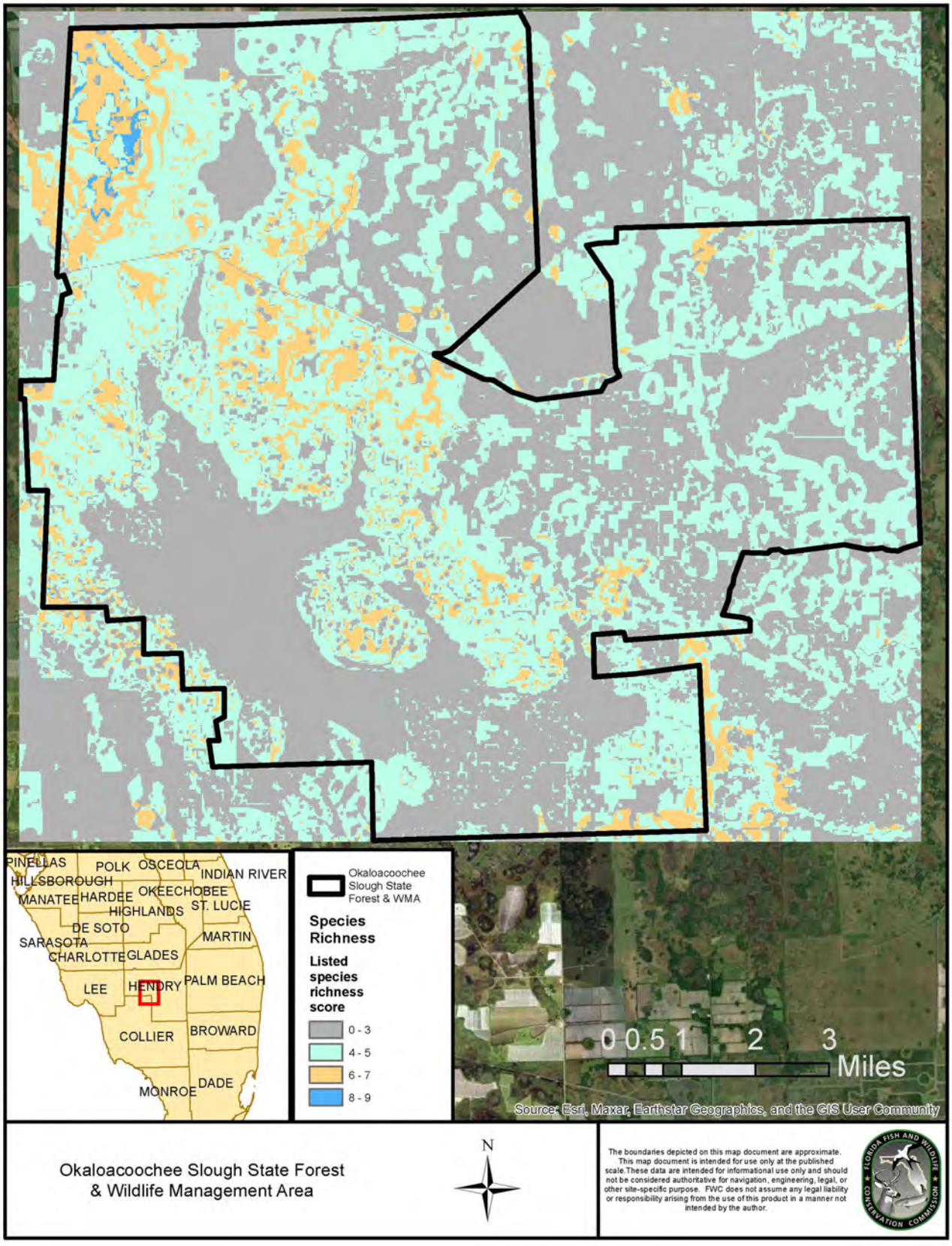
Laura DiGruttolo, Land Use Planning Supervisor
Office of Conservation Planning Services
Florida Fish and Wildlife Conservation Commission


POLK
HARDEE
OKEECHOBEE
HIGHLANDS
ST. LUCIE
DE SOTO
MARTIN
CHARLOTTE
GLADES
LEE
HENDRY
COLLIER
BROWARD
DADE
MONROE
Prioritized SHCAs
Okaloacoochee Slough State Forest & WMA
1 Priority 1
2 Priority 2
3 Priority 3
4 Priority 4
5 Priority 5
0 0.5 1 2 3 4
Miles
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Okaloacoochee Slough State Forest & Wildlife Management Area
N
The boundaries depicted on this map document are approximate. This map document is intended for use only at the published scale.These data are intended for informational use only and should not be considered authoritative for navigation, engineering, legal, or other site-specific purpose. FWC does not assume any legal liability or responsibility arising from the use of this product in a manner not intended by the author.
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION



Okaloacoochee Slough State Forest
& Wildlife Management Area

N


PINELLAS
POLK
OSCEOLA
INDIAN RIVER
HILLSBOROUGH
MANATEE
HARDEE
OKEECHOBEE
ST. LUCIE
HIGHLANDS
DE SOTO
SARASOTA
MARTIN
CHARLOTTE
GLADES
LEE
HENDRY
PALM BEACH
COLLIER
BROWARD
DADE
MONROE
Okaloacoochee Slough State Forest & WMA
Species Richness
Listed species richness score
0 - 3
4 - 5
6 - 7
8 - 9
0 0.5 1 2 3
Miles
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
Okaloacoochee Slough State Forest & Wildlife Management Area
N
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FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

Exhibit N

Ten-Year Fire History

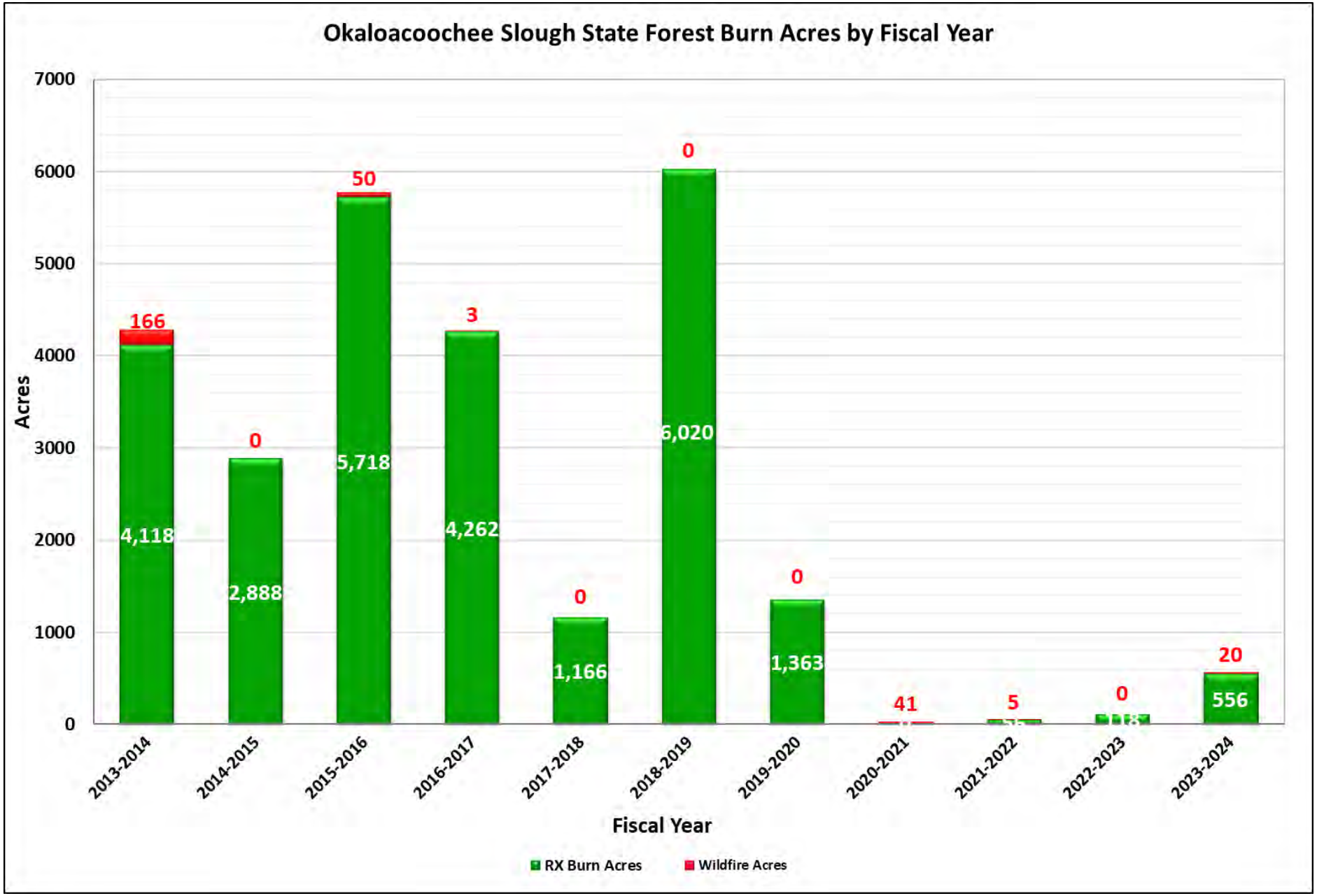

Okaloacoochee Slough State Forest Burn Acres by Fiscal Year
Acres
7000
6000
5000
4000
3000
2000
1000
0
166
4,118
0
2,888
50
5,718
3
4,262
0
1,166
0
6,020
0
1,363
41
5
0
20
556
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
2020-2021
2021-2022
2022-2023
2023-2024
Fiscal Year
RX Burn Acres
Wildfire Acres

Exhibit O

Invasive Species Map

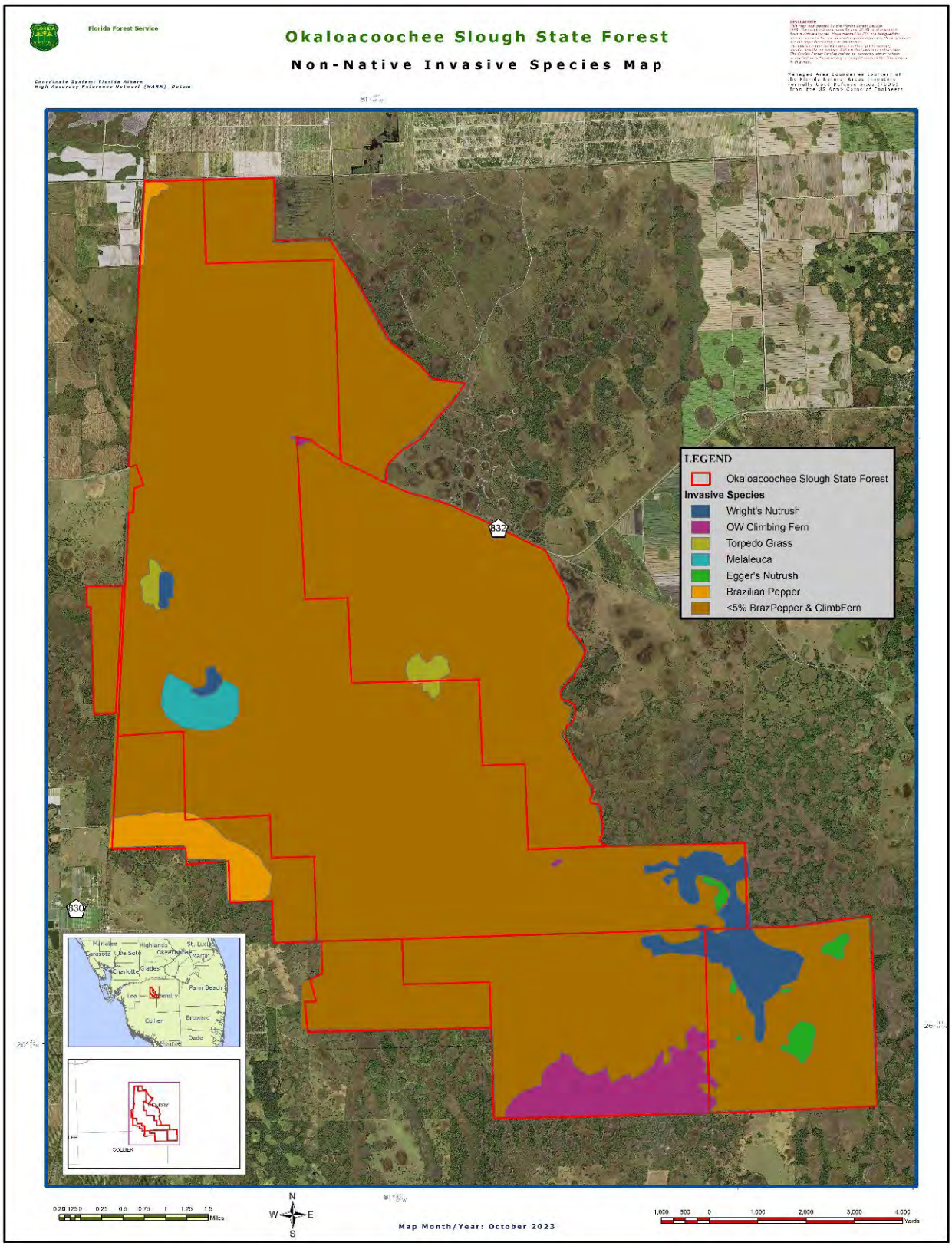

Florida Forest Service
Okaloacoochee Slough State Forest
Non-Native Invasive Species Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
LEGEND
Okaloacoochee Slough State Forest
Invasive Species
Wright's Nutrush
OW Climbing Fern
Torpedo Grass
Melaleuca
Egger's Nutrush
Brazilian Pepper
<5% BrazPepper & ClimbFern
832
830
Manatee
Highlands
St. Lucie
Sarasota
De Soto
Okeechobee
Martin
Charlotte
Glades
Palm Beach
Hendry
Lee
Collier
Broward
Dade
Monroe
Hendry
Lee
Collier
0 0.25 0.5 0.75 1 1.25 1.5 Miles
N
W
E
S
1,000 500 0 1,000 2,000 3,000 4,000 Yards
Map Month/Year: October 2023

Exhibit P

Current FNAI
Natural Communities Map

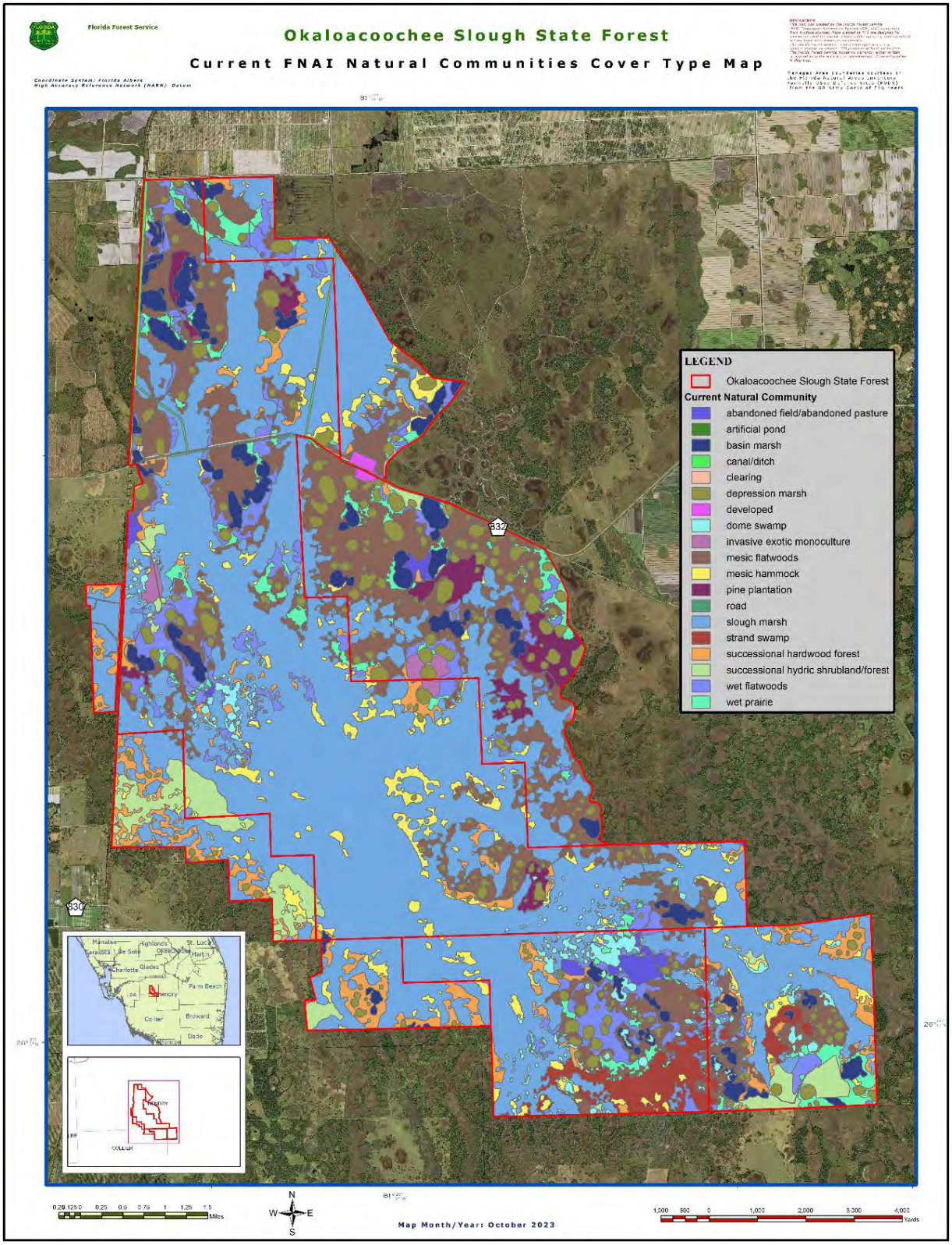

Florida Forest Service
Okaloacoochee Slough State Forest
Current FNAI Natural Communities Cover Type Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
LEGEND
Okaloacoochee Slough State Forest
Current Natural Community
abandoned field/abandoned pasture
artificial pond
basin marsh
canal/ditch
clearing
depression marsh
developed
dome swamp
invasive exotic monoculture
mesic flatwoods
mesic hammock
pine plantation
road
slough marsh
strand swamp
successional hardwood forest
successional hydric shrubland/forest
wet flatwoods
wet prairie
832
830
Manatee
Highlands
St. Lucie
Sarasota
De Soto
Okeechobee
Martin
Glades
Charlotte
Palm Beach
Hendry
Lee
Collier
Broward
Dade
Monroe
Hendry
Collier
0 0.25 0.5 0.25 0.5 0.75 1 1.25 1.5 Miles
N
W
E
S
1,000 500 0 1,000 2,000 3,000 4,000 Yards
Map Month/Year: October 2023

Exhibit Q

Historic FNAI
Natural Communities Map

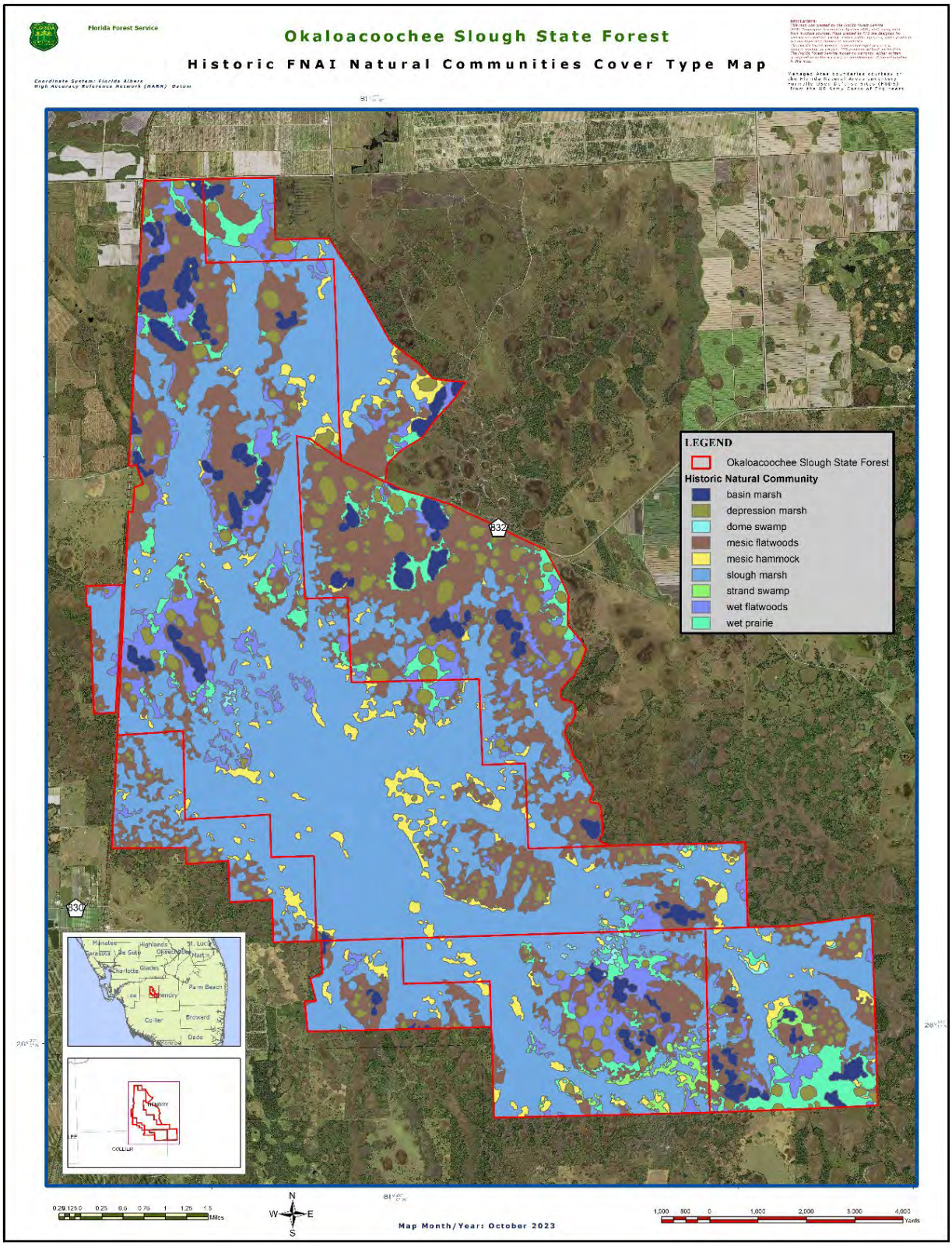

Florida Forest Service
Okaloacoochee Slough State Forest
Historic FNAI Natural Communities Cover Type Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
LEGEND
Okaloacoochee Slough State Forest
Historic Natural Community
basin marsh
depression marsh
dome swamp
mesic flatwoods
mesic hammock
slough marsh
strand swamp
wet flatwoods
wet prairie
832
830
Manatee
Highlands
St. Lucie
Sarasota
De Soto
Okeechobee
Martin
Charlotte
Glades
Palm Beach
Hendry
Lee
Collier
Broward
Dade
Monroe
HENDRY
LEE
COLLIER
0.25 0.125 0 0.25 0.5 0.75 1 1.25 1.5
Miles
N
W
E
S
Map Month/Year: October 2023
1,000 500 0 1,000 2,000 3,000 4,000
Yards

Exhibit R

Land Management Reviews

(2016 & 2021)

2016 Land Management Review Team Report for Okaloacoochee Slough State Forest

Table of Contents

1. Introduction

Section 259.036, F.S. requires a periodic on-site review of conservation and recreation lands titled in the name of the Board of Trustees to determine (1) whether the lands are being managed for the purposes for which they were acquired and (2) whether they are being managed in accordance with their land management plan adopted pursuant to s. 259.032, F.S. In cases where the managed areas exceed 1,000 acres in size, such a review must be scheduled at least every five years. In conducting this review, a statutorily constructed review team "shall evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions or archaeological features. The review shall also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan."

The land management review teams are coordinated by the Division of State Lands and consist of representatives from the Division of Recreation and Parks (DEP), the Florida Forest Service (DACS), the Fish and Wildlife Conservation Commission, the local government in which the property is located, the DEP District in which the parcel is located, the local soil and water conservation district, a conservation organization member, and a local private land manager.

Each land management review report is divided into three sections. Section 1 provides the details of the property being reviewed as well as the overall results of the report. Section 2 provides details of the field review, in which the review team inspects the results of management actions on the site. Section 3 provides details of the land management plan review, in which the team determines the extent to which the management plan provides for and documents adequate natural and recreational resource protection.

Finally, each report may also contain an Appendix that lists individual team member comments. This Appendix is a compilation of feedback, concerns or other thoughts provided by individual team members. It is not necessarily indicative of the final consensus reached by the land management review team.

1.1. Property Reviewed in this Report

Name of Site: Okaloacoochee Slough State Forest

Managed by: Florida Forest Service (FFS)

Acres: 32,349.32 **County:** Hendry, Collier

Purpose(s) for Acquisition: To protect areas that are critical to maintaining South Florida's ecological integrity, and acquiring lands that are necessary for water management, water supply, and the conservation and protection of water resources.

Acquisition Program(s): SOR, P2000/CARL **Original Acquisition Date:** 8/3/1995

Area Reviewed: TIITF-owned portions **Last Management Plan Approval Date:** 12/14/2012

Review Date: 6/3/2016

Agency Manager

- Heather Ferrand

Key Staff Present

- Chris Schmiege, Dexter Sowell, Anthony Curella, Ian Doyle, Melinda Avni

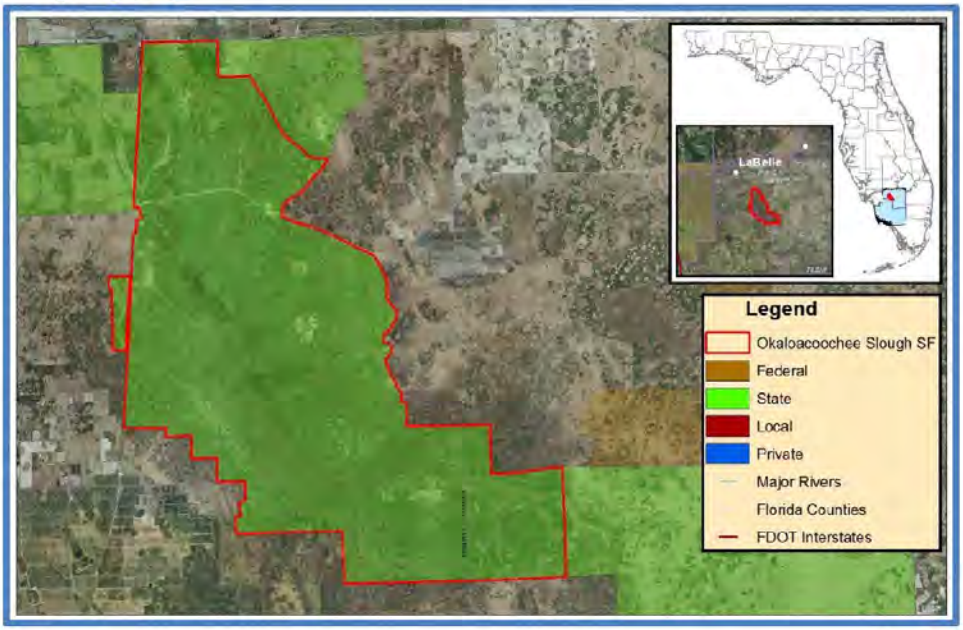
Review Team Members Present (voting)

- DRP: Matthew Hodge
- FWC: Dawn Dodds
- FFS: Bill Korn
- DEP: Greg O'Connell
- SWCD:
- Local gov't: Christal Segura
- Conservation organization: Patsy McDonald
- Private land manager:

Other Non-Team Members Present (attending)

- Keith Singleton, DEP/DSL
- Dennis Giardina, FWC IPM

1.2 Property Map



1.3. Overview of Land Management Review Results

Is the property managed in accordance with the purposes for which it was acquired?

Yes = 6, No = 0

Are the management practices, including public access, in compliance with the management plan?

Yes = 6, No = 0

Table 1 shows the average scores received for each applicable category of review. *Field Review* scores refer to the adequacy of management actions in the field, while *Management Plan Review* scores refer to adequacy of discussion of these topics in the management plan. Scores range from 1 to 5 with 5 signifying excellence. For a more detailed key to the scores, please see *Appendix A*.

Table 1: Results at a glance.

Major Land Management Categories	Field Review	Management Plan Review
Natural Communities / Forest Management	4.50	4.38
Prescribed Fire / Habitat Restoration	4.42	4.49
Hydrology	4.27	2.79
Imperiled Species	4.00	4.06
Exotic / Invasive Species	4.28	4.42
Cultural Resources	4.58	4.67
Public Access / Education / Law Enforcement	4.29	4.09
Infrastructure / Equipment / Staffing	3.69	N/A

Color Code (See Appendix A for detail)

1.3.1 Consensus Commendations for the Managing Agency

The following commendations resulted from discussion and vote of the review team members:

1. The review team commends FFS for consistent and thorough post burn/fire monitoring. (6+, 0-)
2. The review team commends FFS for getting the majority of local staff through the DHR archeological resource monitor training. (6+, 0-)
3. The review team commends FFS for restoration activities that are occurring in the mesic flatwoods restoration sites, which have completed the replanting of 2,600 acres of South Florida slash pine largely from seed collected off the forest. (6+, 0-)
4. The review team commends FFS for staff commitment to locating, mapping, and treating invasive plants. (6+, 0-)
5. The review team commends FFS and FWC for supporting the wild hog hunting program that has contributed to a substantial reduction in hog damage on the forest. (6+, 0-)
6. The review team commends FFS for excellent work at construction and maintenance of the roads within the forest. (6+, 0-)

7. The review team commends FFS for increasing the average annual burn accomplishments on this forest. (6+, 0-)

8. The review team commends FFS for future recreation plans including bike paths and a dog training area. (6+, 0-)

1.3.2. Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of the review team members. The next management plan update should include information about how these recommendations have been addressed:

1. The review team recommends that FFS add additional invasive species prevention strategies to the management plan; such as adding signage or education about EDRR for python and tegu sightings. (6+, 0-)

   Managing Agency Response:

2. The review team recommends that FFS seek opportunities to improve general environmental, cultural, and invasive species interpretation at recreation trailheads and public access points. (6+, 0-)

   Managing Agency Response:

3. The review team recommends that FFS evaluate monitoring strategies to determine the presence of large, exotic reptiles on the forest. (6+, 0-)

   Managing Agency Response:

2. Field Review Details

2.1. Field Review Checklist Findings

The following items received high scores on the review team checklist, which indicates that management actions exceeded expectations.

1. **Natural Communities, specifically mesic flatwoods, wet flatwoods, wet prairie, basin marsh, depression marsh, slough marsh, strand swamp, dome swamp, mesic hammock, and hydric hammock:**
2. **Listed Species Protection and Preservation, specifically for Florida panther:**
3. **Natural resource survey/monitoring, specifically listed species or their habitat monitoring, fire effects monitoring, other habitat management effects monitoring, and invasive species survey and monitoring:**
4. **Cultural resources, specifically survey and protection/preservation:**
5. **Prescribed fire, specifically area being burned and quality:**

6. **Restoration, specifically mesic flatwoods restoration:**
7. **Forest management, specifically timber inventory, timber harvesting, reforestation, and site preparation:**
8. **Non-Native, Invasive & Problem Species, specifically prevention and control of plants, animals, pests and pathogens:**
9. **Hydrologic/geologic function, specifically roads/culverts, and ditches:**
10. **Ground water and Surface water monitoring, specifically for water quality and quantity:**
11. **Resource Protection, specifically boundary survey, gates and fencing, signage, and law enforcement presence:**
12. **Public Access, specifically roads and parking:**
13. **Environmental Education and Outreach, specifically habitat management activities, interpretive facilities and signs, recreational opportunities, and management of visitor impacts:**
14. **Management Resources, specifically buildings and equipment:**

2.2. Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 3.0 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. **The management plan update should include information on how these items have been addressed**:

The review team checklist scores did not identify items requiring improvement in the field.

2.3. Field Review Checklist and Scores

Field Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Mesic Flatwoods	I.A.1	4	4	4	4	4	4			4.00
Wet Flatwoods	I.A.2	4	4	3	5	4	4			4.00
Wet Prairie	I.A.3	5	5	4	5	5	5			4.83
Basin Marsh	I.A.4	4	4	4	5	4	4			4.17
Depression Marsh	I.A.5	4	4	4	5	4	4			4.17
Slough Marsh	I.A.6	4	4	4	5	5	4			4.33
Strand Swamp	I.A.7	4	4	4	5	4	4			4.17
Dome Swamp	I.A.8	4	5	4	5	5	4			4.50
Mesic Hammock	I.A.9	5	5	4	5	5	4			4.67
Hydric Hammock	I.A.10	5	5	4	4	5	4			4.50
									Natural Communities Average Score	4.33
Listed Species: Protection & Preservation (I.B)										
Animals	I.B.1	3	4	4	4	4	4			3.83
Panther	I.B.1.a	5	5	4	4	4	4			4.33
Plants	I.B.2	4	4	3	4	4	4			3.83

									Listed Species Average Score	4.00
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	4	5	4	5	5	4			4.50
Other non-game species or their habitat monitoring	I.C.3	4	4	X	4	3	4			3.80
Fire effects monitoring	I.C.4	5	5	5	5	5	4			4.83
Other habitat management effects monitoring	I.C.5	4	5	3	4	4	4			4.00
Invasive species survey / monitoring	I.C.6	5	5	4	5	5	5			4.83
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	4	5	4	4	5	5			4.50
Protection and preservation	II.B	5	5	4	4	5	5			4.67
									Cultural Resources Average Score	4.58
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A1	4	4	4	4	4	4			4.00
Frequency	III.A.2	3	3	3	3	3	3			3.00
Quality	III.A.3	5	5	5	5	5	5			5.00
									Resource Management, Prescribed Fire Average Score	4.00
Restoration (III.B)										
Mesic Flatwoods Restoration	III.B.1	5	5	5	5	4	5			4.83
									Restoration Average Score	4.83
Forest Management (III.C)										
Timber Inventory	III.C.1	5	5	5	4	4	5			4.67
Reforestation/Afforestation	III.C.3	5	5	4	4	4	5			4.50
Site Preparation	III.C.4	5	5	5	4	5	5			4.83
									Forest Management Average Score	4.67
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1. a	5	5	5	5	5	5			5.00
prevention - animals	III.D.1. b	3	4	4	5	4	3			3.83
prevention - pests/pathogens	III.D.1. c	3	X	5	5	4	3			4.00
Control										
control - plants	III.D.2. a	5	5	4	5	5	3			4.50
control - animals	III.D.2. b	5	4	4	5	5	3			4.33
control - pest/pathogens	III.D.2 .c	3	4	3	5	5	X			4.00
									Non-Native, Invasive & Problem Species Average Score	4.28
Hydrologic/Geologic function Hydro-Alteration (III.E.1)										
Roads/culverts	III.E.1. a	5	5	5	5	5	5			5.00
Ditches	III.E.1. b	4	5	4		5	5			4.60
									Hydrologic/Geologic function, Hydro-Alteration Average Score	4.80
Ground Water Monitoring (III.E.2)										
Ground water quantity	III.E.2. b	4	4	3	5	4	4			4.00
									Ground Water Monitoring Average Score	4.00
Surface Water Monitoring (III.E.3)										
Surface water quantity	III.F.3. b	4	4	3	5	4	4			4.00
									Surface Water Monitoring Average Score	4.00

Resource Protection (III.F)										
Boundary survey	III.F.1	5	5	4	4	5	4			4.50
Gates & fencing	III.F.2	5	5	4	4	5	4			4.50
Signage	III.F.3	4	5	4	5	4	4			4.33
Law enforcement presence	III.F.4	4	4	3	4	5	4			4.00
							Resource Protection Average Score			4.33
Adjacent Property Concerns (III.G)										
Land Use										
Inholdings/additions	III.G.2	3	4	4	4	4	4			3.83
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1. a	5	5	4	5	5	5			4.83
Parking	IV.1. b	5	4	4	4	5	4			4.33
Environmental Education & Outreach										
Wildlife	IV.2. a	4	4	4	4	4	3			3.83
Invasive Species	IV.2. b	3	5	4	4	3	3			3.67
Habitat Management Activities	IV.2. c	3	5	4	5	4	3			4.00
Interpretive facilities and signs	IV.3	4	5		5	4	4			4.40
Recreational Opportunities	IV.4	4	5	4	5	4	4			4.33
Management of Visitor Impacts	IV.5	4	5	5	5	4	4			4.50
							Public Access & Education Average Score			4.24
Management Resources (V.1, V.2, V.3. V.4)										
Maintenance										
Waste disposal	V.1.a	3	5	3	4	4	4			3.83
Sanitary facilities	V.1.b	3	4	3	4	4	4			3.67
Infrastructure										
Buildings	V.2.a	4	5	4	5	3	4			4.17
Equipment	V.2.b	4	4	4	5	4	3			4.00
Staff	V.3	3	4	4	3	3	3			3.33
Funding	V.4	4	4	4	3	2	2			3.17
							Management Resources Average Score			3.69
	Color Code:	Excellent		Above Average		Below Average		Poor		See Appendix A for detail
				Missing Vote		Insufficient Information				

3. Land Management Plan Review Details

3.1 Items Requiring Improvements in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than 3.0 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The next management plan update should address the checklist items identified below:

1. **Natural Communities, specifically strand swamp and hydric hammock, received below average scores. This is an indication that the management plan does not sufficiently address current or desired condition and/or future management actions to protect or restore natural communities.**

   Managing Agency Response:

2. **Non-native, Invasive & Problem Species, specifically prevention and control of pests/pathogens, received below average scores. This is an indication that the management plan does not sufficiently address prevention and control of invasive/problem species.**

   Managing Agency Response:

3. **Ground water and surface water monitoring, specifically for water quantity, received below average scores. This is an indication that the management plan does not sufficiently address water monitoring.**

   Managing Agency Response:

4. **Proposed managed area uses, specifically the proposed shooting range, received a below average score. This is an indication that the management plan does not sufficiently address to what degree this use is consistent with the purpose for which the property was acquired, or other restrictions.**

   Managing Agency Response:

3.2 Management Plan Review Checklist and Scores

Plan Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Mesic Flatwoods	I.A.1	5	5	5	5	5	5			5.00
Wet Flatwoods	I.A.2	5	5	5	5	5	5			5.00
Wet Prairie	I.A.3	5	5	5	5	5	5			5.00
Basin Marsh	I.A.4	5	5	5	5	5	5			5.00
Depression Marsh	I.A.5	5	5	5	5	5	5			5.00
Slough Marsh	I.A.6	5	5	5	5	5	5			5.00
Strand Swamp	I.A.7	2	1	1	5	2	2			2.17
Dome Swamp	I.A.8	5	5	5	5	5	5			5.00
Mesic Hammock	I.A.9	5	5	5	5	5	5			5.00
Hydric Hammock	I.A.10	2	2	2	2	2	2			2.00
									Natural Communities Average Score	4.42
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	4	5	4	3	3	5			4.00
Panther	I.B.1.a	4	5	4	3	3	5			4.00

Plants	I.B.2	4	5	4	4	3	5			4.17
									Listed Species Average Score	4.06
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	4	5	4	4	5	5			4.50
Other non-game species or their habitat monitoring	I.C.3	3	5		4	4	5			4.20
Fire effects monitoring	I.C.4	4	5	4	5	5	5			4.67
Other habitat management effects monitoring	I.C.5	4	5	4	4	4	5			4.33
Invasive species survey / monitoring	I.C.6	4	5	4	4	5	5			4.50
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	5	4	4	5	5			4.67
Protection and preservation	II.B	5	5	4	4	5	5			4.67
									Cultural Resources Average Score	4.67
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	4	5	4	4	5	5			4.50
Frequency	III.A.2	4	5	4	3	5	5			4.33
Quality	III.A.3	4	5		4	5	5			4.60
									Resource Management, Prescribed Fire Average Score	4.48
Restoration (III.B)										
Mesic Flatwoods Restoration	III.B.1	4	5	4	4	5	5			4.50
									Restoration Average Score	4.50
Forest Management (III.C)										
Timber Inventory	III.C.1	4	4	5	4	4	5			4.33
Reforestation/Afforestation	III.C.3	4	5	4	4	4	5			4.33
Site Preparation	III.C.4	4	4	5	4	4	5			4.33
									Forest Management Average Score	4.33
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1. a	3	5	5	5	5	5			4.67
prevention - animals	III.D.1. b	3	5	4	5	5	5			4.50
prevention - pests/pathogens	III.D.1. c	3	5	4	2	5	5			4.00
Control										
control - plants	III.D.2. a	4	5	4	5	5	5			4.67
control - animals	III.D.2. b	4	5	4	5	5	5			4.67
control - pest/pathogens	III.D.2.c	3	5	4	2	5	5			4.00
									Non-Native, Invasive & Problem Species Average Score	4.42
Hydrologic/Geologic function, Hydro-Alteration (III.E.1)										
Roads/culverts	III.E.1. a	3	5	4	4	5	5			4.33
Ditches	III.E.1. b	3	5	4		5	5			4.40
									Hydrologic/Geologic function, Hydro-Alteration Average Score	4.37
Ground Water Monitoring (III.E.2)										
Ground water quantity	III.E.2. b	3	1	1	1	1	5			2.00
									Ground Water Monitoring Average Score	2.00
Surface Water Monitoring (III.E.3)										

Surface water quantity	III.E.3. b	3	1	1	1	1	5			2.00
								Surface Water Monitoring Average Score		2.00
Resource Protection (III.F)										
Boundary survey	III.F.1	4	5	4	4	5	5			4.50
Gates & fencing	III.F.2	3	5	4	4	5	5			4.33
Signage	III.F.3	3	5	4	4	5	5			4.33
Law enforcement presence	III.F.4	4	5	4	4	5	5			4.50
								Resource Protection Average Score		4.42
Adjacent Property Concerns (III.G)										
Land Use										
Inholdings/additions	III.G.2	3	5	4	4	5	3			4.00
Discussion of Potential Surplus Land Determination	III.G.3	3	3	3	4	3	3			3.17
Surplus Lands Identified?	III.G.4	3	3	5	4	5	3			3.83
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1. a	5	5	4	4	5	4			4.50
Parking	IV.1. b	5	5	4	4	5	4			4.50
Environmental Education & Outreach										
Wildlife	IV.2. a	3	3	3	3	3	4			3.17
Invasive Species	IV.2. b	3	3	3	3	3	4			3.17
Habitat Management Activities	IV.2. c	3	3	3	3	3	4			3.17
Interpretive facilities and signs	IV.3	3	3		4	3	4			3.40
Recreational Opportunities	IV.4	5	5	4	4	4	4			4.33
Management of Visitor Impacts	IV.5	4	4	4	4	3	4			3.83
								Public Access & Education Average Score		3.76
Managed Area Uses (VI.A, VI.B)										
Existing Uses										
Recreational Trail Use	VI.A.1	5	5	4	5	4	4			4.50
Camping / Primitive	VI.A.2	4	5	4	5	4	4			4.33
Cattle Lease	VI.A.3	4	4	4	4	2	4			3.67
Hunting	VI.A.4	5	5	4	5	6	4			4.83
Fishing	VI.A.5	5	3	4	4	2	3			3.50
Equestrian Use	VI.A.6	4	5	4		3	4			4.00
Apiary	VI.A.7	4	5	4		3	4			4.00
Native Seed Collection	VI.A.8	5	5	4	5	3	3			4.17
Proposed Uses										
Bicycling	VI.B.1	4	5	4	5		3			4.20
Shooting Range	VI.B.2	2	2	2	5	1	3			2.50
Dog Training Area	VI.B.3	3	3	2	5	3	3			3.17

Color Code: Excellent | Above Average | Below Average | Poor | See Appendix A for detail

Missing Vote | Insufficient Information

Appendix A: Scoring System Detail

Explanation of Consensus Commendations:

Often, the exceptional condition of some of the property's attributes impress review team members. In those instances, team members are encouraged to offer positive feedback to the managing agency in the form of a commendation. The teams develop commendations generally by standard consensus processes or by majority vote if they cannot obtain a true consensus.

Explanation of Consensus Recommendations:

Subsection 259.036(2), F.S., specifically states that the managing entity shall consider the findings and recommendations of the land management review. We ask team members to provide general recommendations for improving the management or public access and use of the property. The teams discuss these recommendations and develop consensus recommendations as described above. We provide these recommendations to the managing agency to consider when finalizing the required ten-year management plan update. We encourage the manager to respond directly to these recommendations and include their responses in the final report when received in a timely manner.

Explanation of Field Review Checklist and Scores, and Management Plan Review Checklist and Scores:

We provide team members with a checklist to fill out during the evaluation workshop phase of the Land Management Review. The checklist is the uniform tool used to evaluate both the management actions and condition of the managed area, and the sufficiency of the management plan elements. During the evaluation workshop, team members individually provide scores on each issue on the checklist, from their individual perspective. Team members also base their evaluations on information provided by the managing agency staff as well as other team member discussions. Staff averages these scores to evaluate the overall conditions on the ground, and how the management plan addresses the issues. Team members must score each management issue 1 to 5: 1 being the management practices are clearly insufficient, and 5 being that the management practices are excellent. Members may choose to abstain if they have inadequate expertise or information to make a cardinal numeric choice, as indicated by an "X" on the checklist scores, or they may not provide a vote for other unknown reasons, as indicated by a blank. If a majority of members failed to vote on any issue, that issue is determined to be irrelevant to management of that property or it was inadequately reviewed by the team to make an intelligent choice. In either case staff eliminated the issue from the report to the manager.

Average scores are interpreted as follows:

Scores 4.0 to 5.0 are *Excellent*

Scores 3.0 to 3.99 are *Above Average*

Scores 2.0 to 2.99 are *Below Average*

Scores 1.0 to 1.99 are considered *Poor*

2021 Land Management Review Team Report for Okaloacoochee Slough State Forest

Table of Contents

1. Introduction

Section 259.036, F.S. requires a periodic on-site review of conservation and recreation lands titled in the name of the Board of Trustees to determine (1) whether the lands are being managed for the purposes for which they were acquired and (2) whether they are being managed in accordance with their land management plan adopted pursuant to s. 259.032, F.S. In cases where the managed areas exceed 1,000 acres in size, such a review must be scheduled at least every five years. In conducting this review, a statutorily constructed review team "shall evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions or archaeological features. The review shall also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan."

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Finally, each report may also contain an Appendix that lists individual team member comments. This is a compilation of feedback, concerns or other thoughts raised by individual team members, but not necessarily indicative of the final consensus reached by the Land Management Review Team.

1.1. Property Reviewed in this Report

Name of Site: Okaloacoochee Slough State Forest

Managed by: Department of Agriculture and Consumer Services, Florida Forest Service

Acres: 32,349 **County:** Collier and Hendry

Purpose(s) for Acquisition: To protect areas that are critical to maintaining South Florida's ecological integrity, and acquiring lands that are necessary for water management, water supply, and the conservation and protection of water resources.

Acquisition Program(s): SOR, P2000/CARL **Original Acquisition Date:** 8/3/95

Area Reviewed: Entire Property **Last Management Plan Approval Date:** 12/14/12

Review Date: 2/26/21

Agency Manager and Key Staff Present:

- Michael Weston, Manager

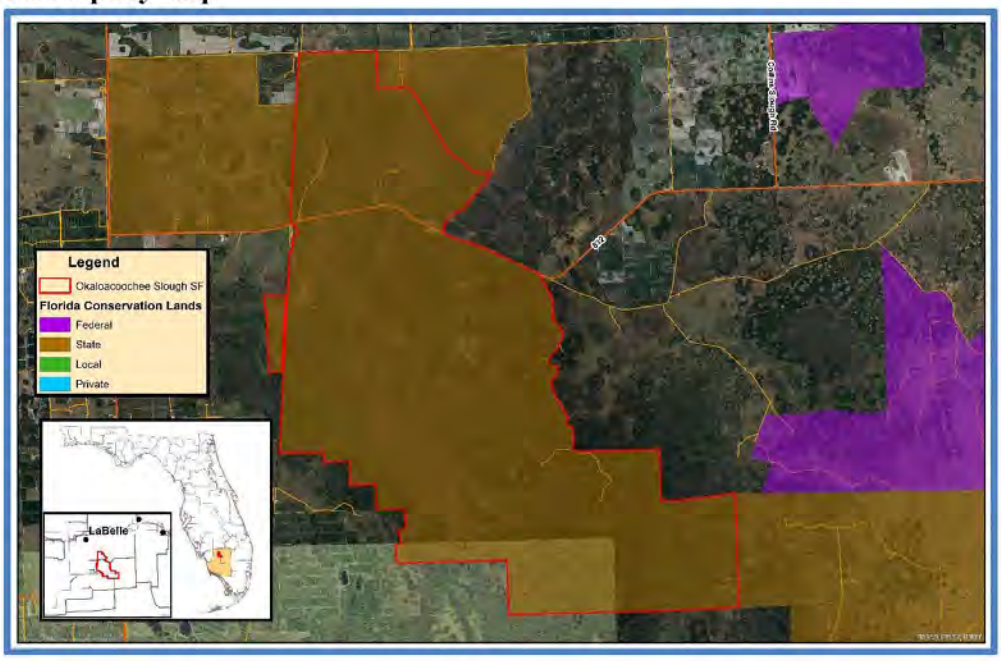
Review Team Members Present (voting)

- Matthew Hodge, DRP District
- Christal Segura, Local Gov't.
- Katelyn Horn, FWC
- Tori Gray, DEP District
- Clark Ryals, FFS
- Marie Dessources, SFWMD
- Conservation Org., None
- Private Land Manager, None

Other Non-Team Members Present (attending)

- Keith Singleton, DEP/DSL

1.2 Property Map



1.3. Overview of Land Management Review Results

Is the property managed for purposes that are compatible with conservation, preservation, or recreation?

Yes = 6, No = 0

Are the management practices, including public access, in compliance with the management plan?

Yes = 6, No = 0

Table 1 shows the average scores received for each applicable category of review. *Field Review* scores refer to the adequacy of management actions in the field, while *Management Plan Review* scores refer to adequacy of discussion of these topics in the management plan. Scores range from 1 to 5 with 5 signifying excellence. For a more detailed key to the scores, please see *Appendix A*.

Table 1: Results at a glance.

Major Land Management Categories	Field Review	Management Plan Review
Natural Communities / Forest Management	4.50	4.38
Prescribed Fire / Habitat Restoration	4.33	4.39
Hydrology	4.06	3.33
Imperiled Species	4.18	4.01
Exotic / Invasive Species	4.25	4.00
Cultural Resources	4.67	4.83
Public Access / Education / Law Enforcement	4.66	4.13
Infrastructure / Equipment / Staffing	3.91	N/A

Color Code (See Appendix A for detail)

Excellent | Above Average | Below Average | Poor

1.3.1 Consensus Commendations for the Managing Agency

The following commendations resulted from discussion and vote of the review team members:

1. The team commends the Florida Forest Service (FFS) for the improved, interpretive and informative signage on the boardwalk and elsewhere in the forest. (6+, 0-)
2. The team commends the FFS staff for the overall level of effort to control and maintain the exotic plant species at the forest. (6+, 0-)
3. The team commends the staff for the condition of the main access roads at the forest. (6+, 0-)

1.3.2. Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The next management plan update should include information about how these recommendations have been addressed:

There were no consensus recommendations.

2. Field Review Details

2.1 Field Review Checklist Findings

The following items received high scores on the review team checklist, which indicates that management actions exceeded expectations.

1. **Natural communities, specifically mesic flatwoods, wet prairie, basin marsh, depression marsh, slough marsh, strand swamp, dome swamp, mesic hammock, and hydric hammock.**

2. **Listed Species Protection and Preservation, animals and plants in general, and specifically Florida panther.**
3. **Natural resource survey/monitoring resources, specifically fire effects monitoring, other habitat management effects monitoring, and invasive species survey and monitoring.**
4. **Cultural resources, specifically survey and protection/preservation.**
5. **Resource management (prescribed fire), specifically frequency, and quality.**
6. **Restoration, specifically mesic flatwoods restoration.**
7. **Forest management, specifically timber inventory, timber harvesting, reforestation, and site preparation.**
8. **Non-native, invasive, and problem species, specifically prevention and control of plants, and animals, and prevention of pests/pathogens.**
9. **Hydrologic/geologic function, specifically roads/culverts, and ditches.**
10. **Ground water monitoring, specifically for water quantity.**
11. **Resource protection, specifically boundary survey, gates and fencing, signage, and law enforcement presence.**
12. **Adjacent property concerns, land use, specifically inholdings and additions.**
13. **Public access, specifically roads, and parking.**
14. **Environmental education and outreach, specifically wildlife, invasive species, habitat management activities, interpretive facilities and signs, recreational opportunities, and management of visitor impacts.**
15. **Management resources, specifically waste disposal, and buildings.**

2.2. Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 3.0 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. **The management plan update should include information on how these items have been addressed:**

The review team scores did not identify items requiring improvement actions in the field.

2.3. Field Review Checklist and Scores

3. Land Management Plan Review Details

Field Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Mesic Flatwoods	I.A.1	5	3	5	4	5	5			4.50
Wet Flatwoods	I.A.2	4	3	4	4	4	4			3.83
Wet Prairie	I.A.3	5	3	5	5	5	5			4.67
Basin Marsh	I.A.4	4	4	5	5	5	5			4.67
Depression Marsh	I.A.5	4	4	5	5	5	5			4.67
Slough Marsh	I.A.6	5	5	5	4	5	5			4.83
Strand Swamp	I.A.7	4	4	5	5	5	5			4.67

Dome Swamp	I.A.8	5	4	5	5	5	5			4.83
Mesic Hammock	I.A.9	4	4	5	5	5	5			4.67
Hydric Hammock	I.A.10	4	4	5	4	5	5			4.50
								Natural Communities Average Score		4.58
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	4	3	5	4		5			4.20
Panther	I.B.1.a	4	4	5	4	4	5			4.33
Plants	I.B.2	3	3	5	4		5			4.00
								Listed Species Average Score		4.18
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	3	3	5	4	3	5			3.83
Other non-game species or their habitat monitoring	I.C.3	3	3	5	4	3	5			3.83
Fire effects monitoring	I.C.4	4	4	5	5	4	5			4.50
Other habitat management effects monitoring	I.C.5	4	3	5	4	x	4			4.00
Invasive species survey / monitoring	I.C.6	5	4	5	4	4	5			4.50
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	4	5	5	4	5			4.67
Protection and preservation	II.B	5	4	5	5	4	5			4.67
								Cultural Resources Average Score		4.67
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	3	4	4	4	4	4			3.83
Frequency	III.A.2	4	3	5	4	4	4			4.00
Quality	III.A.3	5	3	5	5	5	5			4.67
								Resource Management, Prescribed Fire Average Score		4.17
Restoration (III.B)										
Mesic Flatwoods Restoration	III.B.1	5	3	5	5	4	5			4.50
								Restoration Average Score		4.50
Forest Management (III.C)										
Timber Inventory	III.C.1	5	4	5	5	3	5			4.50
Timber Harvesting	III.C.2	5	4	4	5	4	5			4.50
Reforestation/Afforestation	III.C.3	5	4	5	5	3	5			4.50
Site Preparation	III.C.4	5	4	4	5	3	x			4.20
								Forest Management Average Score		4.43
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1.a	4	4	5	5	4	5			4.50
prevention - animals	III.D.1.b	5	3	5	4	4	5			4.33
prevention - pests/pathogens	III.D.1.c	5	3	5	4	3	5			4.17
Control										
control - plants	III.D.2.a	4	3	5	5	4	5			4.33
control - animals	III.D.2.b	4	3	5	5	4	5			4.33
control - pest/pathogens	III.D.2.c	4	3	5	4	3	4			3.83

							Non-Native, Invasive & Problem Species Average Score			4.25
Hydrologic/Geologic function Hydro-Alteration (III.E.1)										
Roads/culverts	III.E.1.a	5	4	5	5	4	5			4.67
Ditches	III.E.1.b	5	3	5	5	x	4			4.40
							Hydrologic/Geologic function, Hydro-Alteration Average Score			4.53
Ground Water Monitoring (III.E.2)										
Ground water quantity	III.E.2.b	5	3	5	4	x	x			4.25
							Ground Water Monitoring Average Score			4.25
Surface Water Monitoring (III.E.3)										
Surface water quantity	III.F.3.b	x	3	4	4	3	3			3.40
							Surface Water Monitoring Average Score			3.40
Resource Protection (III.F)										
Boundary survey	III.F.1	5	4	5	5	x	5			4.80
Gates & fencing	III.F.2	5	5	5	5	4	5			4.83
Signage	III.F.3	5	5	5	5	5	5			5.00
Law enforcement presence	III.F.4	5	5	4	5	4	5			4.67
							Resource Protection Average Score			4.83
Adjacent Property Concerns (III.G)										
Land Use										
Inholdings/additions	III.G.2	5	5	4	5	x	5			4.80
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1.a	5	5	4	5	4	5			4.67
Parking	IV.1.b	5	4	5	5	3	5			4.50
Environmental Education & Outreach										
Wildlife	IV.2.a	5	4	4	4	4	5			4.33
Invasive Species	IV.2.b	5	4	4	4	4	5			4.33
Habitat Management Activities	IV.2.c	5	4	3	5	4	5			4.33
Interpretive facilities and signs	IV.3	5	5	4	5	4	5			4.67
Recreational Opportunities	IV.4	5	5	5	4	4	5			4.67
Management of Visitor Impacts	IV.5	5	3	4	5	x	5			4.40
							Public Access & Education Average Score			4.49
Management Resources (V.1, V.2, V.3. V.4)										
Maintenance										
Waste disposal	V.1.a	5	4	4	5	3	5			4.33
Sanitary facilities	V.1.b	5	4	3	4	2	4			3.67
Infrastructure										
Buildings	V.2.a	5	4	4	4	3	4			4.00
Equipment	V.2.b	5	4	4	4	2	4			3.83
Staff	V.3	4	3	4	3	3	4			3.50
Funding	V.4	5	3	3	3	3	4			3.50
							Management Resources Average Score			3.81

3.1 Items Requiring Improvements in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than 3.0 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The next management plan update should address the checklist items identified below:

1. ***Surface Water Monitoring, specifically quality, received a below average score. This is an indication that the management plan does not sufficiently address surface water quality monitoring.***

   Managing Agency Response: ***The Florida Forest Service will work with the South Florida Water Management District to plan and implement a surface water quality monitoring plan.***

2. ***Adjacent Property Concerns, specifically discussion of potential surplus land determination, received a below average score. This is an indication that the management plan does not sufficiently address adjacent property and/or surplus lands.***

   Managing Agency Response: ***The next land management plan update will include a better discussion of adjancent property concerns and potential surplus lands determination. The processes used for determinations will be explained. Managed area uses, specifically the proposed shooting range, received a below average score. This is an indication that the management plan does not sufficiently address managed area uses.***

3. ***Managed area uses, specifically the proposed shooting range, received a below average score. This is an indication that the management plan does not sufficiently address managed area uses.***

   Managing Agency Response: ***No suitable location was found. A shooting range has been determined to be an incompatible use. The shooting range will not be included in the next land management plan update.***

3.2 Management Plan Review Checklist and Scores

Plan Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Mesic Flatwoods	I.A.1	5	3	5	5	5	5			4.67
Wet Flatwoods	I.A.2	4	3	5	5	4	5			4.33
Wet Prairie	I.A.3	4	3	5	5	4	5			4.33
Basin Marsh	I.A.4	3	3	5	5	4	5			4.17
Depression Marsh	I.A.5	3	4	5	5	4	5			4.33

Slough Marsh	I.A.6	4	5	5	5	4	5			4.67
Strand Swamp	I.A.7	3	4	5	2	4	5			3.83
Dome Swamp	I.A.8	4	4	5	5	4	5			4.50
Mesic Hammock	I.A.9	5	4	5	5	4	5			4.67
Hydric Hammock	I.A.10	4	4	5	2	4	5			4.00
									Natural Communities Average Score	4.35
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	3	3	5	4		5			4.00
Panther	I.B.1.a	3	3	5	3	4	5			3.83
Plants	I.B.2	4	3	5	4		5			4.20
									Listed Species Average Score	4.01
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	3	3	4	4	3	5			3.67
Other non-game species or their habitat monitoring	I.C.3	4	3	4	5	3	5			4.00
Fire effects monitoring	I.C.4	3	4	5	5	4	5			4.33
Other habitat management effects monitoring	I.C.5	3	3	4	4		5			3.80
Invasive species survey / monitoring	I.C.6	5	4	4	4	4	5			4.33
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	4	5	5	5	5			4.83
Protection and preservation	II.B	5	4	5	5	5	5			4.83
									Cultural Resources Average Score	4.83
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	5	4	5	4	5	5			4.67
Frequency	III.A.2	5	3	5	4	5	5			4.50
Quality	III.A.3	5	3	5	5	5	5			4.67
									Resource Management, Prescribed Fire Average Score	4.61
Restoration (III.B)										
Mesic Flatwoods Restoration	III.B.1	4	3	4	5	4	5			4.17
									Restoration Average Score	4.17
Forest Management (III.C)										
Timber Inventory	III.C.1	4	4	5	5	4	5			4.50
Timber Harvesting	III.C.2	4	4	5	5	4	5			4.50
Reforestation/Afforestation	III.C.3	4	4	5	5	4	5			4.50
Site Preparation	III.C.4	4	4	4	5	3	5			4.17
									Forest Management Average Score	4.42
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.E.1.a	3	4	5	4	5	5			4.33
prevention - animals	III.E.1.b	3	3	5	4	4	5			4.00
prevention - pests/pathogens	III.E.1.c	3	3	5	4	1	5			3.50
Control										

control - plants	III.E.2.a	3	3	5	5	5	5			4.33
control - animals	III.E.2.b	3	3	5	5	4	5			4.17
control - pest/pathogens	III.E.2.c	3	3	5	5	1	5			3.67
								Non-Native, Invasive & Problem Species Average Score		4.00
Hydrologic/Geologic function, Hydro-Alteration (III.E.1)										
Roads/culverts	III.F.1.a	5	4	5	4	4	5			4.50
Ditches	III.F.1.b	5	3	5	4		5			4.40
								Hydrologic/Geologic function, Hydro-Alteration Average Score		4.45
Ground Water Monitoring (III.E.2)										
Ground water quantity	III.F.2.b	5	2	5	2	2	3			3.17
								Ground Water Monitoring Average Score		3.17
Surface Water Monitoring (III.E.3)										
Surface water quantity	III.F.3.b	1	2	4	2	2	3			2.33
								Surface Water Monitoring Average Score		2.33
Resource Protection (III.F)										
Boundary survey	III.G.1	5	4	5	4	2	5			4.17
Gates & fencing	III.G.2	5	4	5	4	2	5			4.17
Signage	III.G.3	5	4	5	4	2	5			4.17
Law enforcement presence	III.G.4	5	4	4	5	2	5			4.17
								Resource Protection Average Score		4.17
Adjacent Property Concerns (III.G)										
Land Use										
Inholdings/additions	III.H.2	5	3	5	4		5			4.40
Discussion of Potential Surplus Land Determination	III.H.3	1	1	3	2	1	4			2.00
Surplus Lands Identified?	III.H.4	5	4	5	5	5	5			4.83
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1.a	5	5	5	5	3	5			4.67
Parking	IV.1.b	3	4	5	5	3	5			4.17
Environmental Education & Outreach										
Wildlife	IV.2.a	5	4	5	3	2	5			4.00
Invasive Species	IV.2.b	5	4	5	3	2	5			4.00
Habitat Management Activities	IV.2.c	4	4	4	3	2	5			3.67
Interpretive facilities and signs	IV.3	5	4	4	4	2	5			4.00
Recreational Opportunities	IV.4	5	4	5	4	4	5			4.50
Management of Visitor Impacts	IV.5	4	4	4	4	1	5			3.67
								Public Access & Education Average Score		4.08
Managed Area Uses (VI.A, VI.B)										
Existing Uses										
Recreational Trail Use	VI.A.1	5	5	5	5	4	5			4.83
Camping / Primitive	VI.A.2	5	5	5	5	4	5			4.83
Cattle Lease	VI.A.3	2	2	4	5	3	5			3.50

Hunting	VI.A.4	5	2	5	5	4	5			4.33
Fishing	VI.A.5	5	3	3	5	4	5			4.17
Equestrian Use	VI.A.6	5	3	5	5	4	5			4.50
Apiary	VI.A.7	5	4	5	5	4	5			4.67
Native Seed Collection	VI.A.8	4	1	5	5	4	5			4.00
Proposed Uses										
Bicycling	VI.B.1	5	5	5	5	4	5			4.83
Shooting Range	VI.B.2	2	1	4	3		4			2.80
Dog Training Area	VI.B.3	5	3	5	5	4	5			4.50

Color Code: Excellent | Above Average | Below Average | Poor | See Appendix A for detail

Missing Vote | Insufficient Information

Appendix A: Scoring System Detail

Explanation of Consensus Commendations:

Often, the exceptional condition of some of the property's attributes impress review team members. In those instances, team members are encouraged to offer positive feedback to the managing agency in the form of a commendation. The teams develop commendations generally by standard consensus processes or by majority vote if they cannot obtain a true consensus.

Explanation of Consensus Recommendations:

Subsection 259.036(2), F.S., specifically states that the managing entity shall consider the findings and recommendations of the land management review. We ask team members to provide general recommendations for improving the management or public access and use of the property. The teams discuss these recommendations and develop consensus recommendations as described above. We provide these recommendations to the managing agency to consider when finalizing the required ten-year management plan update. We encourage the manager to respond directly to these recommendations and include their responses in the final report when received in a timely manner.

Explanation of Field Review Checklist and Scores, and Management Plan Review Checklist and Scores:

We provide team members with a checklist to fill out during the evaluation workshop phase of the Land Management Review. The checklist is the uniform tool used to evaluate both the management actions and condition of the managed area, and the sufficiency of the management plan elements. During the evaluation workshop, team members individually provide scores on each issue on the checklist, from their individual perspective. Team members also base their evaluations on information provided by the managing agency staff as well as other team member discussions. Staff averages these scores to evaluate the overall conditions on the ground, and how the management plan addresses the issues. Team members must score each management issue 1 to 5: 1 being the management practices are clearly insufficient, and 5 being that the management practices are excellent. Members may choose to abstain if they have inadequate expertise or information to make a cardinal numeric choice, as indicated by an "X" on the checklist scores, or they may not provide a vote for other unknown reasons, as indicated by a blank. If a majority of members failed to vote on any issue, that issue is determined to be irrelevant to management of that property or it was inadequately reviewed by the team to make an intelligent choice. In either case staff eliminated the issue from the report to the manager.

Average scores are interpreted as follows:

Scores 4.0 to 5.0 are *Excellent*

Scores 3.0 to 3.99 are *Above Average*

Scores 2.0 to 2.99 are *Below Average*

Scores 1.0 to 1.99 are considered *Poor*

Exhibit S

Compliance
with
Local Comprehensive Plans

(Collier & Hendry Counties)

Florida Forest Service
(850) 681-5800

The Conner Building
3125 Conner Boulevard
Tallahassee, Florida 32399-1650

Florida Department of Agriculture and Consumer Services
Commissioner Wilton Simpson

December 26, 2024

Collier County Comprehensive Planning Section
2800 Horseshoe Drive N.
Naples, FL 34104
(239) 252-2400

RE: Okaloacoochee Slough State Forest 10-Year Land Management Plan

To Whom It May Concern,

Greetings from the Florida Forest Service (FFS). Attached is a copy of the Ten-Year Land Management Plan and Exhibits for Okaloacoochee Slough State Forest, prepared in accordance with F.S. 253.034. Please review the draft plan at your earliest convenience and reply as to whether the plan is consistent with Collier County's Comprehensive Plan.

Please address all correspondence concerning the Management Plan on official letterhead to the above mailing address or via e-mail. I can be reached by telephone at (850) 681-5889 or by email at Emily.Marsh@fdacs.gov if you have any questions.

Thank you for assisting us in managing Okaloacoochee Slough State Forest resources through a stewardship ethic to ensure they are available for future generations.

Sincerely,

Emily Marsh
State Lands Management Planner
Forest Management Bureau
Florida Forest Service

HENDRY COUNTY PLANNING
& ZONING DEPARTMENT
POST OFFICE BOX 2340 • 640 S. MAIN STREET • LABELLE, FLORIDA 33975 • (863) 675-5240 • FAX: (863) 674-4194

January 14, 2025

Emily Marsh
State Lands Management Planner
Florida Forest Service
(850) 681-5889

Re: Okaloacoochee Slough WMA Management Plan

Dear Ms. Emily Marsh:

Hendry County is pleased to provide a review of the Florida Forest Service Okaloacoochee Slough 10-Year Land Management Plan. Planning Department staff finds that the Okaloacoochee Slough Land Management Plan is in compliance with the Hendry County Comprehensive Plan.

Thank you for the opportunity to contribute and to review the proposed management plan. If you have questions or need additional information, we can be reached at 863-675-5240 Monday– Friday 8am- 5pm.

Sincerely,

Ryan Alexander,
Director of Planning and Community Development
Hendry County BOCC

Exhibit T

State Forest Management Plan
Advisory Group Summary

Management Plan Advisory Group Public Hearing
Okaloacoochee Slough State Forest
10-Year Land Management Plan

November 19, 2024
10:30 A.M.

Meeting Minutes

MPAG Members Present:

• Michael Joel	Caloosahatchee Forestry Center Manager, Florida Forest Service (FFS)
• Joe Bozzo	Science Supervisor, South Florida Water Management District
• Josiah Freese	Representing Ryder Hochmuth, Florida Fish and Wildlife Commission
• Margaret England	Representative, Hendry, and Glades County Audubon Society
• Jamie French	Representing Representative McDaniel, Collier County Commissioner

MPAG Members Not Present:

• Conor Egan	Local Soil and Water Conservation District Representative
• Ivan Howard	Local Property Owner
• Dane Scofield	Local Property Owner
• Representative Karson Turner	Hendry County Commissioner

FFS Staff:

• Alan Davis	Land Planning Coordinator
• Brian Camposano	Forest Management Assistant Bureau Chief
• Michael Weston	Caloosahatchee Forestry Center Forestry Resource Administrator
• Thomas Gonzalez	Forest Area Supervisor
• James Kavanaugh	Forester
• Michael Knight	Biological Scientist III
• Emily Marsh	Land Management Planner

Guests:

- William Hamilton

Public Meeting Start Time: 10:30 A.M.

- Land Planning Coordinator, Alan Davis (FFS) opened the meeting by introducing himself and explained the purpose and statutory framework for the Okaloacoochee Slough State Forest 10-Year Land Management Plan process. He explained that the Plan is not an annual work plan or detailed operational plan but provides general and conceptual guidance for management of Okaloacoochee Slough State Forest (OSSF) for the next 10-year period.
- Mr. Davis confirmed compliance with the Florida Sunshine Law advising MPAG members to not discuss the draft outside of the public meetings. He stated that the meetings are open to the public, recorded, and minutes taken.
- Mr. Davis stated that both MPAG meetings are open to the public and proper notice was given. The meetings were advertised in the Naples Daily News on October 25, 2024, and Lake Okeechobee News on October 30, 2024; Florida Administrative Register, FFS webpage, as well as posted at the kiosks in the Caloosahatchee Forestry Center. The meetings were announced at the Collier County Board of County Commissioners meeting and Hendry County Board of County Commissioners meeting on October 22, 2024.

He noted that the draft plan goes through various approvals before and after the MPAG meetings but that the FFS Director is granted final authority on changes to the draft plan. He described the day's two meetings: The first meeting is informational and provides opportunity for public comment; the 1:00 p.m. Workshop meeting provides opportunity for the MPAG members to discuss the public input and to share their personal comments on the draft plan. The public is welcome to attend the Workshop, but participation is limited to MPAG members.

- Mr. Davis then requested MPAG Member introductions and attendance was taken.
- Mr. Davis asked the advisory group to elect an MPAG chairperson. Michael Joel was elected to serve as chairperson.
- Mr. Davis asked if there are any questions at this time. None followed.
- Mr. Davis then introduced Forestry Resource Administrator, Michael Weston who presented a PowerPoint presentation of the 10-Year Plan. Mr. Davis asked if there were any clarifying questions regarding the presentation. None followed.
- Mr. Camposano clarified that the audience may have seen references to another forest; however, everything content-wise reflected for OSSF. He continued to explain that the wheel is not reinvented structure for MPAGs and how we our presenting our plans. He concluded by apologizing if the group saw other forests, but this is all content on OSSF.
- Mr. Davis asked if there are any further questions. He then inquired about any speakers that wanted to speak and any additional public comment speaker forms that had not yet been collected. None followed.
- Mr. Davis then thanked everyone for participating and adjourned the public hearing portion of the meetings.

Public Meeting End Time: 11:03 A.M.

Management Plan Advisory Group Workshop Meeting
Okaloacoochee Slough State Forest
10-Year Land Management Plan

November 19, 2024
1:00 P.M.

Meeting Minutes

MPAG Members Present:

• Michael Joel	Caloosahatchee Forestry Center Manager, Florida Forest Service (FFS)
• Conor Egan	Local Soil and Water Conservation District Representative
• Joe Bozzo	Science Supervisor, South Florida Water Management District
• Josiah Freese	Representing Ryder Hochmuth, Florida Fish and Wildlife Commission
• Margaret England	Representative, Hendry, and Glades County Audubon Society
• Jamie French	Representing Representative McDaniel, Collier County Commissioner

MPAG Members Not Present:

• Ivan Howard	Local Property Owner
• Dane Scofield	Local Property Owner
• Representative Karson Turner	Hendry County Commissioner

FFS Staff:

• Alan Davis	Land Planning Coordinator
• Brian Camposano	Forest Management Assistant Bureau Chief
• Michael Weston	Caloosahatchee Forestry Center Forestry Resource Administrator
• Thomas Gonzalez	Forest Area Supervisor
• James Kavanaugh	Forester
• Michael Knight	Biological Scientist III
• Emily Marsh	Land Management Planner

Guests:

- None

Workshop Meeting Start Time: 1:00 P.M.

- Land Planning Coordinator, Alan Davis introduced himself and opened the OSSF MPAG Workshop. He reminded the MPAG members of the Florida Sunshine law and that the purpose of the workshop is to review and discuss the draft and that any edits made to the draft would be presented to the FFS Director for approval. He noted that minutes will be recorded and emailed to the MPAG members and will be approved via negative response review. MPAG member appointment will terminate when the final draft is submitted to the Acquisition Restoration Council. Forestry Resource Administrator Mike Weston was available to make proposed changes to the draft during the page-by-page review.
- Page 6: Mr. Freese suggested that long-term potential would be expanding the hiking trail system that already exists on OSSF and combining it with the Spirt of the Wild and Dinner Island Ranch (WMAs). Mr. Davis inquired if that pertains to for Goal 2. Mr. Freese stated that he thinks that would be under Goal 2. Mr. Davis stated that there is a section in the plan for planned recreation events. Mr. Freese agreed and stated that that would be better. Mr. Davis continued to explain that that suggestion would be more suitable there than in the Goals and Objectives section. He then suggested for Mr. Freese to hold his suggestion until they reach that section

within the plan, and they will address it then. Mr. Freese agreed. He then suggested for Goal 5, regarding hunting season quotas and bag limits, to reemphasize and implement language about submitting rule change proposals, as needed, to modify specific hunting season quotas and bag limits to address hunting issues. He explained that the way FWC does it, they have to submit rule change proposals and further suggested to add language in regarding rule change proposal prior to developing specific hunting season quotas and bag limits to better emphasize the process that FWC has to follow when they submit their change proposals. Mr. Davis stated that he wants to avoid misconception on rule because that is FWC's rule and not FFS's rule. He then stated that as long as FFS is cooperating with FWC, and FWC has updated brochures, dates, bag limits, quota season dates, etc. then it is not necessary to include into the ten-year plan about FWC's rule. Mr. Freese stated ok. Mr. Joel explained that they submit every year. Mr. Freese inquired Mr. Joel if they submit the rule change every year. Mr. Joel stated that they do. Mr. Freese stated ok and explained that Mr. Hochmuth just wanted to emphasize that we have to do it as part of the rule change, and not just because FWC is doing this. Mr. Joel agreed and stated that it also goes for comments; that comments go into the comments box and comes back to FFS sometime during the Springtime. Mr. Freese stated yes. Mr. Davis stated that as long as we maintain that relationship, then our process can remain separate from FWC's process. Mr. Freese agreed. Mr. Davis inquired if there was anything else on page 6.

- Page 7: Mr. Freese suggested adding in something about collaborating with partnering agencies to potentially help foster that relationship, specifically with OSSF to either Objective 1 or Objective 2. He further suggested to add something about including partners in burn planning for boundary units or governments adjacent public lands. Mr. Davis stated that there is a fire section in the plan and suggested that section would be better suited for that suggestion. Mr. Freese stated ok and that he didn't know if it would fall under that, prescribed burning managed lands specifically; or for objective 2, if it would be better state it there instead of in the prescribed fire section since it is more of a planning thing. Mr. Davis stated that, to him, it's more of an obligation. He asked is they agree regarding the burning section of the plan states how we cooperate with other agencies. He then stated that we can look at that section when we get there and see if Mr. Freese's suggestion would be appropriate. He then inquired Mr. Joel if they should change or reject it. Mr. Joel cautioned in having any wording that includes anyone outside of FFS. He continued to state that we do cooperate, but FFS is also the overseers of prescribed fires in the state of Florida. He then stated that he doesn't know if changing that would involving changing a much larger issue. Mr. Joel asked Mr. Freese if he is suggesting language that reads "discussing and implementing ideas on boundary burns". Mr. Freese stated yes and explained that FWC has their cooperative group to be able to work with FFS and vice versa, so if we don't have to call that out in the plan specifically, then that's fine. He continued to state that the boundary units would be beneficial just so that at the start of FFS' burn year, you can have some units to refer to for that year so that FWC can also make sure their units are prepped on their side to either potentially burn through that fence on the same day with FFS or to just be able to plan out FWC's efforts better. Mr. Davis agreed and stated that that's more of a local communication reference rather than something for the 10-year management plan. Mr. Joel added that this is a ten-year plan doesn't believe that such a specific idea meets the objective of a ten-year plan. Mr. Davis agreed and suggested to share FFS's 5 year and annual burn plans and see if that works there. He then stated that he believes that it is more about local communication. Mr. Joel suggested that he would look at it more as of a one-year plan rather than in the ten-year plan. Mr. Davis and Mr. Freese agreed. Mr. Joel inquired if everyone was in agreement. Mr. Freese and group agreed. Mr. Freese stated that he will let Ryder know. Mr. Joel stated that this is the strategic goal to maintain the forest rather what Mr. Freese was referring to is a specific one-year plan. Mr. Freese stated that Ryder's goal would be to embody it somehow into the ten-year management plan on the broader scale; but to have a heightened level of conversation rather than to "hey, make sure you send that". He continued to state that having this language in the plan would reflect, "hey, this is in our plan to cooperate or to communicate without partner agencies or boundaries". He then stated that if FWC feels that it is more pertinent to the one-year plan, then that is fine. Mr. Joel stated that we'll be looking at it more and more, but the ten-year plan is supposed to be broader, and more general because this reflects the bigger picture for the next ten years. Mr. Freese stated that they are going off based on FWC's ten-year management plans. He continued to state that the FWC management plans are very inclusive because they do annual work plans

but are not writing annual management plans. Therefore, FWC's ten-year management plans are very inclusive. He continued to state that that was the mindset that Ryder was approaching with his suggestions. Mr. Davis inquired if there were any changes. Mr. Joel stated no change, but to add it to the one-year plan.

- Page 8: Mr. Freese stated that for Goal 5, to either collaborate with adjacent landowners or early detection rapid response, and with species management because FWC can help FFS with that. He then suggested to add in a performance measure for it how to quantify FFS is collaborating with FWC's WMA staff. Mr. Davis stated that later on in the plan there is an invasive species control section that could already be in the plan addressing Mr. Freese's statement. Mr. Joel stated that it wouldn't be listed as an objective; that it would be something specific to talk about. Mr. Davis agreed and added that that is something that would be built into the plan, if so. Mr. Freese stated ok. He then asked what page it would be on. Mr. Davis stated that it will be on page 43 under the Invasive species control. Mr. Freese stated ok. Mr. Davis stated that once we get there, we can reassess what Mr. Freese is thinking and see if it makes sense to put something in there. Mr. Freese stated that sounds good. Mr. Davis then inquired if there was anything else on page 8.
- Page 24: Mr. Davis requested the link be deactivated due to the possibility of it being out of date. He further stated to keep the words but to deactivate the link. A member inquired the concern. Mr. Davis explained that there is a link in there that directs the reader to the webpage. He further stated that if it's not an active link then five years down the road, that link may be wrong. Mr. Camposano stated that there is a reason that we put that in there. He explained that we wanted to reference the Basin Management Action Plan, and right now, that is where you get to it. He further explained that it is the direct link, but that we could look into adjusting that to forward to DEP.gov and leaving the rest of that off. He then stated that because it does falls within a Basin Management Action Plan and wanted to provide a link to get there. He concluded by stating that we can change it to forward you to DEP instead. Mr. Davis agreed and referenced to what DEP had told him in the past about links. Mr. Camposano agreed and explained that we didn't have a better option at the time so we can deal with that on the back end; unless there is a strong opinion from the MPAG group today. Mr. Davis stated that it should be fine.
- Page 23: Mr. Freese requested to go back to page 23. He stated that for wetland restoration, obviously coordinated with Southwest Florida Water Management District at the end, but it could have some sort of language of communicated with FWC again. He further stated that FWC is going to be doing a lot of wetland restoration on OSSF and Spirit, hopefully one day as well. He then stated that when FFS begins the work that hopefully they can tie into that work/land space-based restoration effort. He further suggested language such as "or communicated with"...Mr. Joel read out loud that "FFS and SFWMD will work with FWC on hydrologic evaluation on the effects of major canals". Mr. Freese apologized and inquired where Mr. Joel sees that language on page 23. Mr. Joel stated that it is in the second paragraph under Water Protection. Mr. Freese apologized and said that we are good then and is satisfied with that language. Mr. Joel inquired if Water Management was ok with that language. Mr. Bozzo stated yes. Mr. Davis inquired if there was anything else on page 23.
- Page 25: Mr. Freese stated that the Mangrove fox squirrel has new been reclassified, so that it should be either the Big Cypress fox squirrel, which is still state threatened; or, it is Southern fox squirrel, which has been delisted. He further stated for FFS to check their records on that. He continued to state that it should be Cypress because it's south of Caloosahatchee so it should stay as state threatened, but the species name will change. Mr. Camposano stated that this is an instance where FFS will take his recommendation from the get-go. Mr. Freese stated ok, then it should reflect as Big Cypress fox squirrel. Mr. Davis instructed Mr. Weston to make track change within the document. Mr. Camposano inquired if there is a subspecies for the Big Cypress fox squirrel. Mr. Freese stated yes, but then back tracked and stated that only the common name needed to be changed.
- Page 24: Mr. Knight stated that back on page 24 it reads, "there are nine animals and one plant species with either state or federal listed status" and continued to state that that needs revision since there is an entire table there. He continued to state that maybe it should have read as "state, federal, and endangered status". Mr. Camposano agreed. Mr. Knight continued to state that he would go through and check on that and make sure

the numbers are correct. Mr. Davis directed Mr. Weston to place a comment indicating the group to double check.

- Page 25: Mr. Freese commented that some statuses are listed as LT and others are listed as FT for federal status. Mr. Davis inquired if there was anything else on pages 24 or 25.
- Page 32: Mr. Freese inquired if the hiking facilities listed are proposed or if they will be addressed later in the plan. Mr. Weston stated that the proposed facilities are listed a few pages later. Mr. Davis stated that these are all existing facilities.
- Page 33: Mrs. England inquired if the Collier to Polk Regional Trail will impact on OSSF, because she cannot determine its impacts based on the maps. Mr. Weston stated that he doesn't know either. He continued to explain that it's in the planning phases so there are a bunch of steps they will need to jump through. He then stated if they get funded then OSSF will get permissions, etc. Mrs. England stated that the one meeting she attended sounded like they would go up through Sears, Goodno, and Ortona Locks because they were talking about bicycles crossing over the old railroad tracks. She then stated that she walks and that would be poor engineering work. Mr. Weston agreed and reiterated that they have a bunch of steps to get through first such as state forest impacts and ARC before they can proceed with that kind of development. Mrs. England agreed and stated that this is the DEP project. Mr. Camposano inquired Mrs. England if DEP came up with a defined route or if it was a series of routes. Mrs. England stated that, to her, it looked like it was just going to be along the road or highway, that doesn't look very appealing to her; but, if it did go into different habitats and regions, even if it went across the Ortona Locks that would be a very interesting trail. Mr. Weston added that DEP did approach them and asked OSSF staff for comment. He further stated that there was some initial stuff about them cutting across the slough and FFS stated that that wouldn't be possible for a whole bunch of reasons. Mrs. England agreed and added that the old railroad bed holds historical significance, and you would have to go through all kinds of loopholes to even do anything with those old railroad tracks. Mr. Weston agreed and added that currently the project is at a standstill, but it is a good topic to bring up, but we don't have anything concrete. Mrs. England stated that as long as that is in the plan then that is good. Mr. Camposano added that if we get to a point where the county and planning development folks for that trail/purchase comes to FFS and says "Hey, we want to move forward with this. This is what we got funding for and one of the options is on the forest", then FFS will do a plan amendment to add that into the plan. Mr. Davis agreed. Mr. Camposano further explained that presently, we do not want to talk about something that is out of our control. However, if we get to that point, then we will do a plan amendment, because we are not sure what is happening with that yet. There are studies, maps, and potential routes, but other than that, it's been pretty quiet. Mrs. England stated ok. Mr. Davis inquired if there was anything else on page 33.
- Page 35: Mr. Davis indicated to Mr. Freese where the planned facilities starts on that page.
- Page 36: Mr. Freese suggested considering the feasibility of creating or connecting trails from Spirit of the Wild through the state forest to Dinner Island. Mr. Davis inquired the group of their thoughts. Mr. Freese inquired if FFS would be interested in doing something that big. He then explained that in FWC's plans, they will say "consider feasibility of doing this". Mr. Davis stated that you can't specifically lay out everything until it actually becomes proposed amendment. Mr. Freese stated ok. Mr. Camposano inquired Mr. Freese that he would like a statement in the plan that FFS would explore or work with FWC on potentially connecting...Mr. Freese interjected stating that is how they have their plans written and then agreed with Mr. Camposano. Mr. Camposano stated that it is up to the MPAG Committee to add that language. He continued to state that his opinion would be to add a simple statement at the end of the trails section as its own paragraph. If the MPAG Committee agrees to that then sure, as it will not tie FFS's hands to say that we will have to do that, but at the same time, it opens the door a little bit...Mr. Freese explained that for FWC plans, they can't really have the discussion with FFS if they don't have it in their plans to consider this or contemplate that. He then stated if FFS doesn't need that in their plans then we're probably fine. Mr. Davis stated that the first statement generally covers a broad assessment of opportunities. Mr. Camposano and Mr. Davis both stated that it is up to the MPAG Committee. Mr. Davis continued to state that it's up to the MPAG Committee to decide on the language and where it is in the plan; so, if you want to propose language and put it there, and everybody agrees with it, then we're good. Mr. Freese stated that he proposes to state, "Consider the feasibility of connecting existing

trails". Mr. Camposano stated that we do not want to talk about something that is super conceptual, but this is our paper property where there is a real likelihood to do something like that. Mr. Freese agreed. He then stated that Mr. Hochmuth wanted to address, especially for user groups between state forests in the area for the WMA; especially since it doesn't talk about equestrian use, or something like that, has been an issue. He then elaborated stating that there have been conversations regarding equestrian use on the southern roads from the camping areas to the lead area. He then asked if FFS has had conversations with Mr. Hochmuth about that. Mr. Weston stated that they have had conversations to say if FWC wants people going over to the FWC side, then Mr. Hochmuth would be open to it. Mr. Freese agreed and stated that he believes that is Mr. Hochmuth's biggest concern. Mr. Weston stated that there is language in the plan for hunting, that FFS examined additional access points in the WMA area. Mr. Joel inquired if we could propose something that we listed biking, hunting and equestrian use or if Mr. Hochmuth was only thinking about addressing one of them. Mr. Freese stated that he could not recall at the moment if he was pro-equestrian or anti-equestrian use in the WMA, but he remembered that horses came up in conversation, and talking about those access points between the forest and WMA. Mr. Joel stated that they are just trying to figure out where to put that in the plan. Mr. Camposano agreed and stated that if it's going to be more than hiking trails, then to just put trails. Mr. Joel agreed and then suggested to put it under recreation. Mr. Davis stated that they're all trails. Mr. Joel agreed. Mr. Freese inquired if access points are discussed under hunting. Mr. Weston stated that he placed the language further down as well, but they are currently in the trails section. Mr. Camposano stated that you can make the statement about equestrian and hiking trails, or any kind of trails here, and then a separate statement under the hunting section. Mr. Joel added that Mr. Weston did place the statement under Hunting and Fishing. Mr. Camposano stated that if the statement is already under Hunting and Fishing, then you can make this statement here and cut the rest of the statement but leave in where it says trails. Mr. Freese stated that sounds good to him. Mr. Camposano stated that the whole group needs to be ok with this change. Mr. Freese inquired that Mr. Camposano proposed to remove the second sentence of that statement because it was covered in hunting. Mr. Weston stated that hunting will just be hunting so outside of hunting...Mr. Joel joked that unless they are hunting with their bicycles with horseback drawing them. Mr. Weston stated that this statement wouldn't hurt FFS. He explained that they already have a hiking trail that goes to Mustang Grade. He then stated that half of the Twin Mills hiking trail when he first came out here, he commented how unique it was for the trail to go to FWC property. He reiterated that OSSF is ok to have something like that since they already have a trail leading to FWC property. He concluded by stating that this statement would allow for the non-hunting part to help us through. Mr. Davis stated that unless there is something proposed for horses (when, where, and how), we don't really want to say until it's truly proposed. Mr. Freese agreed. Mr. Davis inquired Mr. Freese if he was good with the language. Mr. Freese stated yes. Mr. Davis then asked if all of the other MPAG members were ok with the language. All members agreed.

- Page 37: Mrs. England inquired if there was funding with these proposed changes or additions to these campgrounds. Mr. Davis stated that these are proposed. Mrs. England gave the example of where it states about having a new RV campground, a new campground with two to four campsites. She further inquired if these were proposed or funded. Mr. Davis stated they are proposed. Mr. Camposano stated that while these are proposed, we are at a juncture with state government, where we have more funding than we ever had before. He further stated that the likelihood of implementing these are much more heightened than when we did these plans five years ago. He continued to state that while the plans are conceptual, FFS definitely has asked the field to build out an idea, especially if they're going through a plan development process right now where we know we will have a little bit of funding. He then stated that he hopes a lot of those proposed will be implemented as long as we have funding sticking around for a little while. He stated that given that the source of the funding, he hopes that the funding will be available for some time but hopes to get a lot of those items completed. Mr. Weston stated that just mechanism wise for the field if they do not propose it in the plan, and later on get an idea to do it, then we have to look into a plan amendment. Mr. Camposano stated that we don't want spending funds to slow us down. Mrs. England inquired if adding maintenance and upkeep and extra personnel involved into the proposal or is that something different. Mr. Weston stated that a maintenance proposal is different and would be reflected in the annual expenditures and our mindset has been

to look to make sure we have the people in place before we move forward with such a proposal. Mrs. England stated ok. She further stated that that is good management. Mr. Davis inquired if there was anything else on page 37.

- Page 39: Mr. Weston emphasized that this section is where they talk about the hunting access points. Mr. Freese thanked Mr. Weston and stated that he saw that. Mr. Joel stated that this is also where you would add burn unit plans. Mr. Freese inquired clarification that if he were to propose burn unit plan that he would propose it on page 40. He further stated that it can just be a simple sentence stating "share boundary proposals" or something like that. He further acknowledged that burn plans change pretty regularly, and sometimes FWC we don't burn in units, and we burn the next one. He then stated that the idea is that the collaboration is anticipated or remain in communication. Mr. Joel stated that you can easily add that under Fire Management. He then concluded that you can add it anywhere. Mr. Freese reiterated that a simple sentence about continuing collaboration with adjoining properties or others. Mr. Weston stated to go with adjoining properties so that they can capture adjacent, private landowners. Mr. Weston inquired the group is everyone was ok with that change. Mr. Davis inquired if there was anything else on page 39.
- Page 42: Mr. Davis pointed out to Mr. Freese where it states language about adjacent neighbor contacts, maintain a list of neighbors and notify them of prescribed burns. Mr. Freese stated that was all good, he just wanted to make sure that language was captured related to the planning stages of the logistics of prescribed burns to ensure FWC was on the same page as FFS. Mr. Davis stated ok
- Page 44: Mr. Knight stated that the first paragraph talks about adjacent landowners and FWC, which is a part of the previous paragraph related to primarily plants and questions raised earlier in the meeting. He further explained that our invasive species program works very closely with FWC, so a lot of that is coordinated with them. He exemplified the treatment plan for the new *Scleria* species, *Scleria eggersiana*, which already has active treatments going on across the border and in Dinner Island. He then stated that FFS received funding from FWC to get it all and there is no sense to leave some there to infest something else. Mr. Freese agreed and then inquired if there is anything being done in the southwest corner of the marsh. Mr. Knight stated yes. Mr. Freese inquired if it's being treated aerially. Mr. Knight stated no. He then stated that it's by ground and you can't do it by air since it's in little patches scattered all around. He explained that they will treat *Scleria lacustris* will be done by air because that's big, huge expanses of monoculture. But for instances that are a "search and destroy" type of operation, they need to be treated on the ground. He then agreed there are some bigger areas, but most cannot be reached by helicopter because that species likes to tuck itself under cypress domes and such. He concluded that, regardless, FFS is coordinating with FWC. Mr. Freese agreed.
- Page 46: Mr. Weston joked that they are not trying to make the list in Table 6 longer.
- Mr. Davis inquired about any questions regarding the exhibits. None followed.
- Mr. Davis read and asked if any MPAG members had comments regarding the public hearing conducted earlier. Mr. Joel stated that supports the plan and thanks the partners for helping us and continue to be in this together. Mr. French stated that it is a great plan and inquired to consider communication in the future regarding the fire and prescribed burns. He explained that at the local government level, they will get calls from citizens complaining from outside the area. He then suggested enhanced efforts with Emergency Management partners for publications. He then inquired consideration of their corridors within conservation programs and other communities, that when we have prescribed burns adjoining properties, to perhaps, have some additional inner agency cooperation or communication because they will be out with each other anyways. He then stated that most of the times, at the local level, they will contract out or work through FFS to supervise those prescribed burns. He concluded by stating that Commissioner McDaniel would like more hunting access. Mrs. England stated her pleasure in increased recreational opportunities and that it is a good plan. Mr. Bozzo stated that it is a great plan and that he has been involved in this project since the beginning with FWC, initially. He stated that FFS has done great things and he looks forward to more things in the future. Mr. Egan stated that he thinks the plan is good and agrees with everything that is within the plan. He suggested that for those who are unfamiliar with NRCS, that they have financial assistance programs for private landowners. He then suggested if there are adjacent landowners or ranchers with issues like Brazilian pepper or cogongrass that they don't have the means to treat, for them to reach out to NRCS for funding assistance. Mr. Freese said that it is a great

plan and thanked everyone for writing it and appreciate the ongoing collaboration between FFS and FWC. He then stated that he looks forward to growing that collaboration in the future, especially in regard to having better staffing in their areas. He thanked the group for the additions from FWC and expressed his appreciation in being at the MPAG.

- Mr. Davis noted that the draft will be submitted to the Acquisition and Restoration Council for review. Consideration by the Council will likely occur at the April 11, 2025, public meeting.
- Mr. Davis thanked everyone for their time and participation and adjourned the meeting.

Workshop Meeting End Time: 1:50 P.M.

Exhibit U

State Forest Summary Budget

	OKALOACOOCHEE SLOUGH STATE FOREST MGT. ONLY 23-24 EXPENDITURES	Percentages Based on Total Dollar Amount of Expenditures	Assessed Needed Funding Based Upon LMUAC Resource Management
Resource Management	**$ 49,833**	**24.57%**	**$ 170,522.14**
Exotic Species Control	$ 3,444	3.52%	$ 24,454.68
Prescribed Burning	$ 30,053	4.33%	$ 30,053.22
Cultural Resources Management	$ 120	0.12%	$ 850.72
Timber Management	$ 7,993	8.18%	$ 56,760.95
Hydrological Management	$ 478	0.49%	$ 3,391.02
	$ -		$ -
OTHER RESOURCE MANAGEMENT	$ 7,746	7.93%	$ 55,011.55
Listed Species Management	$ -		$ -
Forest Pest and Disease	$ -		$ -
Plant Conservation Program	$ -		$ -
State Forest Research Projects	$ -		$ -
Boundary Surveys for State Forests	$ -		$ -
Other Activities Also Include:	$ -		$ -
Liaison Community Meetings / Boundary Line Maintenance / Forest Inventories and Various Other Activities / Wildfire Suppression on State Forests			
			$ -
Administration	**$ -**	**7.56%**	**$ -**
Central Office Headquarters	$ -		$ -
District/Regions	$ -	7.56%	$ -
Units/Projects	$ -		$ -
	$ -		$ -
Support	**$ 32,706**	**33.47%**	**$ 232,262.22**
Land Management Planning	$ 1,582	1.62%	$ 11,235.32
Land Management Reviews	$ 247	0.25%	$ 1,756.55
Training/Staff Development	$ 8,266	8.46%	$ 58,704.26
Vehicle Purchase	$ 324	0.33%	$ 2,298.43
Vehicle Operations and Maintenance	$ 16,394	16.78%	$ 116,422.04
	$ -		$ -
OTHER SUPPORT	$ 5,892	6.03%	$ 41,845.62
State Forest Land Acquisition Support			$ -
Other Support Activities Also Include:	$ -		$ -
Computer Maintenance / Radio Maintenance / Technical Support / Management of Apiary and Cattle Leases / State Forest Leases, Lease Amendments, Easements and Other Various Activities	$ -		$ -
			$ -
Capital Improvements	**$ 19,509**	**19.96%**	**$ 138,546.36**
New Facility Construction	$ 2,165	2.22%	$ 15,374.97
Facility Maintenance	$ 17,344	17.75%	$ 123,171.39
			$ -
Visitor Services/Recreation	**$ 14,116**	**14.44%**	**$ 100,246.59**
Information/Education	$ 3,144	3.22%	$ 22,328.64
Operations	$ 10,972	11.23%	$ 77,917.95
			$ -
Law Enforcement	$ -	0.00%	$ -
Total	**$ 97,727.09**	**100.00%**	**$694,013.66**

Exhibit V

Arthropod Control Plans

(Collier & Hendry Counties)

600 North Road | Naples, FL 34104-3464 | P 239.436.1000 | F 239.436.1005

October 11, 2023

Michael Weston
Forestry Resource Administrator – Caloosahatchee Forestry Center
Florida Forest Service
Florida Department of Agriculture and Consumer Services
Tallahassee, FL 32399

Subject: Okaloacoochee Slough State Forest 10-year Land Management Plan

Dear Mr. Weston,

The Collier Mosquito Control District (CMCD/the District) appreciates the opportunity to provide input on the Okaloacoochee Slough State Forest (OSSF) 10-year Land Management Plan. The purpose of this letter is therefore to convey the District's current position on any potential mosquito control activities in Okaloacoochee Slough State Forest.

Based on a thorough evaluation of available data, it is CMCD's current position that mosquito control activities are not currently warranted within the Okaloacoochee Slough State Forest. The forest's geographical location falls outside the boundaries of our current service area. Our primary operational focus remains directed towards areas within or near residential areas, where nuisance and potential public health threats are more pronounced. However, it is worth noting that as our community continues to expand, implementing an Arthropod Control Plan may become advisable/necessary in the OSSF (at some point) to continue to provide valuable service in protecting public health and comfort. CMCD takes its integrated approach to mosquito management seriously and will work directly with FFS/OSSF management to develop a plan commensurate with all industry best practices for treatment within public lands.

We remain open to discussions regarding mosquito production in the forest, and nuisance and public health concerns that may arise in the future. CMCD looks forward to a continued partnership with the Florida Forest Service.

Sincerely,

Patrick Linn, MS, MSHAPI
Executive Director
plinn@cmcd.org

Hangar | P 239.436.1008 | F 239.436.1007
Immokalee Substation | 2050 Commerce Avenue, Unit #7 | Immokalee, FL 34142 | 239.867.3200

From: Weston, Michael
To: Marsh, Emily
Subject: FW: Arthropod Control Plan request
Date: Friday, September 15, 2023 5:20:16 PM
Attachments: Arthropod Plan Request Letter 2023 OSSF Hendry.pdf
FDACS Arthropod Control Plan.pdf
ACP - DEP Letter 8-31-16.pdf

Emily,

Here is the email to Hendry County. Forgot to copy you on the initial.

Michael Weston
Forestry Resource Administrator – Caloosahatchee Forestry Center
Florida Forest Service
Florida Department of Agriculture and Consumer Services

(239) 690-8021 Office
(239) 220-2404 Cell
(239) 690-8002 Fax
Michael.Weston@fdacs.gov

Caloosahatchee Forestry Center
10941 Palm Beach Blvd.
Fort Myers, FL 33905
www.fdacs.gov

From: Weston, Michael
Sent: Friday, September 15, 2023 5:06 PM
To: Tommy Vaughan <tvaughan@hendryfla.net>
Cc: Joel, Michael <Michael.Joel@fdacs.gov>
Subject: Arthropod Control Plan request

Good afternoon Mr. Vaughan,

Please find the attached letter and supporting documentation to discuss arthropod control on Okaloacoochee Slough State Forest for our 10-year Land Management Plan revision. I look forward to working with you to document the need or lack of need for this work.

Please let me know if you have any questions.

Sincerely,

Michael Weston
Forestry Resource Administrator – Caloosahatchee Forestry Center
Florida Forest Service
Florida Department of Agriculture and Consumer Services

(239) 690-8021 Office

(239) 220-2404 Cell
(239) 690-8002 Fax
Michael.Weston@fdacs.gov

Caloosahatchee Forestry Center
10941 Palm Beach Blvd.
Fort Myers, FL 33905
www.fdacs.gov

Exhibit W

Ground Water
Monitoring Wells Map

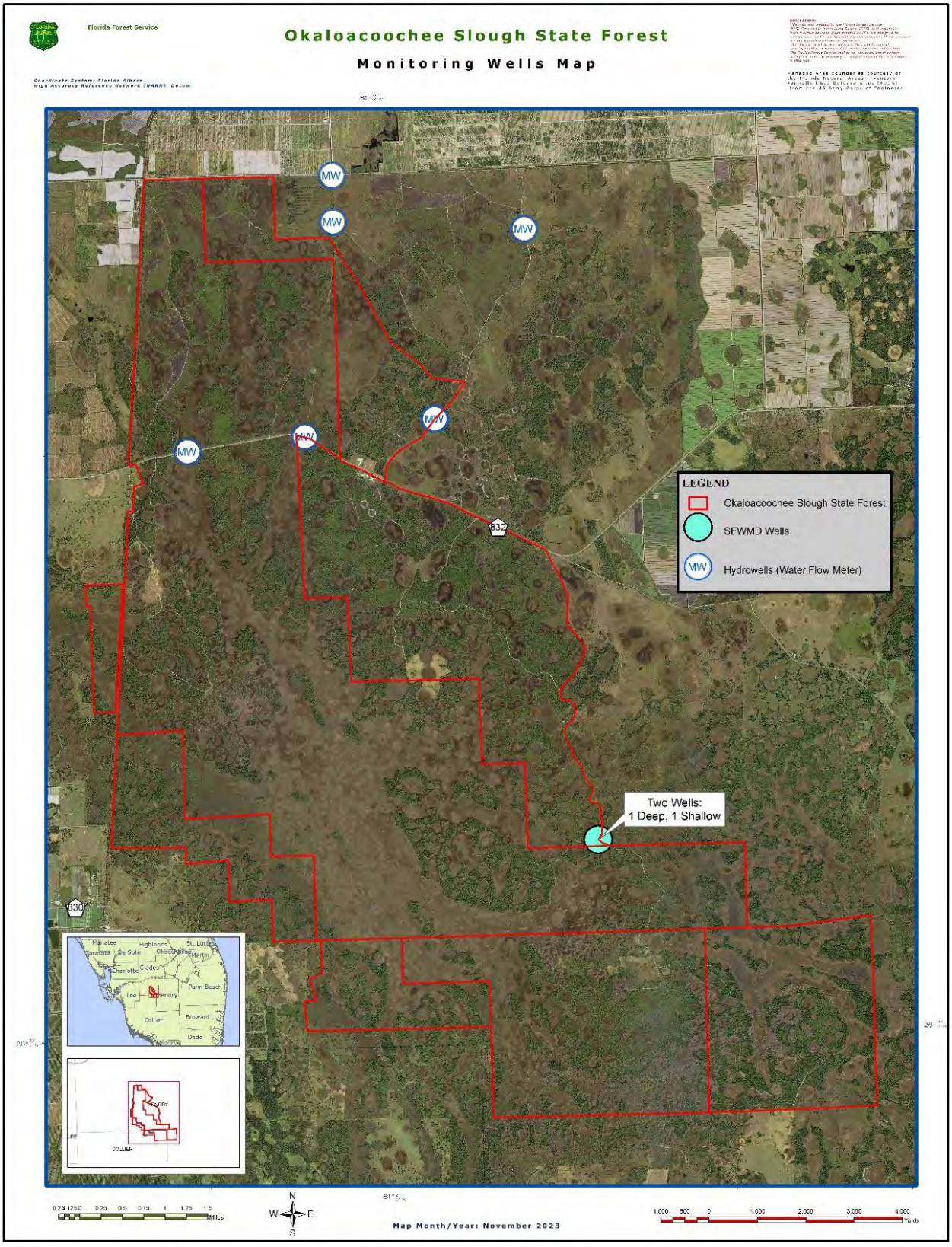

Florida Forest Service
Okaloacoochee Slough State Forest
Monitoring Wells Map
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
MW
LEGEND
Okaloacoochee Slough State Forest
SFWMD Wells
Hydrowells (Water Flow Meter)
Two Wells:
1 Deep, 1 Shallow
832
830
Hendry
Miles
Yards
N
W
E
S
Map Month/Year: November 2023

Exhibit X

Florida Forever Projects

Devil's Garden

Critical Natural Lands
Collier and Hendry Counties

Year Added to Priority List	*2002*
Project Acres	*82,995*
Acquired Acres	*35,353*
Cost of Acquired Acres	*$63,395,000*
Remaining Project Acres	*47,642*
2021 Assessed Value of Remaining Acres	*$174,110,470*

Purpose for State Acquisition

The Devil's Garden project will help to protect Florida's biodiversity at the species, natural community and landscape levels and fill a gap in a critical landscape corridor for the federally endangered Florida panther. Numerous records of panthers and other rare and threatened species have been noted on site. The project borders the Okaloacoochee Slough State Forest on the west and Dinner Island Wildlife Management Area to the south, providing crucial connectivity between existing conservation lands and increasing the amount of forestland available for sustainable management of natural resources.

General Description

The Devil's Garden project is in Hendry and Collier counties. The project's major parcel (71,608 acres) adjoins the eastern boundary of Okaloacoochee Slough State Forest and is roughly 18 miles long (east-west) and six miles wide (north-south). An additional parcel (6,445 acres) is adjacent to the northeastern boundary of the State Forest and Okaloacoochee Slough Wildlife Management Area. Two smaller parcels (3,328 acres and 1,127 acres) border the southwestern boundary of the state forest.

Devil's Garden is a huge tract of ranch land that has been heavily impacted by pasture conversion and other agricultural activities. Non-forested wetlands, including basin marsh, depression marsh, swale and wet prairie, make up the dominant natural communities still present on the property. Mesic and wet flatwoods have been mostly cleared and converted to pasturelands. Prairie hammocks were scattered throughout the property and formed irregularly shaped forests, usually with basin and depression wetlands. In a helicopter survey, a few small patches (approximately 15 acres) of dome swamp fringing swale systems could be seen in the project's southwestern parcels. These parcels have few remaining upland natural communities except for narrow fringes adjacent to wetlands and some remnant hammock.

FNAI Element Occurrence Summary

FNAI Elements	Score
Florida panther	G5T1/S1
Eastern indigo snake	G3/S2?
Gopher tortoise	G3/S3
Swallow-tailed kite	G5/S2
Florida black bear	G5T4/S4
Wood stork	G4/S2
Crested caracara	G5/S2
Little blue heron	G5/S4
White ibis	G5/S4

Public Use

The property can accommodate resource-based recreation, including camping, picnicking, hiking, nature study, wildlife observation, bicycling, horseback riding and environmental education. Depending on management emphasis, the land could provide significant hunting opportunities. Careful planning is required to coordinate hunting and wildlife observation.

Acquisition Planning

2002

On December 5, 2002, the Acquisition and Restoration Council added the Devil's Garden project to Group A of the Florida Forever 2003 Priority List. This fee-simple project, sponsored by The Nature Conservancy and the Florida Forest Service, consisted of approximately 82,508 acres with a single owner, Alico Inc., and a taxable value of $9,483,649.

2007

On December 14, 2007, the Acquisition and Restoration Council voted to move Devil's Garden to Group B of the 2008 Florida Forever Priority List.

2011

On December 9, 2011, Devil's Garden was classified as a Critical Natural Lands project.

2013

On June 17, 2013, the U.S. Department of Agriculture established a 11,591.18-acre conservation easement as part of its Natural Resources Conservation Service Wetlands Reserve Program.

2020

In September 2020, Phase 1B (consisting of the project's central and western parcels) was acquired fee simple from Alico, Inc. The acquisition contained 10,702.03 acres and was purchased at a cost of $28,500,000.00. These parcels will be managed by the Florida Fish and Wildlife Conservation Commission as part of Okaloacoochee Slough Wildlife Management Area.

2021

In 2021, DEP acquired 7,355.86 acres fee simple from Alico, Inc. It will be managed by the Florida Fish and Wildlife Conservation Commission as part of Okaloacoochee Slough Wildlife Management Area.

Coordination

The Nature Conservancy is the intermediary and is working to find a purchaser for the eastern portion of the tract (farmland).

Management Policy Statement

The primary goals of management for the Devil's Garden project are to: increase protection of Florida's biodiversity at the species, natural community and landscape levels; protect, restore and maintain the quality and natural functions of the state's land, water and wetland systems; increase natural resource-based public recreational and educational opportunities; and increase the amount of forestland available for sustainable management of natural resources.

Manager(s)

The Florida Fish and Wildlife Conservation Commission is the recommended lead manager for most of the area (approximately 71,608 acres). The Florida Forest Service will manage the two westernmost parcels (approximately 10,900 acres) adjoining the Okaloacoochee Slough State Forest.

Management Prospectus

Qualifications for State Designation

Due to the diversity, and connectivity to the Okaloacoochee Slough State Forest, the two westernmost parcels (approximately 10,900 acres) qualify as state forests. The high wildlife resource values and the designation of primary or secondary panther habitat zones on the project qualify the eastern parcel (approximately 71,608 acres) as a wildlife management area.

Conditions Affecting Intensity of Management

Much of the project's drier natural community types have been disturbed, with many converted to some improved form of agriculture. This conversion usually involves some type of hydrologic alteration for water management. This property contains vast areas of wetlands with sensitive natural resources. Land management and public use will specifically be structured to improve and protect these areas.

Surrounding land uses are not expected to affect prescribed burning on this parcel. The level of management intensity and related management costs is expected to be initially high to obtain the necessary information and resources to restore and manage the system. Given the importance of this property to panther recovery, this link between habitat management and panther use will be critical to insuring the property is managed consistent with the primary purposes for acquisition.

The Devil's Garden project will require 14 FTE positions to manage the project area. Certain activities may be privatized, reducing the number of FTEs required. Funding for natural-resource management and public use administration would come from the Land Acquisition Trust Fund.

Management Implementation, Public Access, Site Security and Protection of Infrastructure

During the first year after acquisition, emphasis will be placed on site security, posting boundaries, public access, fire management, resource inventory, exotic species control and removal of refuse. Conceptual management plans will be developed describing the management goals and specific objectives necessary to implement future resource management.

Public use will be limited to activities that will have little or no impact to these areas. Vehicular use by the public will be confined to designated roads. Unnecessary access points will be closed. Both agencies will cooperate with and seek the assistance of other state agencies, local government entities and interested parties as appropriate.

Long-range plans for this property will generally be directed toward the restoration of disturbed areas and maintenance of natural communities. Disturbed sites will be restored to conditions that would be expected to occur in naturally functioning ecosystems. Management activities will also emphasize enhancing abundance and spatial distribution of threatened and endangered species. Multiple-use principles will be practiced with resource management goals and acquisition purposes in mind. An all-season prescribed burning management plan will be developed and implemented to improve the habitat quality of native fire-dependent plant communities and wildlife habitats.

Revenue-generating Potential

Management will seek to improve revenue-generating potential by improving wildlife diversity and resource-based recreation. Anticipated revenues from wildlife conservation will come from sales of hunting licenses, wildlife management area permits and other special hunting permits. Additional revenues might be generated from ecotourism and wildlife viewing activities. Timber sales will be conducted as needed to improve or maintain desirable ecosystem conditions. These sales will primarily take place in pine stands and will provide a variable source of revenue dependent upon a variety of factors. Due to the existing condition of the timber resource on the property, revenue generating potential of this project is expected to be low. Some revenues might be generated from agricultural farming contracts in areas currently being farmed as row crops until such areas can be restored in the interest of wildlife conservation.

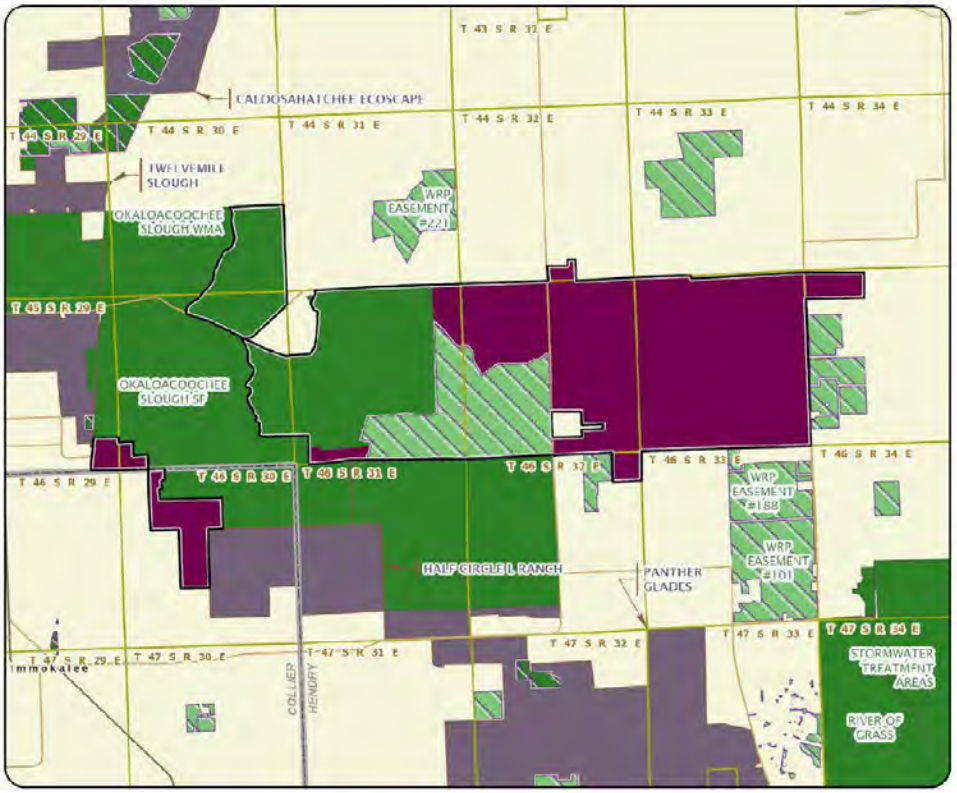
Cooperators in Management Activities

The Florida Fish and Wildlife Conservation Commission and Florida Forest Service will cooperate with other federal, state and local government agencies, including the South Florida Water Management District.

Management Cost Summary

FWC	Startup	Recurring
Source of Funds	LATF	not provided
Salary (6 FTE)	$216,639	not provided
Expense	$725,000	not provided
OCO	$418,200	not provided

Source: Management Prospectus as originally submitted



DEVIL'S GARDEN

COLLIER AND HENDRY COUNTIES

- Florida Forever Project Boundary
- Essential Parcels Remaining
- Other Florida Forever Projects
- State Conservation Lands
- Other Conservation Lands
- Less-Than-Fee Acquisition

N

0 6.5 13 Miles

Half Circle L Ranch

Critical Natural Lands
Collier and Hendry Counties

Year Added to Priority List	*2003*
Project Acres	*11,182*
Acquired Acres	*0*
Cost of Acquired Acres	*$0*
Remaining Project Acres	*11,182*
2021 Assessed Value of Remaining Acres	*$38,406,484*

Purpose for State Acquisition

The Half Circle L Ranch project will protect primary habitat zones for both the Florida panther and the Florida Black bear. The project will complement the ongoing conservation efforts in this region of the state for imperiled species, restore the habitat and hydrology of disturbed areas and provide public recreation compatible with resource protection.

General Description

Half Circle L Ranch adjoins the southern boundary of the Devil's Garden Florida Forever project, the southwestern boundary of the Dinner Island Wildlife Management Area, and the southeastern boundary of the Okaloacoochee Slough State Forest/ Wildlife Management Area in Collier and Hendry counties. The dominant communities on the property are basin and depression marshes, wet prairies, hydric and mesic hammocks and wet and mesic flatwoods. Almost half of the project has been converted to improved pasture, row crops and citrus.

According to the Florida Natural Areas Inventory, the project area is home to several rare species. More than 60 percent of the lands within the Half Circle L Ranch project proposal are designated as Strategic Habitat Conservation Areas. A majority of the site is classified as a Primary Zone for Florida panther and Florida black bear. The remainder of the site is identified as a Secondary Zone for panther habitat (buffer areas for dispersing cats or areas that could be converted to Primary Zone status with restoration) by the Panther Subgroup of the Multispecies/Ecosystem Recovery Implementation Team. Radio telemetry studies have confirmed panther use of the site.

FNAI Element Occurrence Summary

FNAI Elements	Score
Florida panther	G5T1/S1
Florida black bear	G5T4/S4
Florida sandhill crane	G5T2/S2
narrow-leaved strap fern	G4G5/S1
Florida burrowing owl	G4T3/S3
Crested caracara	G5/S2
hand fern	G4/S3
White ibis	G5/S4

Public Use

Due to its extensive wetlands, the project is limited in its ability to provide recreational opportunities. Hiking and horseback trails would be traversable in limited dry season conditions. In upland sites, the project can potentially accommodate camping, picnicking, wildlife observation and environmental education. Depending on management emphasis, hunting can also be supported.

Acquisition Planning

2002

The project consists of 11,182 acres, multiple parcels and two owners. The 2002 tax assessed/taxable value was $2,811,833.00.

2003

On June 6, 2003, the Acquisition and Restoration Council added this project to the A List of the Florida Forever projects.

2004

In 2004, the Acquisition and Restoration Council moved this project to the B List of the Florida Forever projects.

2011

On December 9, 2011, the Acquisition and Restoration Council placed this project in the Critical Natural Lands category.

Coordination

This project is adjacent to Okaloacoochee Slough State Forest and Dinner Island Wildlife Management Area. The Panther Glades and Devil's Garden Florida Forever projects are also adjacent to the site.

Management Policy Statement

The primary land management goal for the project is to restore, maintain and protect native ecosystems in perpetuity; to integrate compatible human use; and to ensure long-term viability of rare species populations. An ecosystem approach will guide the management activities on this project.

Manager(s)

The Florida Fish and Wildlife Conservation Commission is the designated lead manager for the project.

Management Prospectus

Qualifications for State Designation

The project's size and diversity make it desirable for use and management as part of Okaloacoochee Slough State Forest or Dinner Island Wildlife Management Area. Management is contingent upon the state obtaining legal public access to the site and acquiring fee simple title to the property. Major communities represented on this project include swale, slough, basin marsh, depression marsh, wet prairie, strand swamp, dome swamp, hammock, mesic and wet flatwoods. These community types are consistent with the adjacent state forest and wildlife management area.

Conditions Affecting Intensity of Management

Much of the project's drier natural community types have been disturbed; many have been converted to some improved form of agriculture. This conversion usually means some type of hydrologic alteration has occurred. This property contains vast areas of wetlands with sensitive natural resources; accordingly, land management and public use will be structured to improve and protect these areas. The level of management intensity and related management costs is expected to initially be high to obtain the necessary information and resources to restore and manage this system as a part of Okaloacoochee State Forest or Dinner Island Wildlife Management Area.

Once this information is obtained and the resources are available, long-term management costs are expected to be moderate. The Florida Fish and Wildlife Conservation Commission reports that wildlife habitat values and habitat restoration on the semi-improved pasture and native range areas could be improved and potentially restored by removing cattle grazing and utilizing prescribed fire.

Management Implementation, Public Access, Site Security and Protection of Infrastructure

Restoration of the natural communities on this project will be a priority. Initial or intermediate management efforts will concentrate on resource inventory, restoration planning, fire management and planning, site security, public access and removal of exotic species. The inventory of the site's natural resources and threatened and endangered flora and fauna will be conducted to provide the basis for formulation of management goals. Restoration efforts will focus on water flow alterations, ditching, agriculture improvements to the land, and perpetuating natural communities that have historically been changed. Steps will be taken to ensure that the public is provided appropriate access while also affording protection of sensitive resources. Public use will be limited to activities that will have little or no impact on these areas. Long-range goals will emphasize ecosystem management and the protection and management of threatened and endangered species. Essential roads will be stabilized to provide all-weather public access and management operations. Programs providing multiple recreational uses will also be implemented. An all-season prescribed burning management plan will be developed and implemented using appropriate guidelines. Management activities will strive to manage natural plant

communities to benefit native wildlife resources. Archaeological and historic sites will be managed in coordination with the Division of Historical Resources.

Revenue-generating Potential

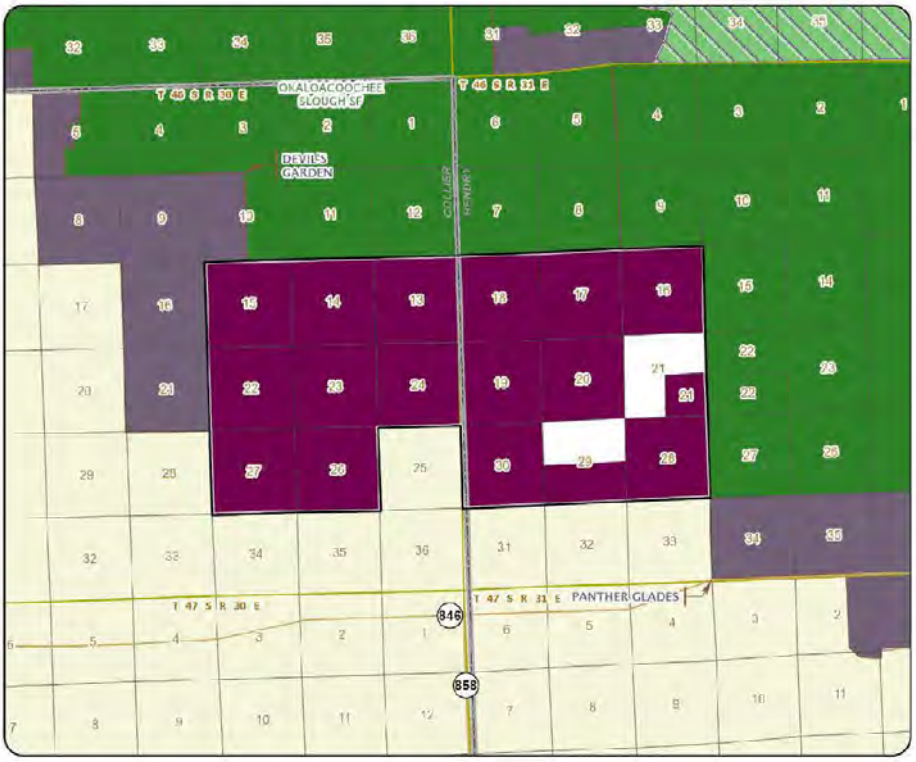
Timber sales will be conducted as needed to improve or maintain desirable ecosystem conditions. These sales will primarily take place in pine stands and will provide a variable source of revenue. Because of the existing condition of the timber resource on the property, revenue generating potential of this project is expected to be low. Additional revenue would be generated from sales of hunting licenses, fishing licenses, wildlife management area stamps and other special hunting stamps. Some revenues might be realized in the future from ecotourism activities, which can be economically developed.

Florida Forever capital project expenditures will be needed on this parcel for hydrological restoration, public access and public use. This management prospectus is not intended to be an application for capital project expenditure; however, as more information is gathered and an analysis of the site is completed, an application may be submitted for capital project expenditure funds. It is anticipated that some of the existing roads will be used as multi-use trails for hiking, horseback riding and off-road bicycling. Management funding will come from the Land Acquisition Trustr Fund or its successor.

Management Cost Summary

FWC	Startup	Recurring
Source of Funds	CARL	not provided
Salary (2 FTE)	$70,751	not provided
Expense	$261,372	not provided
OCO	$300,600	not provided
TOTAL	$632,723	not provided

Source: Management Prospectus as originally submitted



HALF CIRCLE L RANCH

COLLIER AND HENDRY COUNTIES

- Florida Forever Project Boundary
- Essential Parcels Remaining
- Other Florida Forever Projects
- State Conservation Lands
- Other Conservation Lands
- Less-Than-Fee Acquisition

N

0 2 4 Miles

Twelvemile Slough

Critical Natural Lands
Hendry County

Year Added to Priority List	*2001*
Project Acres	*15,968*
Acquired Acres	*7,932*
Cost of Acquired Acres	*$11,000,000*
Remaining Project Acres	*8,036*
2021 Assessed Value of Remaining Acres	*$54,901,270*

Purpose for State Acquisition

The Twelvemile Slough project will protect an exemplary twelve-mile-long slough, or "river of grass" natural community, that forms a broad band of emergent sedges, grasses and herbs running east through the southern part of the project. The Twelvemile Slough provides important habitat for many species, but particularly those that require extensive areas of habitat to maintain viable populations, such as the Florida panther.

General Description

The drainage basin of the proposal flows into the Okaloacoochee Slough project acquired by the South Florida Water Management District and Florida Forest Service. The Okaloacoochee Slough and its associated watershed ultimately flow into the Fakahatchee Strand.

FNAI Element Occurrence Summary

FNAI Elements	**Score**
Florida panther	G5T1/S1
Gopher tortoise	G3/S3
Swallow-tailed kite	G5/S2
Florida black bear	G5T4/S4
Florida spiny-pod	G2/S2
Florida sandhill crane	G5T2/S2
redmargin zephyrlily	G2G3/S2S3
Wood stork	G4/S2
Florida burrowing owl	G4T3/S3
Crested caracara	G5/S2
Glossy ibis	G5/S3
Snowy egret	G5/S3

Public Use

The Twelvemile Slough project is primarily a wetland system joining with the Okaloacoochee Slough that could provide excellent opportunities for wildlife and natural resource observation. To achieve maximum potential for these activities, airboats and other motorized equipment that disrupt the quiet atmosphere or disturb wetlands should not be allowed. Other recreational activities could include picnicking, camping, nature study trails, hiking trails and freshwater fishing. Hunting might also be considered appropriate if further review indicates this activity will not have an adverse impact on the property.

Acquisition Planning

2001

On April 6, 2001, the Acquisition and Restoration Council added the Twelvemile Slough project to Group B of the Florida Forever 2001 Priority List. This fee-simple and less-than-fee acquisition project, sponsored by The Nature Conservancy, consisted of approximately 14,419 acres, multiple parcels and four landowners (AandM of Hendry County LTD, Richard H. Roberts, Alico Inc. and McClure Properties LTD). The Roberts and Albritton parcels were designated as essential.

2002

On April 25, 2002, the Acquisition and Restoration Council approved a fee-simple, 1,416-acre addition to the project boundary. It was sponsored by the Division of State Lands and consisted of one owner, McClure Properties LTD. The landowner, with property already in the original boundary, requested the remainder of his ownership be added.

In June 2002, the state acquired 7,486 acres (Albritton tract) with Florida Forever Land Acquisition Program funds of $11 million to be managed by the Florida Fish and Wildlife Conservation Commission as the Spirit of the Wild Wildlife Management Area.

2003

In December 2003, an additional 160-acre northern tract was acquired.

2006

On June 9, 2006, the Acquisition and Restoration Council moved this project to Group A of the 2006 Florida Forever Priority List.

2008

In May 2008, a correction to the boundary was warranted and the 160 acres of land purchased in 2003 was officially incorporated into the Spirit of the Wild Wildlife Management Area boundary.

2011

On April 15, 2011, the Acquisition and Restoration Council recommended an 87-acre boundary reduction for land occupied by residential development, commercial buildings or infrastructure.

On May 27, 2011, a donation of 310.08 acres was received from AGBLLC of Florida as the result of panther mitigation. The Florida Forest Service will manage this property as part of Okaloacoochee Slough State Forest.

On December 9, 2011, the Acquisition and Restoration Council placed this project in the Critical Natural Lands category.

Coordination

There is some potential for cost sharing with the South Florida Water Management District and The Nature Conservancy.

Management Policy Statement

The principal purposes of the project are to protect habitat important to the Florida panther and other species of concern, as well as to preserve the hydrologic connection between protected lands to the east and south. The project should be managed under the multiple-use concept whenever possible; management activities should be directed first toward conservation of resources and second toward carefully controlled consumptive uses. Managers should control access to the project, thoroughly inventory resources and monitor management activities to ensure that they are conserving site resources. Managers should limit educational and recreational facilities, ensure that they avoid the most sensitive resources and site them in already disturbed areas when possible.

Manager(s)

The Florida Fish and Wildlife Conservation Commission is recommended as lead manager. The Florida Forest Service is recommended as a cooperating agency.

Management Prospectus

This project is part of the larger Okaloacoochee Slough wetlands that partially serve as headwaters of Fakahatchee Strand State Preserve and Big Cypress National Preserve. The land in this project serves to protect groundwater and habitat for species like the Florida panther and snail kite. Strategic habitat conservation areas for some of these species comprise roughly a quarter of the project lands. The entire length of the eastern boundary of the project is contiguous with the 32,162-acre Okaloacoochee Slough State Forest/Wildlife Management Area. The following purposes should guide development of management goals: assessing current land use and natural resources to determine existing conditions and future requirements for inventory and monitoring; conserving, protecting and restoring cultural resources, landscapes, forests, water resources and other elements important to ecosystem functions; conserving, protecting and restoring characteristic biological diversity original to natural communities, including protecting, maintaining or enhancing conditions for rare, threatened and endangered species; developing and adapting project plans, procedures and techniques for improved success in meeting management goals, including the Florida Panther Habitat Preservation Plan; and establishing multiple-use natural resource-based recreation opportunities that are compatible, and which are consistent with the other resource conservation purposes and management goals for the area.

Qualifications for State Designation

The Twelvemile Slough project has the resource diversity to qualify as a wildlife management and environmental area. In 2002, a portion acquired became the Spirit of the Wild Wildlife Management Area.

Conditions Affecting Intensity of Management

Biotic surveys should be a priority, since there are potentially many rare or listed species. Some portions of the Twelvemile Slough proposal include lands that are low-need tracts, requiring basic resource management including the frequent use of prescribed fire where appropriate. However, because 57 percent of the uplands have been developed for agriculture or other purposes, significant restoration activities are proposed for at least some of this acreage. The primary management needed for perpetuation of the less disturbed natural communities would involve hydrological restoration, re-establishing native groundcover, exotic vegetation control, prescribed fire and control of conservation-compatible access by the user community.

Proposed uses of the area include opportunities for hunting, camping, hiking, environmental and cultural resource education and other recreation activities. Since the principal purposes of the project is to protect habitat for the Florida panther and other species of concern, management goals will be oriented to conservation and protection of these species and to education and regulation of the user community. Development of facilities would be kept to the minimum level necessary to assure a high-quality recreational experience; any such development would be confined to areas of previous disturbance.

Restoration would be guided by established procedures and techniques, improved through adaptive management themes, and would emphasize re-establishing native plant communities on pasture and hydrological restoration. Infestations of invasive exotic species, including Brazilian pepper, water hyacinth and tropical soda apple, occur within the area. There will be efforts to eradicate or control the infestations to reduce the potential for further spread.

Management Implementation, Public Access, Site Security and Protection of Infrastructure

During the first year after acquisition, emphasis will be on site security, posting boundaries, relationships with stakeholders, public-use assessments, fire management, resource inventories, exotic species control and removing refuse. A conceptual management plan, developed by the Florida Fish and Wildlife Conservation Commission with a stakeholder-based management advisory group, will specify management goals and objectives.

Longer-range activities would focus on meeting goals and objectives in the conceptual management plan. They include prescribed fire, habitat restoration, protecting or propagating critical habitat for listed species and expanding recreation opportunities. Essential roads would be stabilized and maintained for public and management access. Floral and faunal inventories and evaluations of the management projects would be continually updated by Florida Fish and Wildlife Conservation Commission biologists and would be supplemented as available with data from other sources. Timber resources consist of South Florida slash pine in areas of mesic flatwoods.

To meet wildlife habitat management objectives, sustainable timber harvests will be conducted using acceptable silviculture practices in consultation with the Florida Forest Service. Environmentally sensitive

areas will be identified, and appropriate protective measures will be implemented on those areas. Unnecessary roads, fire lanes and hydrological disturbances will be abandoned or restored as practical.

Minimal infrastructure development will be required to allow public access, provide facilities for the public and provide security and management of the property.

Estimate of revenue-generating potential

Currently, forest products production is limited on the project area. Revenue would be from sales of hunting licenses, fishing licenses, wildlife management area stamps and other special hunting stamps. Some future revenues might be from other nature-based recreation opportunities and cattle-grazing contracts. About 13 percent of the project is pine flatwoods that could be managed to offset operational costs. But future revenue from timber resources will depend on appropriate plant-community and hydrologic restoration. The Florida Fish and Wildlife Conservation Commission will cooperate with federal, state and local government agencies and non-government organizations, to the greatest extent possible. It is anticipated that the Florida Fish and Wildlife Conservation Commission will need the most assistance and cooperation from the following: the Florida Fish and Wildlife Conservation Commission will require three full-time positions to manage this area and will contract with various private entities to procure services and materials to conduct resource management, capital improvements and visitor services within the project.

Management Cost Summary

FFS	Startup	Recurring
Resource Management	$273,692	$328,199
Administration	$125,926	$125,926
Support	$106,207	$25,441
Capital Improvements	$565,196	$51,763
Visitor Services/Recreation	$192,565	$10,323
Law Enforcement	$9,350	$9,350
TOTAL	$1,272,936	$551,002

Source: Management Prospectus as originally submitted

TWELVEMILE SLOUGH

HENDRY COUNTY

- Florida Forever Project Boundary
- Essential Parcels Remaining
- Other Florida Forever Projects
- State Conservation Lands
- Other Conservation Lands
- Less-Than-Fee Acquisition

N

0 2.5 5 Miles