

INDIAN LAKE STATE FOREST
2023 LAND MANAGEMENT PLAN

EXHIBITS

Exhibit A

Ten-Year Management Accomplishment Summary

Indian Lake State Forest
10-Year Accomplishments

Site Preparation	Mowing	Acres	72
Planting	Longleaf Containerized	Acres	570
Seedling Survival Checks	Survival Checks	Acres	1,050
Timber Sales	Harvest	Acres	180
Timber Inventory	Inventory Update	Acres	3,396
	New Inventory	Acres	500
	Plots	Acres	114
Invasive Species Control	Natal Grass	Acres	445
	Cogon Grass	Acres	198
	Camphor Tree	Acres	54
	Mimosa	Acres	48
	Paper Mulberry	Acres	13
	China Berry	Acres	10
	Coral Ardisia	Acres	10
	Chinese Tallow	Acres	6
	Caesar Weed	Acres	2
	Air Potato	Acres	1
	Lantana	Acres	1
	Japanese Climbing Fern	Acres	<1
Fire	Wildfire	No.	0
		Acres	0
	Prescribed Burning	No.	45
		Acres	9,383
Recreation	Day Use Estimated Forest Visitors	No.	148,571
	Overnight Primitive Camping	No.	3,097
	Special Use Permit	No.	25
Roadwork	Roads Constructed	Miles	13
	Bridge Built	No.	1
Boundary Maintenance	Maintenance/Marking	Miles	26

I&E Activities	Programs/Tours	No.	10
	Radio/TV Articles	No.	1
	Education/Research	No.	3

Other Activities	Archaeological Sites Monitored	No.	13
	Firelines Maintained	Miles	514
	Fence Replaced	Miles	6

Exhibit B

Boundary and Road Map

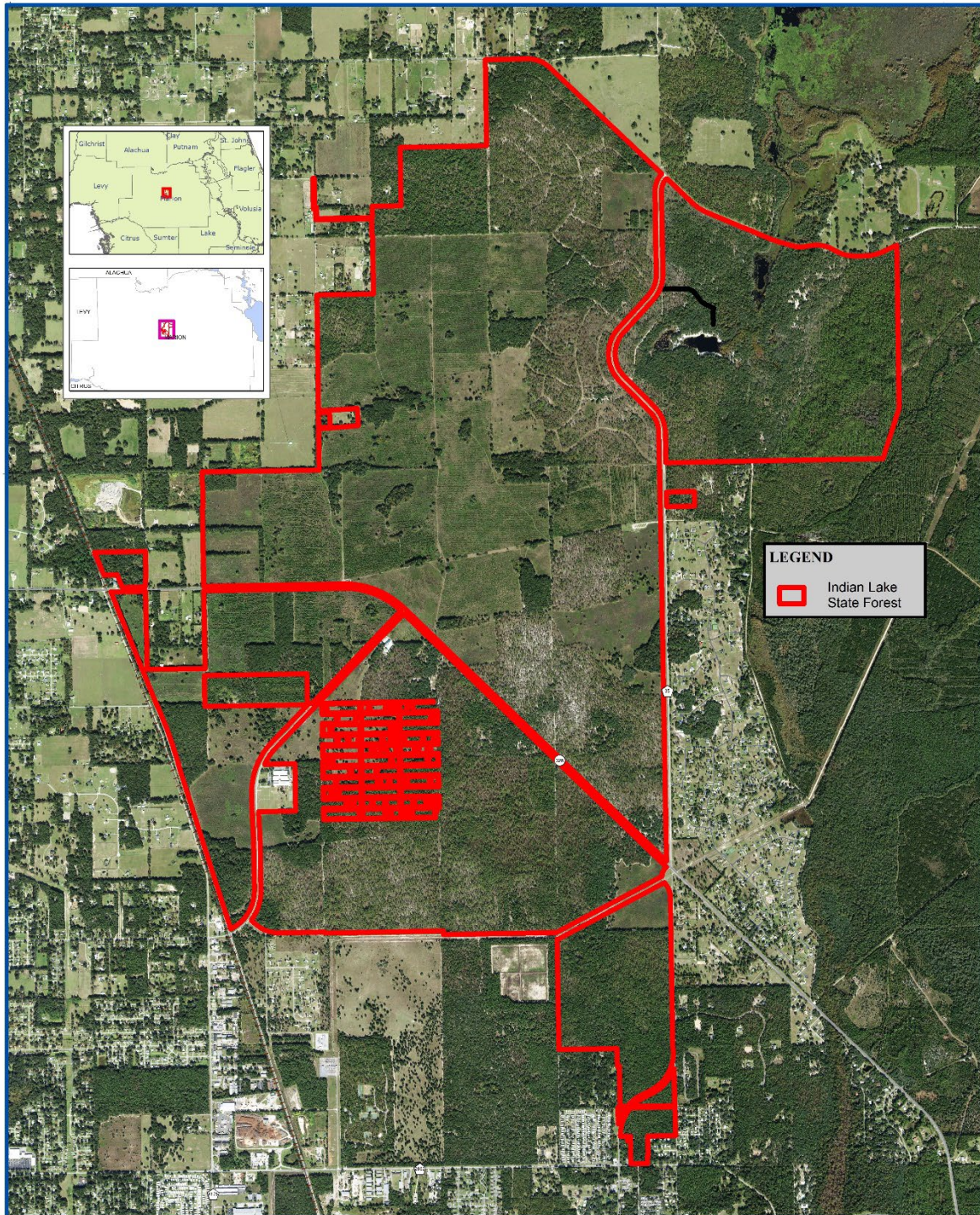


Florida Forest Service

Indian Lake State Forest Boundary & Road Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
This map was created by the Florida Forest Service
and is not intended to be used for any other purpose.
The Florida Forest Service is not responsible for any
errors or omissions in this map. The Florida Forest
Service is not responsible for any damages or
injuries resulting from the use of this map.
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used for any other purpose.



0.5 0.25 0
Miles



Map Month/Year: March 2021

1,000 500 0 1,000
Yards

Exhibit C

Optimal Management Boundary Map



Florida Forest Service

Indian Lake State Forest Optimal Management Boundary Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
This map was created by the Florida Forest Service
and is intended to provide general information only.
It is not intended to be used for legal purposes.
The Florida Department of Natural Resources
does not warrant the accuracy or completeness
of the information contained herein.
The Florida Department of Natural Resources
is not responsible for any errors or omissions
in this map.

Management boundary is courtesy of
the Florida Natural Areas Inventory
Forest & Woodlands Unit (FWS)
From the 2010 Forest Inventory

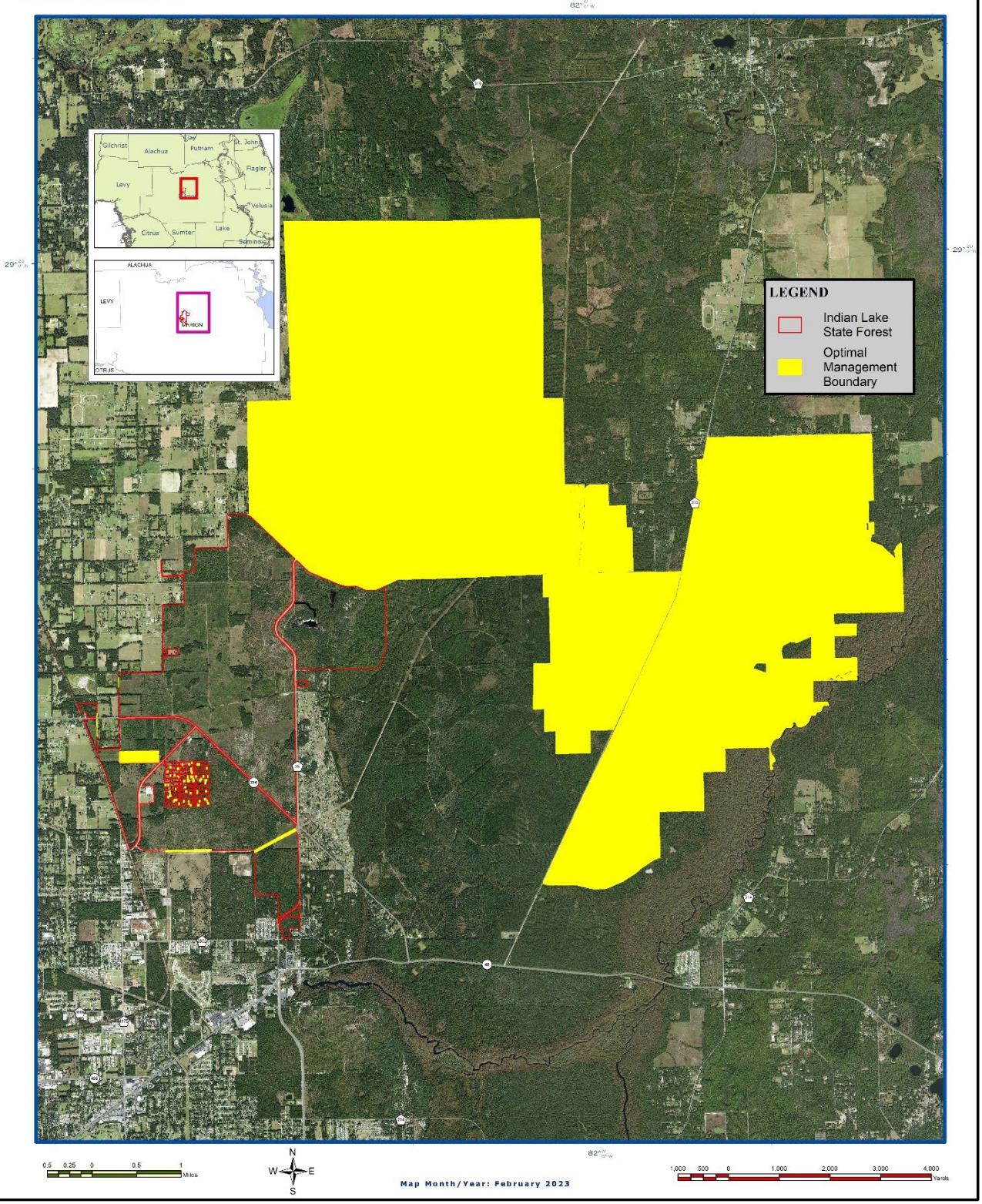


Exhibit D

Facilities, Recreation, and Improvements Map



Indian Lake State Forest

Facilities, Recreation and Improvements Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DESCRIPTION:
This set of 144 volumes of the Florida Natural Areas Survey (FNAS) Comprehensive Inventory Series (CIS) will bring the state's natural resources, their changes over time, and the management actions taken to protect them, into the public domain. These portions are not legal descriptions or documents.
The CIS is a series of 144 volumes, one for each of the 144 natural areas, wetlands, rivers, and/or, in certain, two adjacent natural areas. The CIS is a series of 144 volumes, one for each of the 144 natural areas, wetlands, rivers, and/or, in certain, two adjacent natural areas. The CIS is a series of 144 volumes, one for each of the 144 natural areas, wetlands, rivers, and/or, in certain, two adjacent natural areas.

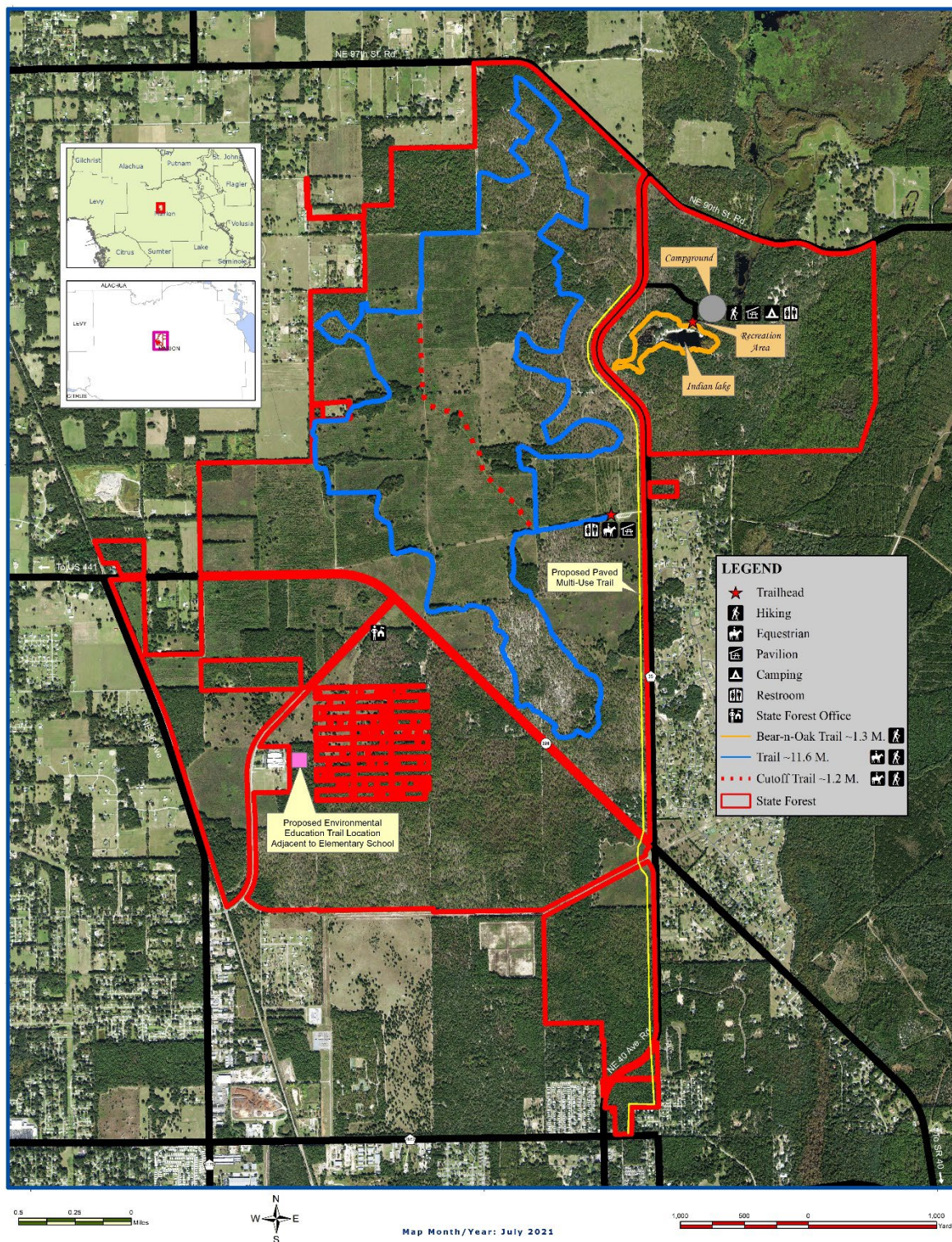


Exhibit E

Tract and Acreage Map



Florida Forest Service

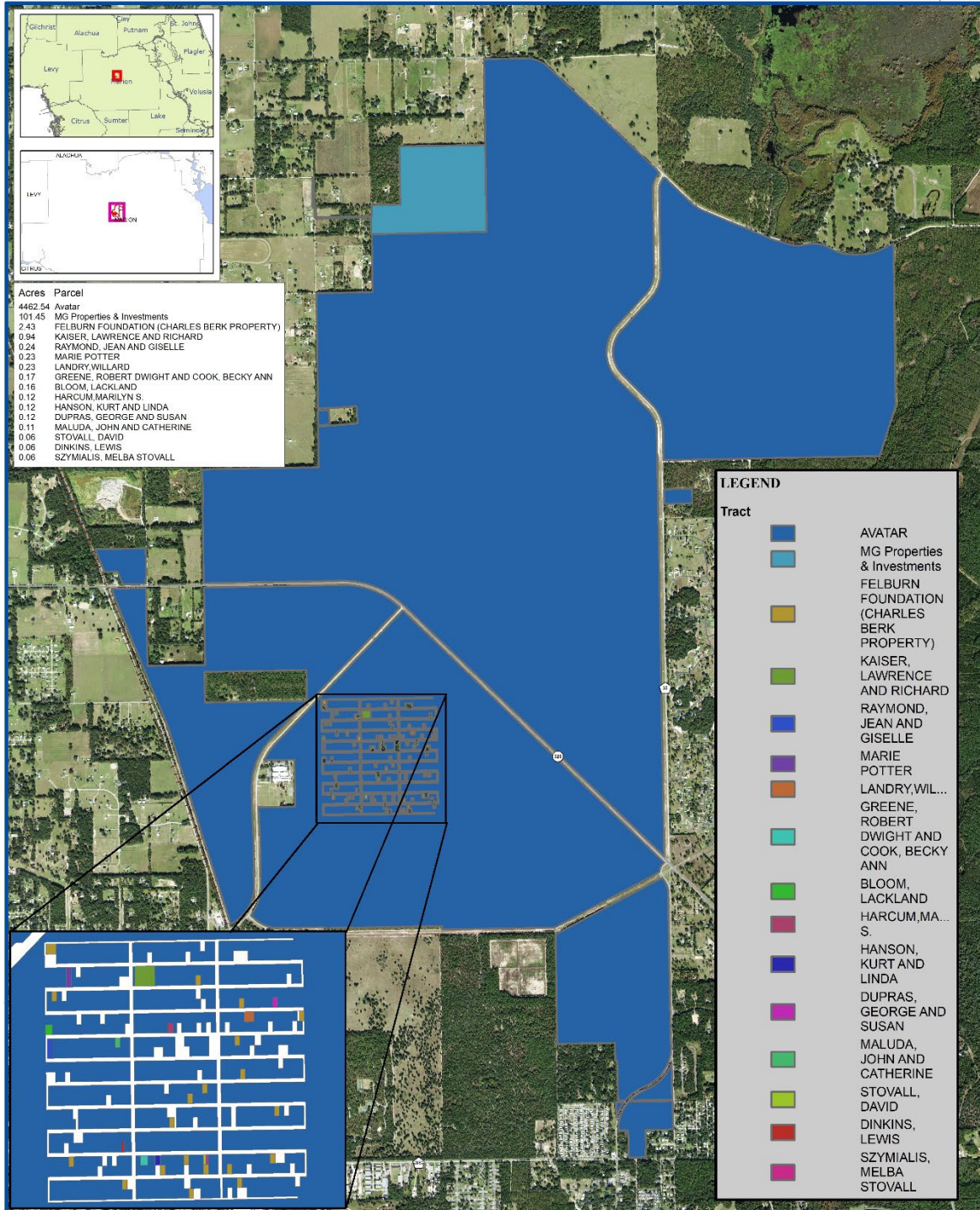
Indian Lake State Forest

Tract and Acreage Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
This map was prepared by the Florida Forest Service
and is not intended to be used for any purpose other than
general information. It is not a legal document and should
not be used for any legal purpose. The Florida Forest Service
does not warrant the accuracy or completeness of the
information contained herein. The Florida Forest Service
accepts no liability for any errors or omissions in this
map. The Florida Forest Service is not responsible for
any damages or losses resulting from the use of this
map.

Revised: May 2008
Original: May 2008
From the US Army Corps of Engineers



0.5 0.25 0 Miles



Map Month/Year: March 2021

1,000 500 0 1,000 Yards

Exhibit F

Proximity to Significant Managed Lands



Florida Forest Service

Indian Lake State Forest Proximity to Significant Managed Lands

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
This map was prepared by the Florida Forest Service, FWS, for informational purposes only. It is not intended to be used for legal or financial purposes. The Florida Forest Service does not warrant the accuracy or completeness of the information contained herein. The Florida Forest Service is not responsible for any errors or omissions in this map. The Florida Forest Service is not responsible for any damages or losses resulting from the use of this map.

Managed Area boundary is courtesy of the Florida Natural Areas Inventory. Property line data is from 2010. From the US Army Corps of Engineers.

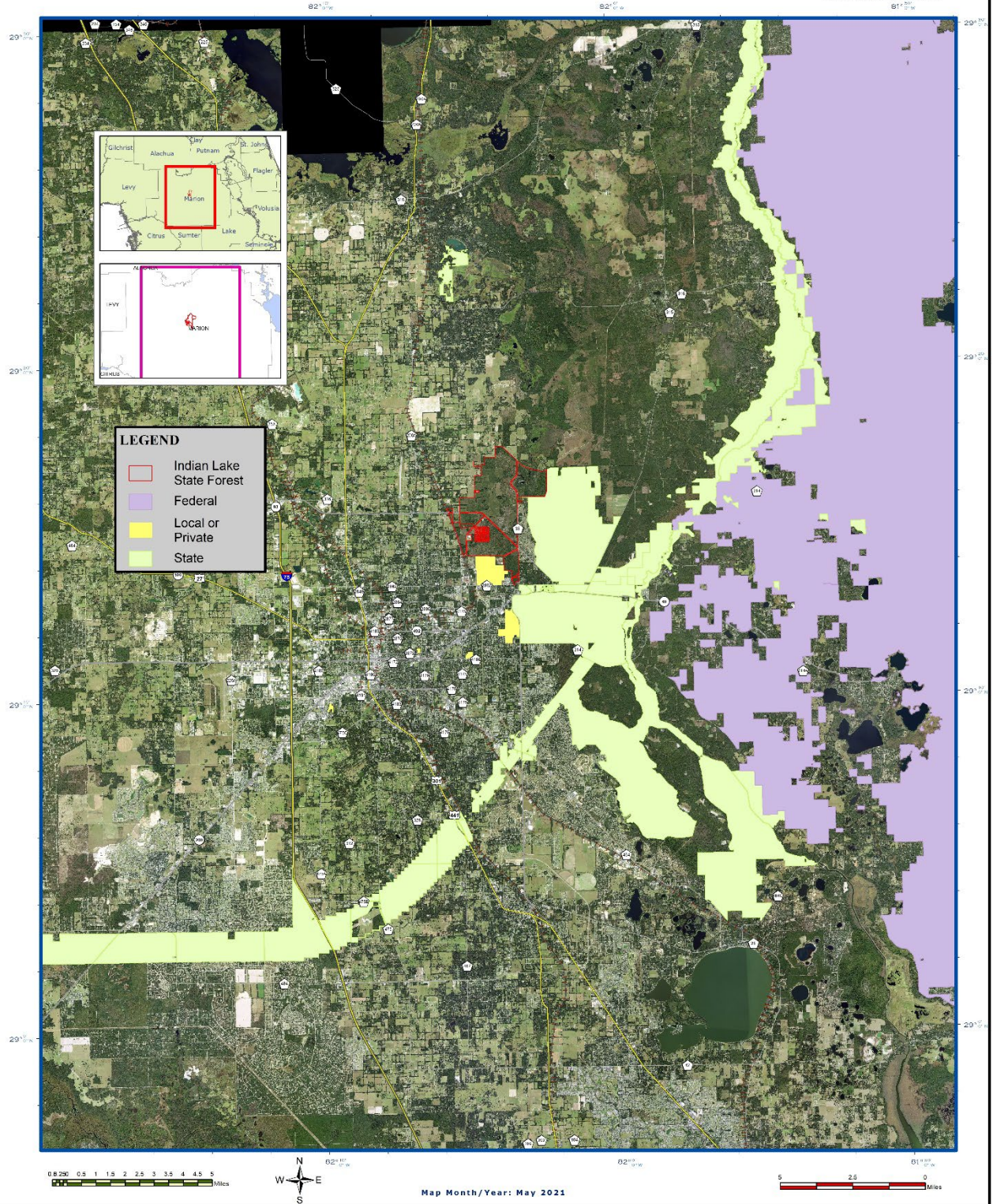


Exhibit G

Department of State Report on Archeological Sites
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.

March 5, 2021

Patti Anderson
Land Management Planner
Florida Forest Service
Florida Department of Agriculture and Consumer Services

In response to your request on March 5, 2021, the Florida Master Site File lists 11 archeological sites and two cemeteries found on Indian Lake State Forest located Marion County.

When interpreting the results of our search, please consider the following information:

- 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



AR=11
SS=0
CM=2
RG=0
BR=0
Total=13

Cultural Resource Roster

SiteID	Type	Site Name	Address	Additional Info	SHPO Eval	NR Status
MR01062	AR	F 46	Silver Springs	Human Remains May Be Present	Not Eligible	
MR03292	CM	Mt. Olive Cemetery	Anthony	Established 1894, Graves = 175	Insufficient Info	
MR03293	CM	Indian Lake Cemetery	Silver Springs	Established 1851, Graves = 26	Insufficient Info	
MR03295	AR	Indian Lake East	Silver Springs		Not Eligible	
MR03296	AR	Indian Lake South	Silver Springs		Not Eligible	
MR03297	AR	Indian Lake Prairie East	Silver DSprings		Not Eligible	
MR03298	AR	Indian Lake Northwest	Silver Springs		Not Eligible	
MR03299	AR	Indian Lake North	Silver Springs		Not Eligible	
MR03300	AR	Indian Lake Camp Northeast	Silver Springs		Not Eligible	
MR03301	AR	Straight Knoll	Silver Springs		Not Eligible	
MR03302	AR	Mt Olive Sinkhole	Silver Springs		Eligible	
MR03303	AR	Indian Lake Camp South East	Silver Springs		Not Eligible	
MR03305	AR	North of Cemetery	Silver Springs		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/>

H. 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

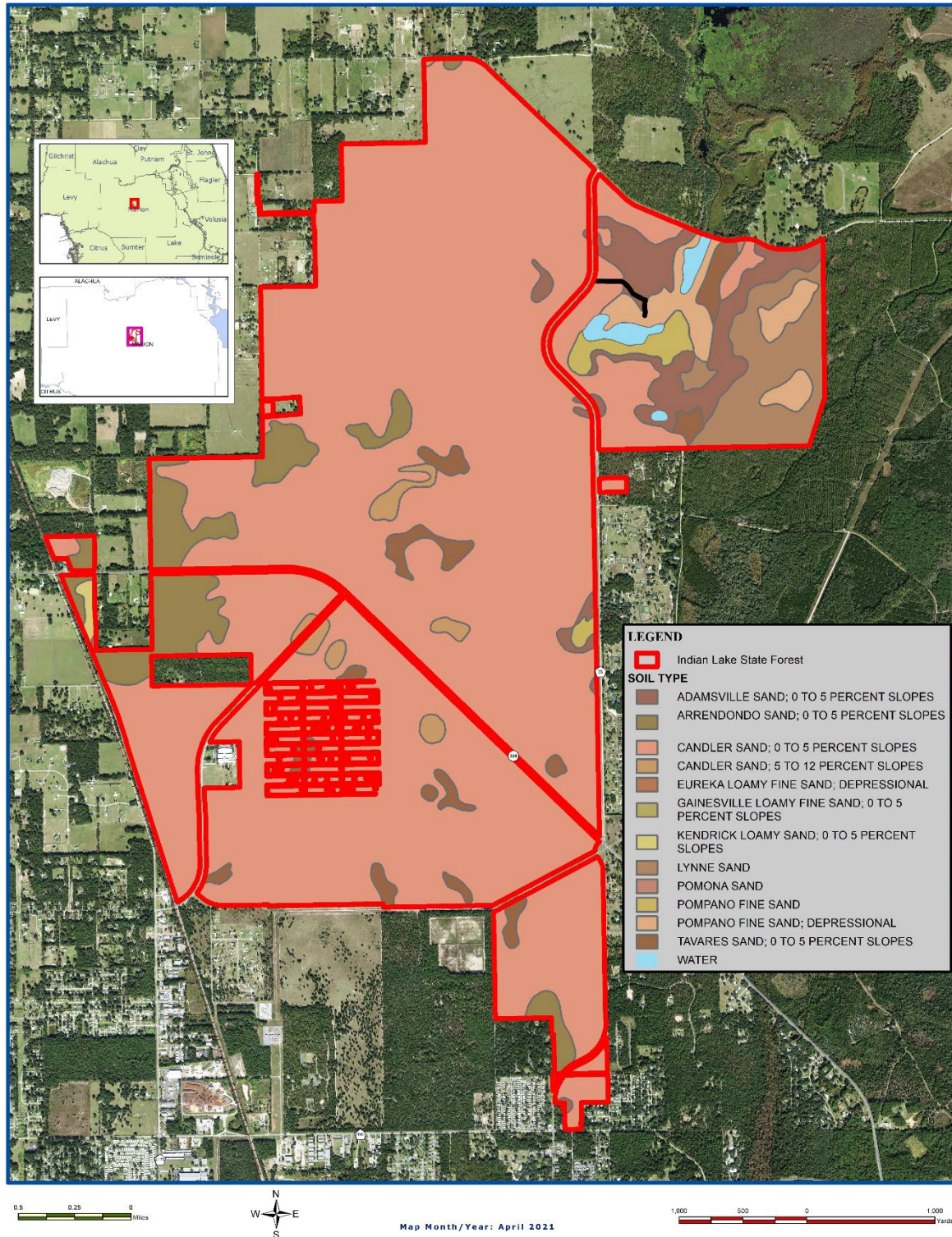
Soil Survey Map and Descriptions

Indian Lake State Forest

Soils Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
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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)

Marion County Area, Florida

Map Unit: 2—Adamsville sand, 0 to 5 percent slopes

Component: Adamsville (85%)

The Adamsville component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on rises 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 somewhat 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 30 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: Pomona, non-hydric (4%)

Generated brief soil descriptions are created for major soil components. The Pomona, non-hydric soil is a minor component.

Component: Pompano (4%)

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

Component: Candler (4%)

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

Component: Tavares (3%)

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

Map Unit: 9—Arredondo sand, 0 to 5 percent slopes**Component: Arredondo (80%)**

The Arredondo component makes up 80 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges 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 well 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. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3s. 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: Candler (7%)

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

Component: Gainesville (7%)

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

Component: Sparr (4%)

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

Component: Sinkhole (1%)

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

Component: Rock outcrop (1%)

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

Map Unit: 22—Candler sand, 0 to 5 percent slopes**Component:** Candler (90%)

The Candler component makes up 90 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges on marine terraces on coastal plains, knolls on marine terraces on coastal plains. The parent material consists of eolian deposits and/or sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively 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. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4s. 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: Tavares (5%)

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

Component: Millhopper (5%)

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

Map Unit: 23—Candler sand, 5 to 12 percent slopes**Component:** Candler (85%)

The Candler component makes up 85 percent of the map unit. Slopes are 5 to 12 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of eolian deposits and/or sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is very 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. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6s. 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: Apopka (6%)

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

Component: Kendrick (5%)

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

Component: Adamsville (3%)

Generated brief soil descriptions are created for major soil components. The Adamsville 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: 35—Gainesville loamy sand, 0 to 5 percent slopes

Component: Gainesville (85%)

The Gainesville component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges 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 well 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. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3s. 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: Hague (4%)

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

Component: Kendrick (4%)

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

Component: Arredondo (4%)

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

Component: Zuber (3%)

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

Map Unit: 44—Kendrick loamy sand, 0 to 5 percent slopes

Component: Kendrick (85%)

The Kendrick component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges, fluviomarine terraces, coastal plains. The parent material consists of sandy marine deposits over loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well 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. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2e. 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: Lochloosa (5%)

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

Component: Gainesville (5%)

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

Component: Arredondo (5%)

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

Map Unit: 48—Lynne sand

Component: Lynne, non-hydric (65%)

The Lynne, non-hydric component makes up 65 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 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: Lynne, hydric (20%)

The Lynne, hydric component makes up 20 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 moderate. 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 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: Eaton, non-hydric (4%)

Generated brief soil descriptions are created for major soil components. The Eaton, non-hydric soil is a minor component.

Component: Eureka, hydric (4%)

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

Component: Electra (4%)

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

Component: Pomona, hydric (3%)

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

Map Unit: 61—Pomona sand**Component:** Pomona, non-hydric (60%)

The Pomona, non-hydric component makes up 60 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 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 May, 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: Pomona, hydric (20%)

The Pomona, hydric component makes up 20 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 May, 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 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: Placid (5%)

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

Component: Pompano (5%)

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

Component: Electra (5%)

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

Component: Lynne, non-hydric (5%)

Generated brief soil descriptions are created for major soil components. The Lynne, non-hydric soil is a minor component.

Map Unit: 62—Pompano sand

Component: Pompano (85%)

The Pompano 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 very 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 3 inches during January, February, May, June, July, August, September, October, November, December. 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: Placid (8%)

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

Component: Pomona, non-hydric (7%)

Generated brief soil descriptions are created for major soil components. The Pomona, non-hydric soil is a minor component.

Map Unit: 63—Pompano sand, depressional

Component: Pompano, depressional (80%)

The Pompano, depressional 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 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 very 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 3 inches during January, February, May, June, July, August, September, October, November, December. 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: Anclote (7%)

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

Component: Placid, depressional (7%)

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

Component: Pomona, hydric (6%)

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

Map Unit: 69—Tavares sand, 0 to 5 percent slopes

Component: Tavares (85%)

The Tavares component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of eolian or sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well 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 57 inches during June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3s. 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 0 within 30 inches of the soil surface.

Component: Apopka (6%)

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

Component: Candler (4%)

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

Component: Adamsville (3%)

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

Component: Zolfo (2%)

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

Map Unit: 99—Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Data Source Information

Soil Survey Area: Marion County Area, Florida
Survey Area Data: Version 18, Jun 9, 2020

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

Noah Valenstein
Secretary

November 2, 2020

Ms. Patti Anderson
Land Management Plan Coordinator, Florida Forest Service
Florida Department of Agriculture and Consumer Services
3125 Conner Boulevard, Suite I-262, Mail Stop C-25
Tallahassee, FL 32399-1650

RE: Indian Lake State Forest

Dear Ms. Anderson:

Thank you for your inquiry regarding the surface water quality classifications and Outstanding Florida Waters (OFW) within or near Indian Lake State Forest in Marion County. All of the surface waters within, adjacent to, or within 5 miles of Indian Lake State Forest are classified as Class III waters according to rule 62-302.400, Florida Administrative Code (FAC).

According to subsection 62-302.700(9), FAC, there are no OFW within or adjacent to the Indian Lake State Forest but there are four OFWs that are relatively nearby (see attached map). These are the Silver River Special Water and the Silver River State Park, each a little over 0.5 miles away, the Oklawaha River Aquatic Preserve approximately 1.5 miles southeast and the Oklawaha River Special waters approximately 3.2 miles southeast.

You may also be interested to know that, according to the Florida Natural Areas Inventory Managed Areas data layer, there are several other parcels within, adjacent, or nearby that are considered conservation lands at a Federal, State, or Local level. However, these have not been designated as OFWs other than as described above.

If you have any questions or need additional information about this response, please feel free to contact me via E-mail at Janet.Klemm@FloridaDEP.gov or by phone at 850-245-8427 or contact Talia E. Smith via E-mail at Talia.E.Smith@FloridaDEP.gov or by phone at 850-245-8068.

Sincerely,

Janet Klemm
Standards Development Section

Indian Lake State Forest Map:

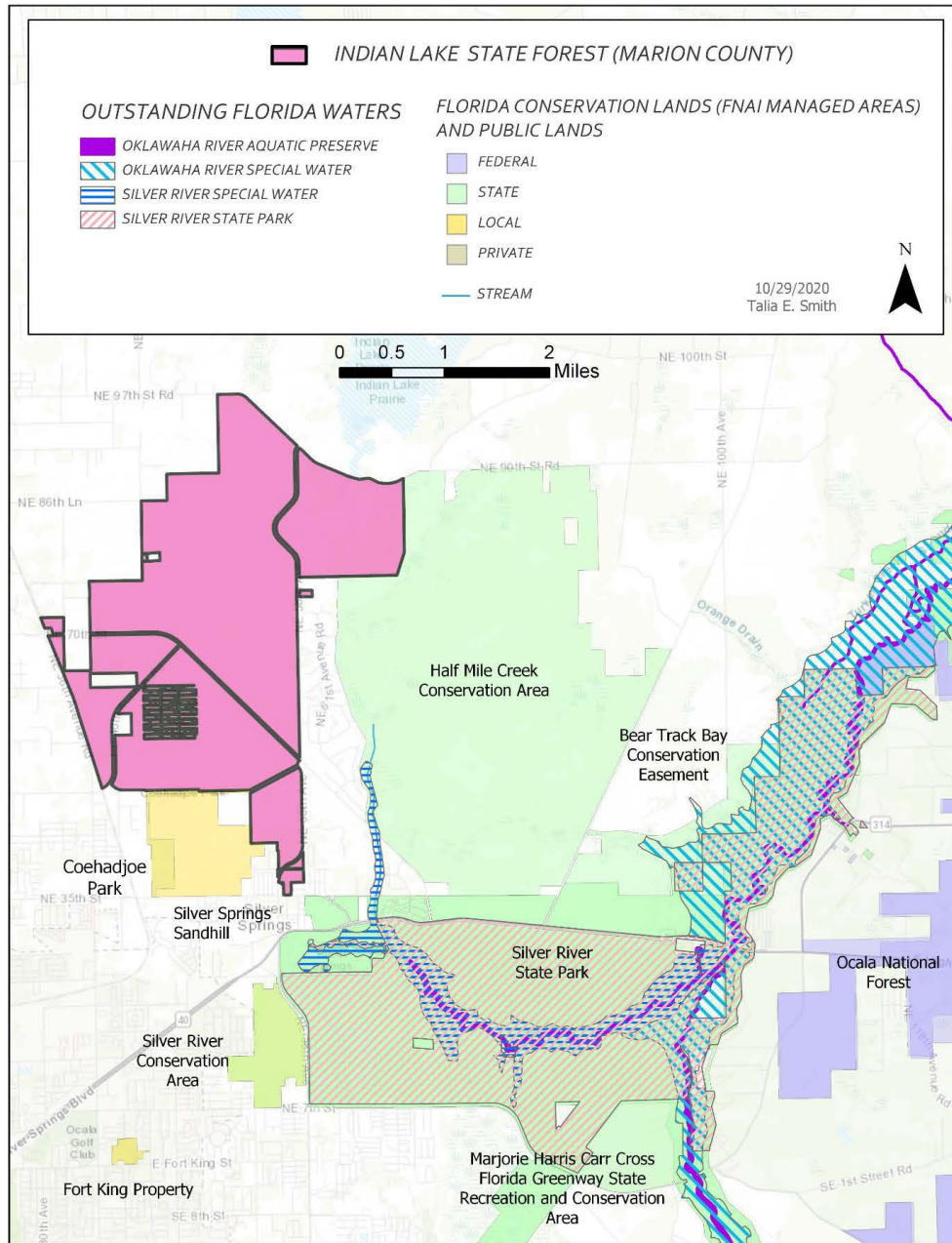


Exhibit K

Water Resources and BMAP Maps (With Monitoring Wells)



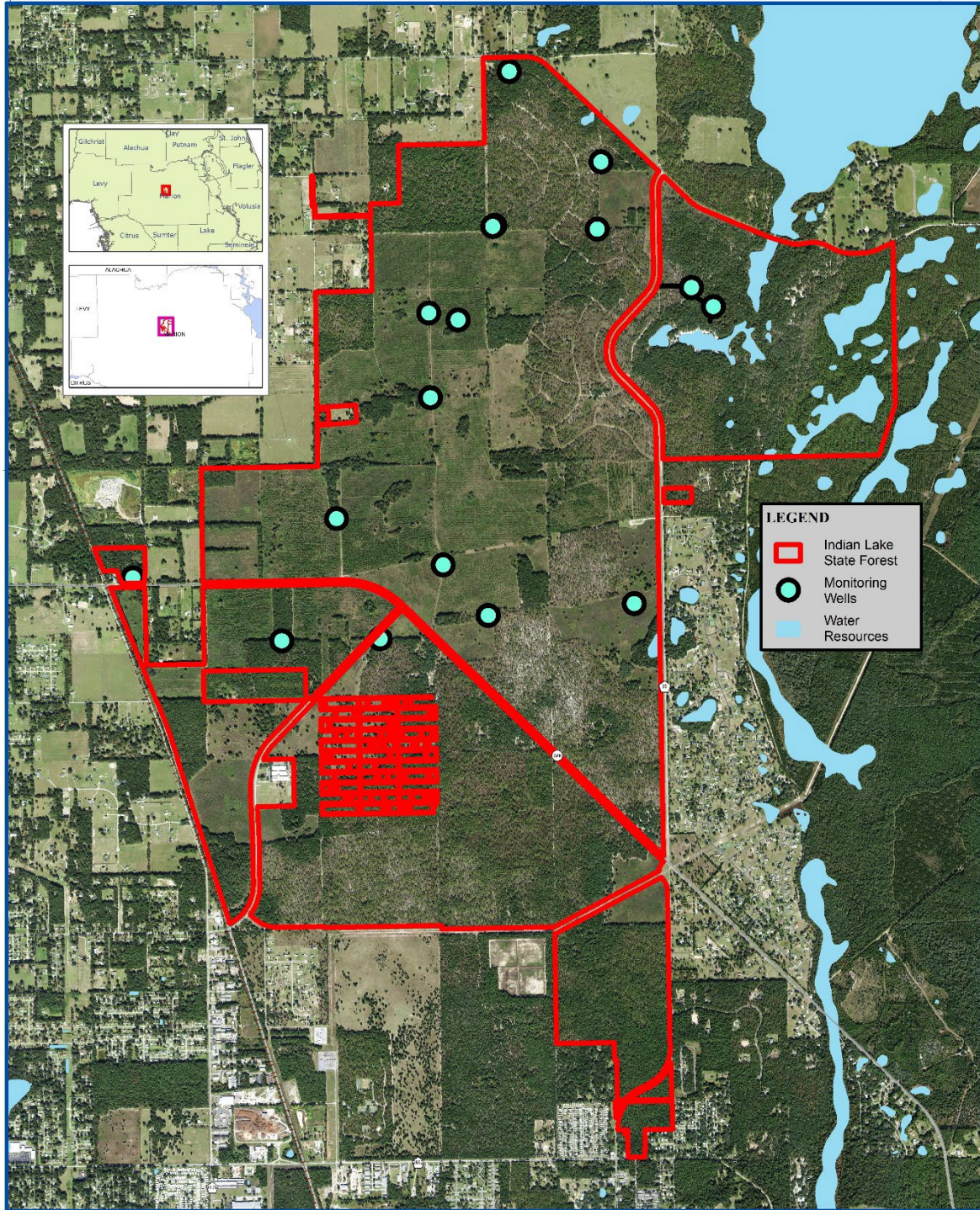
Florida Forest Service

Indian Lake State Forest Water Resources Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
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Revised: Also available as a version of the Florida Forest Service Inventory. For more information, visit www.floridastateforests.com.
From the US Army Corps of Engineers



LEGEND

- Indian Lake State Forest
- Monitoring Wells
- Water Resources

0.5 0.25 0 Miles



Map Month/Year: August 2021

1,000 500 0 Yards



Florida Forest Service

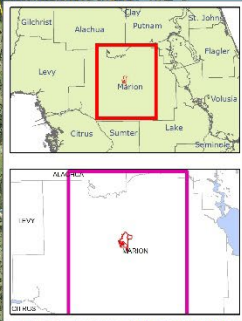
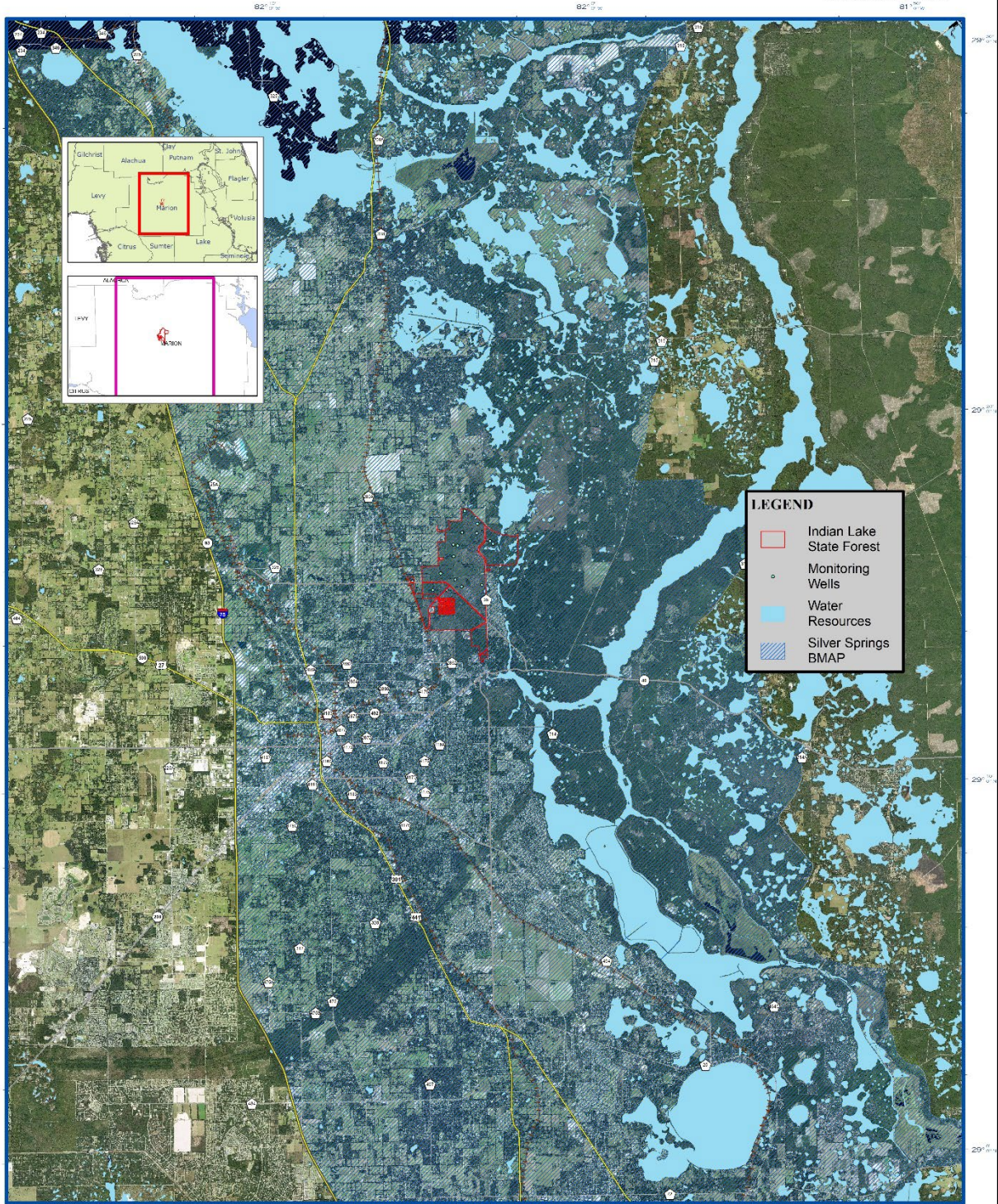
Indian Lake State Forest

BMAP Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

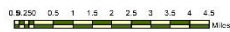
DISCLAIMER:
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Revised: June 2021
The Florida Forest Service is a division of the Florida Department of Natural Resources. It is located at 1000 N. US Highway 1, Tallahassee, FL 32304. The website is www.floridadnr.com.



LEGEND

- Indian Lake State Forest
- Monitoring Wells
- Water Resources
- Silver Springs BMAP



Map Month/Year: August 2021



Exhibit L

Florida Natural Areas Inventory Managed Area Tracking Record



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

March 10, 2021

Patti Anderson
Florida Forest Service
Florida Department of Agriculture and Consumer Services
3125 Conner Boulevard, Suite I-258, Mail Stop C-25
Tallahassee, FL 32399-1650

Dear Ms. Anderson,

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: Indian Lake State Forest

Date Received: 3/5/2021

Location: Marion County

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 several 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.

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 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.*



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Likely and Potential Rare Species

Tracking Florida's Biodiversity

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 <http://www.fnai.org/clip.cfm>.

Managed Areas

Portions of the site appear to be located within the Indian Lake 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.

Land Acquisition Projects

This site appears to be located within Florida's First Magnitude Springs Florida Forever BOT Project - Silver Springs, which is part of the State of Florida's Conservation and Recreation Lands land acquisition program. For more information on this Florida Forever Project, contact the Florida Department of Environmental Protection, Division of State Lands.

Florida Forever Board of Trustees (BOT) projects are proposed and acquired through the Florida Department of Environmental Protection, Division of State Lands. The state has no specific land management authority over these lands until they are purchased.

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/trackinglist.cfm 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



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

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

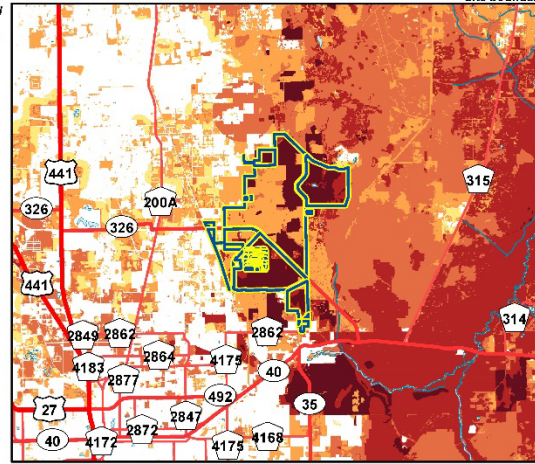
Map should not be interpreted without accompanying documents.

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.

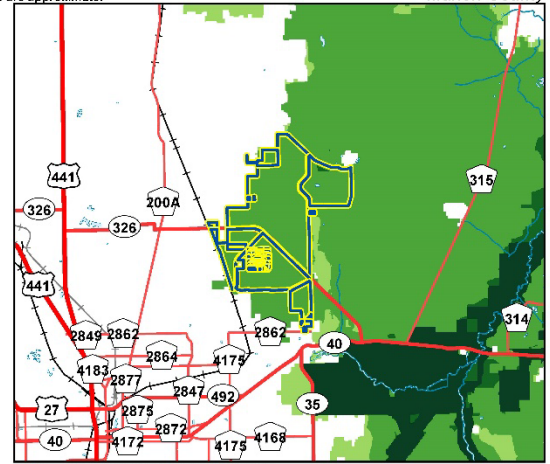
Indian Lake State Forest

Site boundaries are approximate.

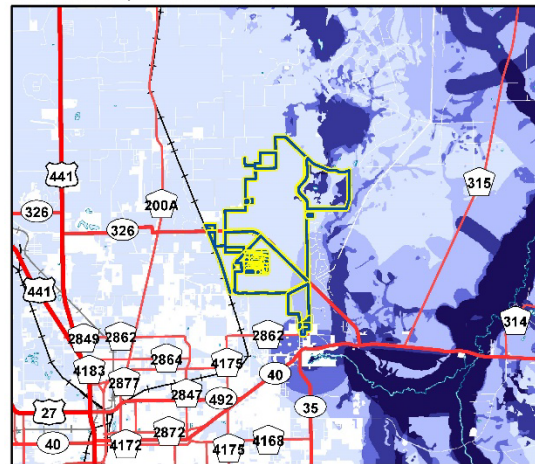
Marion County



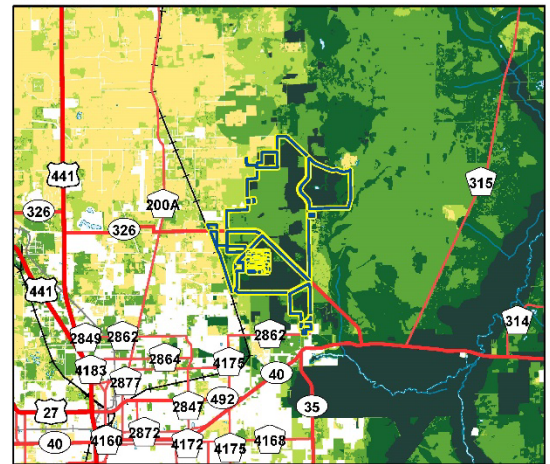
CLIP Biodiversity Resource Priorities



CLIP Landscape Resource Priorities



CLIP Surface Water Resource Priorities



CLIP Aggregated Resource Priorities



Map produced by KAB
3/10/2021



Florida Natural Areas Inventory
Managed Area Element Summary
Indian Lake State Forest



SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status
PLANTS					
<i>Stylisma abdita</i>	scrub stylisma	G3	S3	N	E
REPTILES					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
BIRDS					
<i>Falco sparverius paulus</i>	Southeastern American Kestrel	G5T4	S3	N	ST
MAMMALS					
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

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



FNAI ELEMENT OCCURRENCE REPORT on or near
Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
ALLIMSS*44	<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)	2007-09-06	freshwater prairie, spring-fed river, floodplain swamp, blackwater stream	At least 14 alligators observed.
AMBYCING*50	<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT	1954 pre	1993-03-14: Palis observed that undeveloped land in the Burbank area has been mechanically site prepared and planted to <i>Pinus elliotii</i> . 1954-Pre: no data provided by Neill; however, soils of Burbank area include Eaton, Lynne, and Eureka Sands, indicating that area once supported pine flatwoods (Marion Co. Soil Survey Sheet 61) (PNDFAL02FLUS).	1993-03-14: Palis dipnetted a potential breeding site within the Fort McCoy WMA (T13S, R23E, SEC 33). No flatwoods salamander larvae were encountered. Additional sampling is warranted on WMA since some remnant <i>Aristida stricta</i> still exists (PNDFAL02FLUS). 1954-pre: reported by Neill as having been found here, no further data given (A54NEI01FLUS).
ARAMGUAR*13	<i>Aramus guarana</i>	Limpkin	G5	S3	N	N	2007-03-21	2004-05-26: Limpkins observed along spring run stream and adjacent forest (PNDMUL02FLUS). In past several years, there has been significant degradation of water quality in the spring system due to urban and agricultural run-off (G02DRP02FLUS). 1991-09-19 PRISTINE SPRING-FED RIVER THROUGH HYDRIC HAMMOCK (F91TEL01FLUS).	Limpkins observed from 1991 - 2007 with a high number of nine birds (including four young) seen in 1996 and eight individuals seen in 1991. Element occurrence runs from the head springs to the Ocklawaha River.



FNAI ELEMENT OCCURRENCE REPORT on or near
Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
BASIMARS*40	Basin marsh		G4	S3	N	N	2004	LARGE AREA OF WET PRAIRIE INTERSPERSED WITH NUMEROUS AREAS OF OPEN WATER, WHICH CONTAIN FRAGRANT WATER LILY (NYMPHAEA ODORATA). PRAIRIE DOMINATED BY MARSH GRASSES AND SEDGES. TRANSITIONAL ZONES DOMINATED BY WAX MYRTLE (MYRICA CERIFERA), SWEETGUM (LIQUIDAMBAR STYRACIFLUA), SALT BUSH (BACCHARIS HALIMIFOLIA), SLASH PINE (PINUS ELLIOTTII), A GOLDENROD (SOLIDAGO SP.), BLACKBERRY (RUBUS CUNEIFOLIUS), A BROOMSEDGE (ANDROPOGON SP.), AND MARSH CORDGRASS (SPARTINA BAKERI).	2010: Prior to the 2010 natural community reclassification effort this EO had been known as Wet prairie EO number 33 (see U10FNA01FLUS for updated community descriptions). 2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-23) (U05FNA02FLUS). LARGE AREA OF WET PRAIRIE
CROTADAMP352	<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G3	S3	N	N	2013-07-15	Silver Springs State Park north of Silver River, adjacent part of Cross Florida Greenway, and private parcels in vicinity. SR-40 is a high-traffic highway that cuts across the occurrence. 2013-04-01: capture point (U13SMI01FLUS) was forested upland (sandhill?) above the Silver River floodplain as seen on aerial photograph. 2012-04-30: capture point (U13SMI01FLUS) was forested as seen on aerial photograph.	2012-2013: multiple captures and road-kills discovered by D. Smith and/or colleagues in vicinity of Silver Springs State Park, CR-326, and SR-40; see source features and U13SMI01FLUS for ages, sizes, and specific dates and locations. 1953-08-00: Specimen collected at "Silver Springs" (S53QUIUCFLUS).
DS*11487	<i>Data Sensitive Element</i>	Data Sensitive	G5	S3	N	N	ZZ	Data Sensitive	Data Sensitive
DS*21362	<i>Data Sensitive Element</i>	Data Sensitive	G2G3	S2S3	N	N	1944-04-01	Data Sensitive	Data Sensitive
DS*25687	<i>Data Sensitive Element</i>	Data Sensitive	G3	S3	N	N	1944-04-01	Data Sensitive	Data Sensitive

FNAI ELEMENT OCCURRENCE REPORT on or near
Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
EGRECAER*307	<i>Egretta caerulea</i>	Little Blue Heron	G5	S4	N	ST	1989-05-22	Willow island in freshwater prairie.	1989/05/22: J.A. Hovis, GFC, observation. Surveyed from helicopter. Site not visited by plane in 1989. "Total" = E (includes CAEG, LBHE).
ELIMONR*5	<i>Elliptio monroensis</i>	St. Johns Elephantear	G1G2	S1S2	N	N	2014 pre	Oklawaha and/or Silver River, tributary of St. Johns River.	Williams et al. (2014) depicts 1 site from which this occurrence has been documented.
FALCPAUL*59	<i>Falco sparverius paulus</i>	Southeastern American Kestrel	G5T4	S3	N	ST	1984	UPLAND XERIC WOODLANDS (SANDHILLS AND XERIC HAMMOCK) PARTLY TO MOSTLY DISTURBED OR CLEARED, ADJACENT TO FRESHWATER PRAIRIES.	REPEATEDLY RECORDED ON SITE.
FLOOSWAM*5	Floodplain swamp		G4	S4	N	N	2007-03-21	No general description given	2007-03-21: significant soil subsidence evident due to low water levels over many years (PNDLAM04FLUS). 2004: Update to last obs date was based on interpretation of aerial photography (U05FNA02FLUS). 1993-05-21: FOREST W/ TREES OF VARIABLE SIZES. CYPRESS UP TO 61.8' 5' UP. MAJOR TREE SPP. BALD CYPRESS, BLACKGUM, POP ASH, FLORIDA ASH, RED MAPLE, PANICUM GYMNOCARPON. GROUND COVER IN PLACES (UNDMAR01FLUS).
GOPHPOLY*1290	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2002-03-28	2002-03-28: Ruderal edge of fire-suppressed sandhill right on road (U03HER02FLUS, PNDHER03FLUS, PNDSCH03FLUS).	2002-03-28: One active burrow and one adult observed (U03HER02FLUS, PNDHER03FLUS, PNDSCH03FLUS).
GOPHPOLY*145	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2018-10 – 2018-12	FNAI NCs: sandhill and abandoned field/pasture. Rubus is dominant ground cover in most of abandoned field/pasture - restoration efforts are underway. Sandhill was in good condition.	FNAI 2018 LTDS survey estimated a population of 622 (F18FNA23FLUS). Burrows observed earlier in 1984 and 1993.
LAMPEXTE*22	<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST	1970-10-26	No general description given	3 FSM SPECIMENS (UF-81, 2 UNCAT.), 5 OCTOBER 1933, 1 NOVEMBER 1965 & 26 OCTOBER 1970). FIRST TWO COLLECTED BY UNKNOWN PERSONS, 3RD BY H.W. CAMPBELL.

FNAI ELEMENT OCCURRENCE REPORT on or near
Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
LITHCAPI*213	<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N	2012-03-14	Silver Springs State Park. According to topographic map, the 2012-03-14 observation (U13SMI01FLUS) is just above Silver River floodplain on north side of river, ca. 500 m southwest of intersection of CR-36 with SR-40, and roughly midway between the river and SR-40.	2012-03-14: Daniel Smith and colleagues captured small adult at drift fence (U13SMI01FLUS, PNDSMI15FLUS).
MATEFLOR*6	<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E	1963-05-22	Semi-sunny, flat, upland, cutover forest of Quercus, Fraxinus, Carya, Magnolia grandifolia, and Serenoa. Soil pH = 5.1 in upper 25 cm.	About 10 plants here, most near the small sand road, Flower petals maroon.
MUSTOLIV*10	<i>Mustela frenata olivacea</i>	Southeastern Weasel	G5T4	S3?	N	N	1970-01-03	No general description given	MUSEUM SPECIMENS: SM #08707, COLLECTED BY W. MCCORMICK, 1970-01-03; SM NO #, COLLECTED BY R. ALLEN, 1946-12-17; SM NO # COLLECTED BY D. BOYER, 1946; SM #00828 COLLECTED BY R. ALLEN, 1941.
MUSTPENI*31	<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N	1970-01-03	No general description given	1970-01-03: W. McCormick - Skeleton. Fla. Mus. Nat. Hist. No. 8707.
PITUMELA*107	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	1976-02	No general description given	SPECIMEN COLLECTED FEB 1976 BY SMITH (BCS-1858, UF-36906).
PITUMELA*108	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	1975-04-15	No general description given	MUSEUM SPECIMENS: DOR COLLECTED 15 APRIL 1975 BY HOLLER (BSC-722, UF-36901); SPECIMEN "PLOWED UP", COLLECTED 16 JUNE 1950 BY L. EDMUNSON.
PITUMELA*112	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	1983-08-16	No general description given	SPECIMEN COLLECTED 16 AUG 1983 BY P. PRITCHARD.
PSEUSUWA*47	<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	G5T3	S3	N	N	2004-04-07	Silver River, a large spring-run stream flowing to the Ocklawaha River in the St. Johns River system.	2004-04-07: ca. 20 observed basking during rare animal survey.

FNAI ELEMENT OCCURRENCE REPORT on or near
Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SANDHILL*83	Sandhill		G3	S2	N	N	2004	MATURE STANDS OF GOOD QUALITY SANDHILL DOMINATED BY MATURE TURKEY OAKS (QUERCUS LAEVIS), LONGLEAF PINE (PINUS PALUSTRIS), AND SOME SOUTHERN POST OAK (Q. MARGARETTA) AND BLUEJACK OAKS (Q. INCANA); PINES ARE MOSTLY YOUNG TO MODERATE AGE. MOST AREAS SHOW GOOD DIVERSITY OF HERBS, INCLUDING THE DOMINANT WIREGRASS (ARISTIDA STRICTA), GOLDEN ASTER (PITIOPSIS GRAMINIFOLIA), CHALKY BLUESTEM (SCHIZACHYRIUM STOLONIFERUM), AND BLUE LUPINE (LUPINUS DIFFUSUS). SOME PORTIONS UNBURNED AND SHOWING ENCROACHMENT BY SAND PINE (P. CLAUSA) AND SAW PALMETTO (SERENOA REPENS). SOME AREAS IN THE SOUTHERN PORTION HAVE BEEN LOGGED OF PINES AND HAVE BEEN SINCE USED AS TRASH DUMPS. ON CANDLER SOILS (TYPIC QUARTZIPSAMMENTS).	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-24) (U05FNA02FLUS). MODERATE SIZED TRACT OF SANDHILL JUST SOUTH OF SILVER SPRINGS.
SANDHILL*88	Sandhill		G3	S2	N	N	2004	AREA DOMINATED BY TURKEY OAKS AND LONGLEAF PINE, OF VARIOUS AGES, SOME FAIRLY OLD. VERY GOOD COVER OF WIREGRASS. ON CANDLER SOILS (TYPIC QUARTZIPSAMMENTS).	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-23) (U05FNA02FLUS). GOOD-QUALITY SANDHILL THAT HAS BEEN FIRE-MAINTAINED.

FNAI ELEMENT OCCURRENCE REPORT on or near
Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SANDHILL*89	Sandhill		G3	S2	N	N	2004	LARGE AREA OF ONLY FAIR QUALITY (C-RANK) SANDHILL COMMUNITY WITH NUMEROUS TRAILS AND ROADWAYS CUT THROUGH, MOSTLY CLEARED SANDHILL AREAS TO THE NORTH AND RESIDENTIAL AREAS TO THE SOUTH. THE SANDHILLS ARE DOMINATED BY LONGLEAF PINE (PINUS PALUSTRIS), TURKEY OAK (QUERCUS LAEVIS), AND LIVE OAK (Q. VIRGINIANA), WITH SOME AREAS OF LAUREL OAK (Q. LAURIFOLIA) ENCROACHMENT DUE TO LACK OF FIRES. GROUND COVER IS MOSTLY SPARSE, WITH WIREGRASS (ARISTIDA STRICTA) DOMINANT IN WIDELY SCATTERED CLUMPS. MANY OPEN AREAS OF BARE SAND. OTHER HERBS ARE TYPICAL FOR SANDHILLS. ON CANDLER SOILS (TYPIC QUARTZIPSAMMENTS).	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-24) (U05FNA02FLUS).
SCIUNIGE*10	<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N	1984	UPLAND XERIC WOODLANDS (SANDHILLS & XERIC HAMMOCK) PARTLY TO MOSTLY DISTURBED OR CLEARED, ADJACENT TO FRESHWATER PRAIRIES.	SAID TO BE COMMON ON SITE IN WOODLANDS (SANDHILLS).
SCIUNIGE*190	<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N	2013-02-27	2007-03-21: sandhills in good condition, but in need of more frequent fire to reduce midstory (PNDKIN02FLUS). 2004-05-19: sandhill (PNDMUL02FLUS).	2013-02-27: 2 counted; foraging; quick survey (F13FNA01FLUS). 2007-03-21: one individual seen in sandhills (PNDKIN02FLUS). 1997-04-24: one observation made (PNDMUL02FLUS). 1994: Observations of <i>Sciurus niger shermani</i> made on two occasions in 1994 (PNDMUL02FLUS).
SCIUNIGE*21	<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N	1986-10-28	SUBURBAN	INDIV. HIT BY CAR AND SPECIMEN COLLECTED (UF/FSM, UNCATALOGUED) BY JOE DUDLEY, 28 OCT. 1986.

FNAI ELEMENT OCCURRENCE REPORT on or near
Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SCIUNIGE*75	<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N	1993-03-23	HEDGEROW OF SLASH PINES; SOME MATURE LONGLEAF PINES SCATTERED AROUND AREA. SURROUNDED BY PASTURE LAND AND RESIDENCES. FRINGE OF SANDHILL (EO #88) WITH CLEARED GROUND COVER AND USED FOR CATTLE GRAZING.	ONE INDIVIDUAL OBSERVED NEAR SLIGHT JOG IN RD. OF NE 41 CT; ANOTHER INDIVIDUAL OBSERVED ABOUT 0.6 MILE NORTH OF SR 35 AND NE 90 ST. RD. JUNCTION.
SELOFLOR*10	<i>Selodonon floridensis</i>	Florida Cebtrionid Beetle	G2G4	S2S4	N	N	1962-06-13	1962-06-13: No description given (B99GAL01FLUS).	1962-06-13: One specimen was collected (B99GAL01FLUS).
SPRISTRE*56	Spring-run stream		G2	S2	N	N	2007-03-21	37 MILES.	2007-03-21: water quality has degraded, recreational use is high and increasing, there are ongoing pollution inputs from Halfmile Creek, which drains city and road stormwater (PNDLAM04FLUS). 2002: nitrates in 1953 = 0.463 mg/liter, in 2000=0.81 mg/liter (G02DRP02FLUS). 2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-05-21) (U05FNA02FLUS).
STYLABDI*60	<i>Stylisma abdita</i>	scrub stylisma	G3	S3	N	E	2016-06-29	High quality sandhill burned in past 6 months. Canopy of mature to older mature Pinus palustris. Sparse subcanopy of Pinus palustris, Quercus laevis, and Quercus geminata. Open shrub layer is dominated by Quercus laevis, Licania michauxii, Diospyros virginiana, and Serenoa repens. Diverse groundcover includes Aristida stricta, Aristida purpurascens, Andropogon gyrans, Andropogon temarius Stylisma patens, Pityopsis graminifolia, Croton argyranthemus, Chrysopsis mariana, Carphophorus corymbosus, Rhynchospira megalocarpa, Liatris sp., and Dichantherium sp.	Plants infrequent in areas of exposed sand, sterile, prostrate stems to 15 cm long.



FNAI ELEMENT OCCURRENCE REPORT on or near Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
UPLAFOR*166	Upland hardwood forest		G5	S3	N	N	2007-03-21	2007-03-21: northern portion. DRP mapped as wet flatwoods, grading into upland hardwood forest south to river. Closer to river could be classified as hydric hammock (PNDKIN02FLUS). [Transcribed on 1982-09-18] LOBLOLLY PINE FOREST W/ GRASSY TO SHRUBBY UNDERSTORY. ON " GUMBO" SOIL, PHOSPHATIC CLAY W/ SHELL. OLD GROWTH. MGT. INCLUDES BURNING. HARDWOOD FOREST. SELECTIVELY CUT, BUT STILL HAS 40" DBH SWAMP CHESTNUT OAK & 41" DBH SHUMARD OAK (UNDMAR01FLUS).	2010: Prior to the 2010 natural community reclassification effort this EO had been known as Upland mixed forest EO number 3 (see U10FNA01FLUS for updated community descriptions). 2007-03-21: Loblolly pines also prevalent, some areas of pine bark beetle damage/logging (PNDKIN02FLUS). 2004-05-06: Confirmed as upland mixed forest with mixed hardwoods, Sabal palmetto, and Spigelia loganioides (F04HER01FLUS). [Transcribed on 1982-09-18] MAJOR CANOPY SPP. SWAMP CHESTNUT OAK, HACKBERRY, SWEETGUM, SHUMARD OAK, WINGED ELM, LAUREL OAK, WHITE ASH, CABBAGE PALM, PIGNUT HICKORY, MAGNOLIA. UNDERSTORY INCLUDES HORNBEAM, BLUE PALMETTO, & GRASS CHASMANTHIUM SESSILIFLORUM (UNDMAR01FLUS).



FNAI ELEMENT OCCURRENCE REPORT on or near
Indian Lake State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
URSUFLO95	<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N	2016	Large area of pine plantation, mesic and wet flatwoods, and dome and basin swamps; Largely private commercial timberland, nurseries, and small neighborhoods; public lands are dominated by pine plantation but also have flatwoods interspersed with dome swamps and patches of scrub; Large area of sand pine and oak scrub, mesic flatwoods, sandhill, depression marshes and hardwood swamps, pine plantation; regular harvesting of sand pine (U05SIM01FLUS).	2002: 1,025-1,539 bears estimated in the primary ranges in the Ocala-St. John's region. Part of a larger population that includes Okefenokee Swamp National Wildlife Refuge in Georgia (U05SIM01FLUS). 2014: 1,198 bears estimated in the Ocala-St. John's region and 495 estimated in the Osceola region (A16HUM01FLUS). 2016: polygons created to show where bears are considered 'Abundant' and 'Common' (U16FWC01FLUS) Primary is the FWC-designated core area that represents breeding range and contains documented evidence of reproduction or female bears within available habitat, and Secondary is the FWC-designated area where bears occur within available habitat but outside primary bear range (evidence of bears without documented evidence of reproduction) (U12FWC02FLUS, U05SIM01FLUS). These boundaries are based on decades of bear observations, roadkill distribution, nuisance bear locations, and bear research projects. For detailed location data contact the FWC.

Florida Natural Areas Inventory

Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 31586					
Likely					
Sandhill		G3	S2	N	N
Potential					
<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x curtissii</i>	Curtiss' spleenwort	GNA	S1	N	N
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Pycnanthemum floridanum</i>	Florida mountain-mint	G3	S3	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Selonodon floridensis</i>	Florida Cebionid Beetle	G2G4	S2S4	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 31587

Likely

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Upland hardwood forest		G5	S3	N	N

Potential

<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x curtissii</i>	Curtiss' spleenwort	GNA	S1	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Asplenium x heteroresiliens</i>	Morzeiti's spleenwort	G2	S1	N	N
<i>Asplenium x plenum</i>	ruffled spleenwort	G1Q	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Calopogon multiflorus</i>	many-flowered grass-pink	G2G3	S2S3	N	T
<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	scrub buckwheat	G4T3	S3	T	E
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Nolina atopocarpa</i>	Florida beargrass	G3	S3	N	T
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Pycnanthemum floridanum</i>	Florida mountain-mint	G3	S3	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 31887

Documented

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
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Likely

Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

Potential

<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x heteroresiliens</i>	Morzeiti's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT

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Florida Natural Areas Inventory

Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E
Matrix Unit ID: 31888					
Documented					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Likely					
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
Potential					
<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x curtissii</i>	Curtiss' spleenwort	GNA	S1	N	N
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 31889

Documented

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Sandhill		G3	S2	N	N

Likely

<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
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Potential

<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x curtissii</i>	Curtiss' spleenwort	GNA	S1	N	N
<i>Asplenium x heteroresiliens</i>	Morzentz's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E

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Florida Natural Areas Inventory

Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 31890

Likely

<i>Crangonyx grandimanus</i>	Florida Cave Amphipod	G2G3	S2S3	N	N
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

Potential

<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x curtissii</i>	Curtiss' spleenwort	GNA	S1	N	N
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Pycnanthemum floridanum</i>	Florida mountain-mint	G3	S3	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 32196

Likely

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report



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<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
Potential					
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Mondropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata olivacea</i>	Southeastern Weasel	G5T4	S3?	N	N
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E
Matrix Unit ID: 32197					
Documented					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
<i>Stylisma abdita</i>	scrub stylisma	G3	S3	N	E
Likely					
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
Potential					
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Falco sparverius paulus</i>	Southeastern American Kestrel	G5T4	S3	N	ST

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Florida Natural Areas Inventory

Biodiversity Matrix Report



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<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E
Matrix Unit ID: 32198					
Documented					
<i>Stylisma abdita</i>	scrub stylisma	G3	S3	N	E
Likely					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
Potential					
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x heteroresiliens</i>	Morzeiti's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Falco sparverius paulus</i>	Southeastern American Kestrel	G5T4	S3	N	ST
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E

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Florida Natural Areas Inventory

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<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E
Matrix Unit ID: 32199					
Documented					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Likely					
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
Potential					
<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report



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<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 32200

Documented

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N

Likely

<i>Crangonyx grandimanus</i>	Florida Cave Amphipod	G2G3	S2S3	N	N
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

Potential

<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Arnoglossum diversifolium</i>	variable-leaved Indian-plantain	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cucularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST
<i>Peromyscus floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 32517

Likely

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
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Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
Potential					
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Arnoglossum diversifolium</i>	variable-leaved Indian-plantain	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzeiti's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Calopogon multiflorus</i>	many-flowered grass-pink	G2G3	S2S3	N	T
<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S1	N	N
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Illicium parviflorum</i>	star anise	G2	S2	N	E
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata olivacea</i>	Southeastern Weasel	G5T4	S3?	N	N
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Peromyscus floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteronotopis welaka</i>	Bluenose Shiner	G3G4	S3S4	N	ST
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 32518

Documented-Historic

<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST
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Likely

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Potential					
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Arnoglossum diversifolium</i>	variable-leaved Indian-plantain	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Falco sparverius paulus</i>	Southeastern American Kestrel	G5T4	S3	N	ST
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Peromyscus floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteronotopis welaka</i>	Bluenose Shiner	G3G4	S3S4	N	ST
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E
Matrix Unit ID: 32519					
Likely					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
Upland hardwood forest		G5	S3	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
Potential					
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Arnoglossum diversifolium</i>	variable-leaved Indian-plantain	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST

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Florida Natural Areas Inventory
Biodiversity Matrix Report



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<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S1	N	N
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Dryobates borealis</i>	Red-cockaded Woodpecker	G3	S2	E, PT	FE
<i>Falco sparverius paulus</i>	Southeastern American Kestrel	G5T4	S3	N	ST
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 32520

Likely

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
Sandhill upland lake		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

Potential

<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Arnoglossum diversifolium</i>	variable-leaved Indian-plantain	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzent's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Dermochelys coriacea</i>	Leatherback Sea Turtle	G2	S2	E	FE
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Dryobates borealis</i>	Red-cockaded Woodpecker	G3	S2	E, PT	FE

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Florida Natural Areas Inventory

Biodiversity Matrix Report



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<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	scrub buckwheat	G4T3	S3	T	E
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 32521

Likely

Basin marsh		G4	S3	N	N
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

Potential

<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Arnoglossum diversifolium</i>	variable-leaved Indian-plantain	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzeiti's spleenwort	G2	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Egretta caerulea</i>	Little Blue Heron	G5	S4	N	ST
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	scrub buckwheat	G4T3	S3	T	E
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E

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<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Pteroglossaspis ecrinata</i>	giant orchid	G2G3	S2	N	T
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

Matrix Unit ID: 32841

Likely

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Mesic flatwoods		G4	S4	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

Potential

<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Amoglossum diversifolium</i>	variable-leaved Indian-plantain	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzeiti's spleenwort	G2	S1	N	N
<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Dryobates borealis</i>	Red-cockaded Woodpecker	G3	S2	E, PT	FE
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	scrub buckwheat	G4T3	S3	T	E
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E

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<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E
Matrix Unit ID: 32842					
Likely					
Basin marsh		G4	S3	N	N
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N
Potential					
<i>Agrimonia incisa</i>	incised groove-bur	G3	S2	N	T
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S1	T	FT
<i>Ambystoma tigrinum</i>	Eastern Tiger Salamander	G5	S3	N	N
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Arnoglossum diversifolium</i>	variable-leaved Indian-plantain	G2	S2	N	T
<i>Asplenium x heteroresiliens</i>	Morzeiti's spleenwort	G2	S1	N	N
<i>Carex chapmannii</i>	Chapman's sedge	G3	S3	N	T
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Digitaria floridana</i>	Florida fingergrass	G1	S1	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT
<i>Egretta caerulea</i>	Little Blue Heron	G5	S4	N	ST
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	scrub buckwheat	G4T3	S3	T	E
<i>Forestiera godfreyi</i>	Godfrey's swampprivet	G2	S2	N	E
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2S3	N	N
<i>Illicium parviflorum</i>	star anise	G2	S2	N	E
<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	ST
<i>Lithobates capito</i>	Gopher Frog	G2G3	S3	N	N
<i>Litsea aestivalis</i>	pondspice	G3?	S2	N	E
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Mondropsis reynoldsiae</i>	pygmy pipes	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Myotis austroriparius</i>	Southeastern Bat	G4	S3	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Neofiber alleni</i>	Round-tailed Muskrat	G2	S2	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2	N	N
<i>Orbexilum virgatum</i>	pineland scurfpea	G1	S1	N	E
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Peromyscus floridanus</i>	Florida Mouse	G3	S3	N	N
<i>Salix floridana</i>	Florida willow	G2	S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Sideroxylon alachuense</i>	silver buckthorn	G1	S1	N	E
<i>Spigelia loganioides</i>	pinkroot	G2Q	S2	N	E
<i>Warea amplexifolia</i>	clasping warea	G1	S1	E	E

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.

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

PT = Species proposed for listing as threatened

SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.

SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

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

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

C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service

FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service

FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service

FXN = Federal listed as an experimental population in Florida

FT(S/A) = Federal Threatened due to similarity of appearance

ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.

SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for *Pandion haliaetus* (Osprey) indicates that this status applies in Monroe county only.)

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

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: <http://www.doacs.state.fl.us/pi/>.

E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.

T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.

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

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

Michael W. Sole
Vice Chairman
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Steven Hudson
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Eric Sutton
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Thomas H. Eason, Ph.D.
Assistant Executive Director

Jennifer Fitzwater
Chief of Staff

Fish and Wildlife
Research Institute
Gil McRee
Director

727-896-8626
727-823-0166 FAX

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

**Fish and Wildlife
Research Institute**
100 Eighth Avenue SE
St. Petersburg, Florida
33701-5020
Voice: (727) 896-8626
Fax: (727) 823-0166
Hearing/speech-impaired:
(800) 955-8771 (T)
(800) 955-8770 (V)
MyFWC.com/Research

March 9, 2021

Patti Anderson
Land Management Planner
Florida Forest Services

Dear Patti:

This letter is in response to your request for listed species occurrence records and critical habitats for the Indian Lake State Forest, located in Marion County, Florida. Records from The Florida Fish and Wildlife Conservation Commission's database indicate that listed species occurrence data and critical habitats are located within the project area. Records of Florida black bear and Indigo snake were found on, or within a 1-mile distance of, the property. SHCAs were found for Florida mouse, Cooper's hawk, Florida black bear, Swallow-tail kite and Striped newt within a 1-mile distance of, the property. Enclosed are 8.5 x 11 maps prioritized SHCA's, species richness, priority wetlands for listed species, species locations and land cover for the project site and surrounding area. A list of species occurrences provided by FNAI are enclosed at the end of this document.

This letter and attachments should not be considered as a review or an assessment of the impact upon threatened or endangered species of the project site. It provides FWC's most current data regarding the location of listed species and their associated habitats.

Our SHCA recommendations are intended to be used as a guide. Land development and ownership in Florida is ever-changing and priority areas identified as SHCA might already have been significantly altered due to development or acquired into public ownership. Onsite surveys, literature reviews, and coordination with FWC biologists remain essential steps in documenting the presence or absence of rare and imperiled species and habitats within the project area.

Our fish and wildlife location data represents only those occurrences recorded by FWC staff and other affiliated researchers. It is important to understand that our database does not necessarily contain records of all listed species that may occur in a given area. Also, data on certain species, such as gopher tortoises, are not entered into our database on a site-specific basis.

Therefore, one should not assume that an absence of occurrences in our database indicates that species of significance do not occur in the area.

The Florida Natural Areas Inventory (FNAI) maintains a separate database of listed plant and wildlife species, please contact FNAI directly for specific information on the location of element occurrences within the project area.

Name of Addressee
Page 2
Date

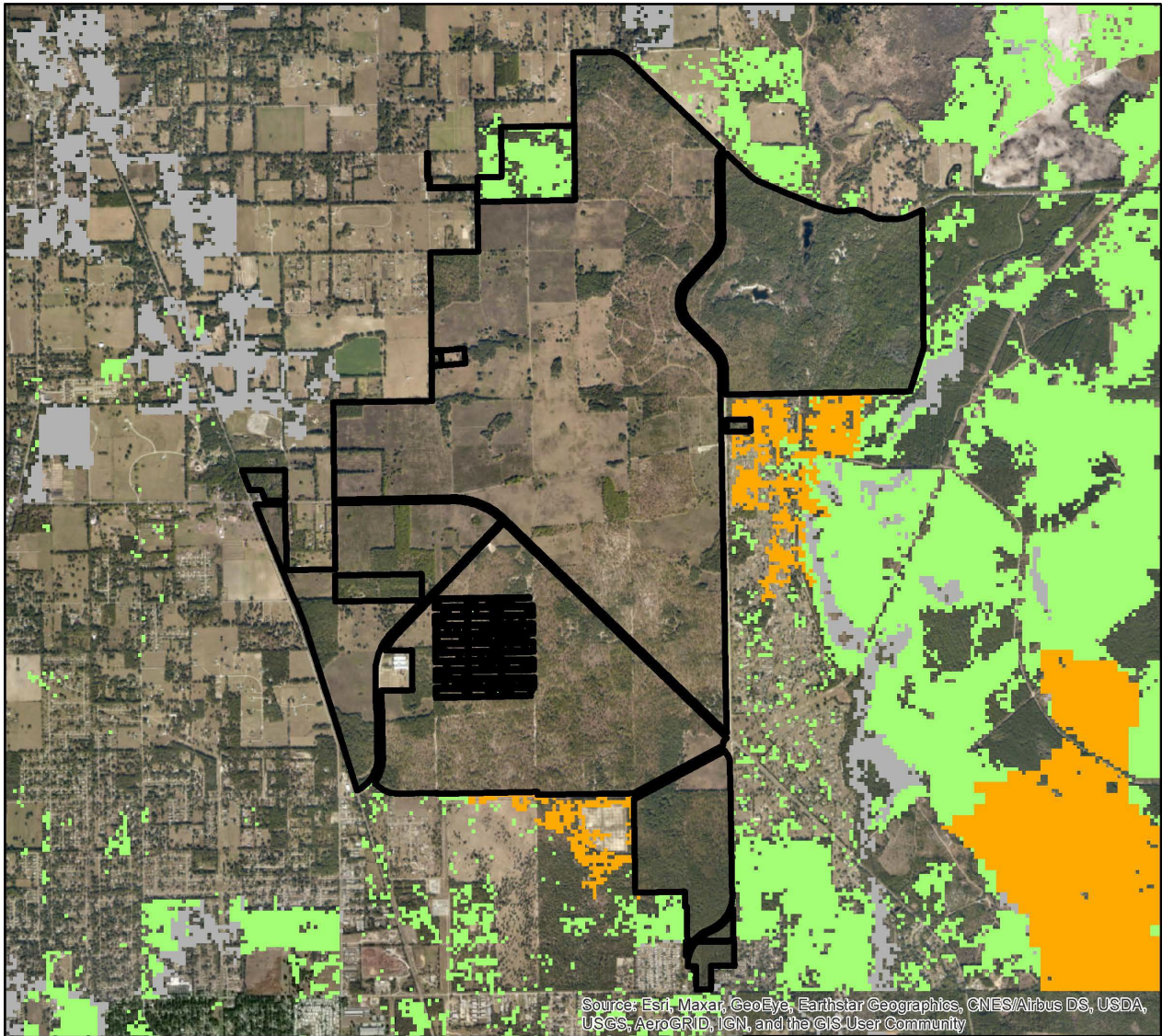
Because FNAI is funded to provide information to public agencies only, you may be required to pay a fee for this information. County-wide listed species information can be located at their website (<http://www.fnai.org>). FNAI species and communities located in the Indian Lake State Forest include Gopher tortoise, Pine snake, Southern fox squirrel, sandhill communities as well as scrub stylisma.

Please credit the Florida Fish and Wildlife Conservation Commission in any publication or presentation of these data. If you have any questions or further requests, please contact me at (850) 488-0588 or gisrequests@myfwc.com.

Sincerely,

Steven Nicholl

Environmental Specialist I/GIS Technician
Center for Spatial Analysis
Florida Fish and Wildlife Conservation Commission
Fish and Wildlife Research Institute
100 8th Avenue S.E.
St. Petersburg, FL 33701



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Prioritized SHCA's



 Indian Lake State Forest Boundary



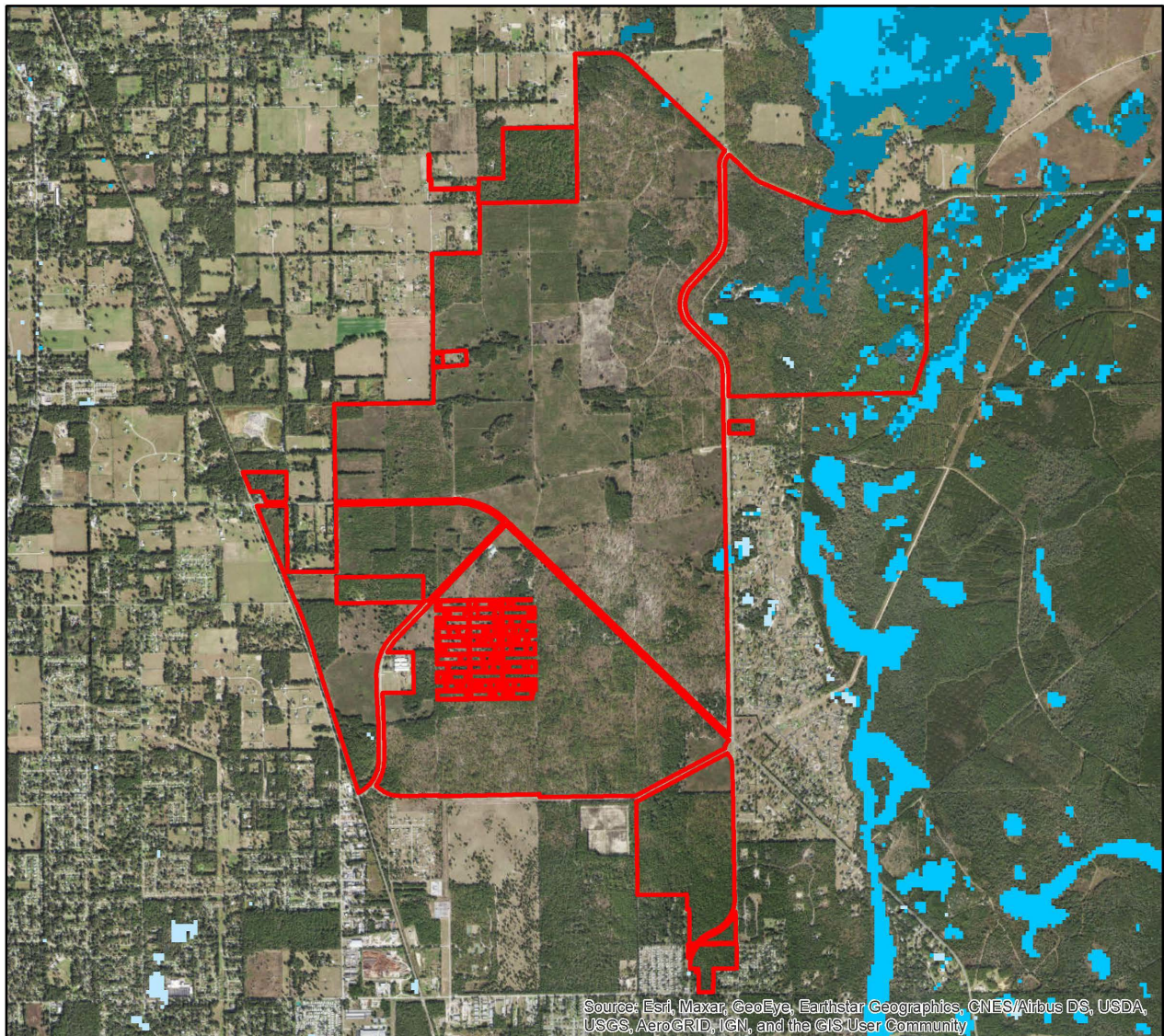
Indian Lake State Forest

The prioritized SHCA map identifies 5 classes of SHCA based upon Heritage ranking criteria developed by The Nature Conservancy, the Natural Heritage Program Network, and the Florida Natural Areas Inventory. There are 2 possible ranks used to prioritize a species' SHCA: 1) the global rank based on a species worldwide status, and 2) the state rank based upon the species status in Florida. The state and global ranks are based upon many factors such as known occurrence locations, estimated abundance, range, amount of habitat currently protected, perceived levels of threats towards the species, and ecological fragility.



Florida Fish and Wildlife
Conservation Commission
MyFWC.com

FWC ID: 2021_6486 March 8, 2021



Priority Wetlands

- 1-3 Species, Wetlands habitat
- 4-6 Species, Wetlands habitat
- 7-9 Species, Wetlands habitat
- 10-11 Species, Wetlands habitat



State Forest site boundary

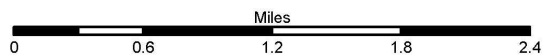


Indian Lake State Forest

This raster dataset identifies Florida wetlands important to wetland-dependent vertebrates listed by the State of Florida as endangered, threatened, or species of special concern. The dataset also ranks the relative importance of wetland areas based on species richness of the selected vertebrate species.

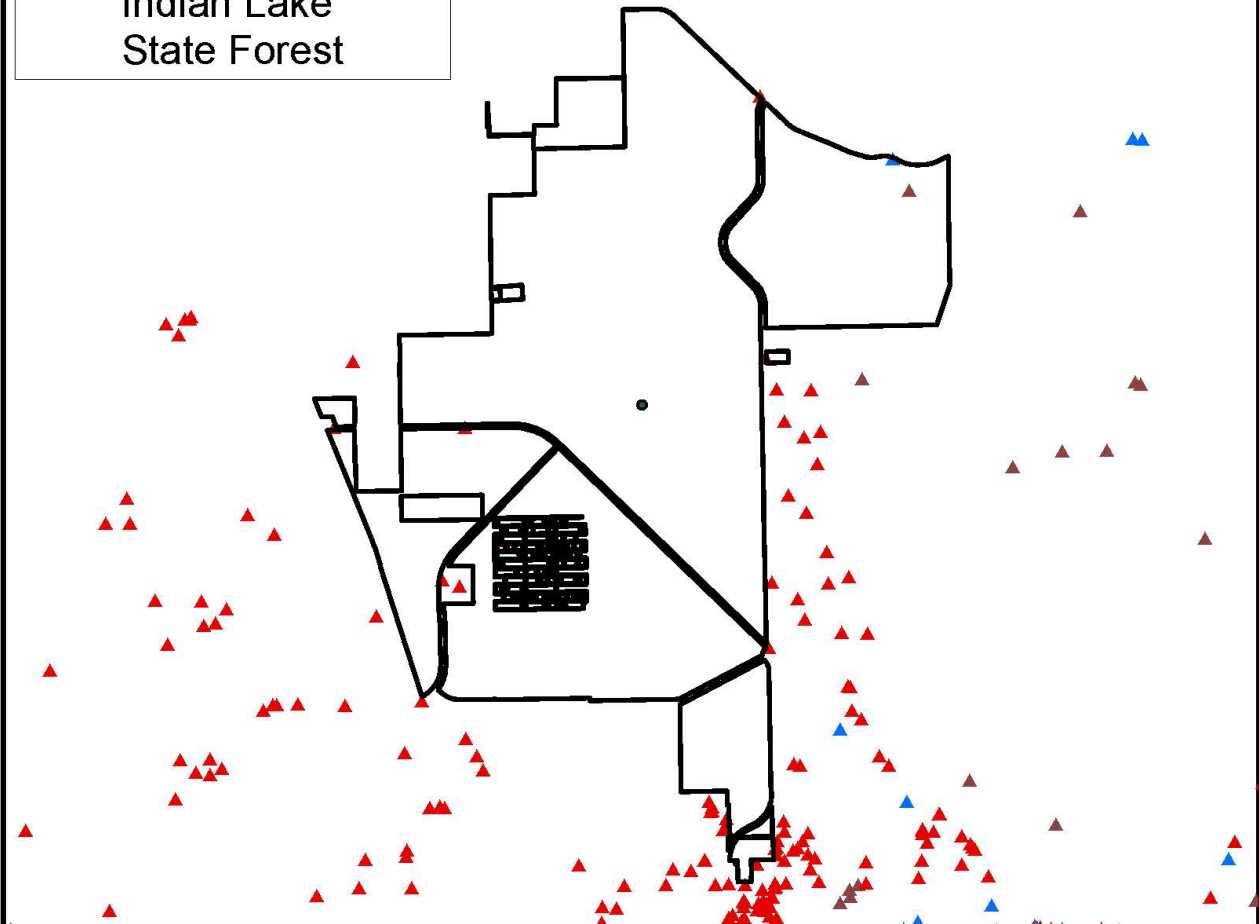


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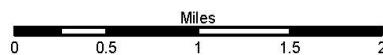


FWC ID: 2021_6532 December 21, 2021

Indian Lake State Forest

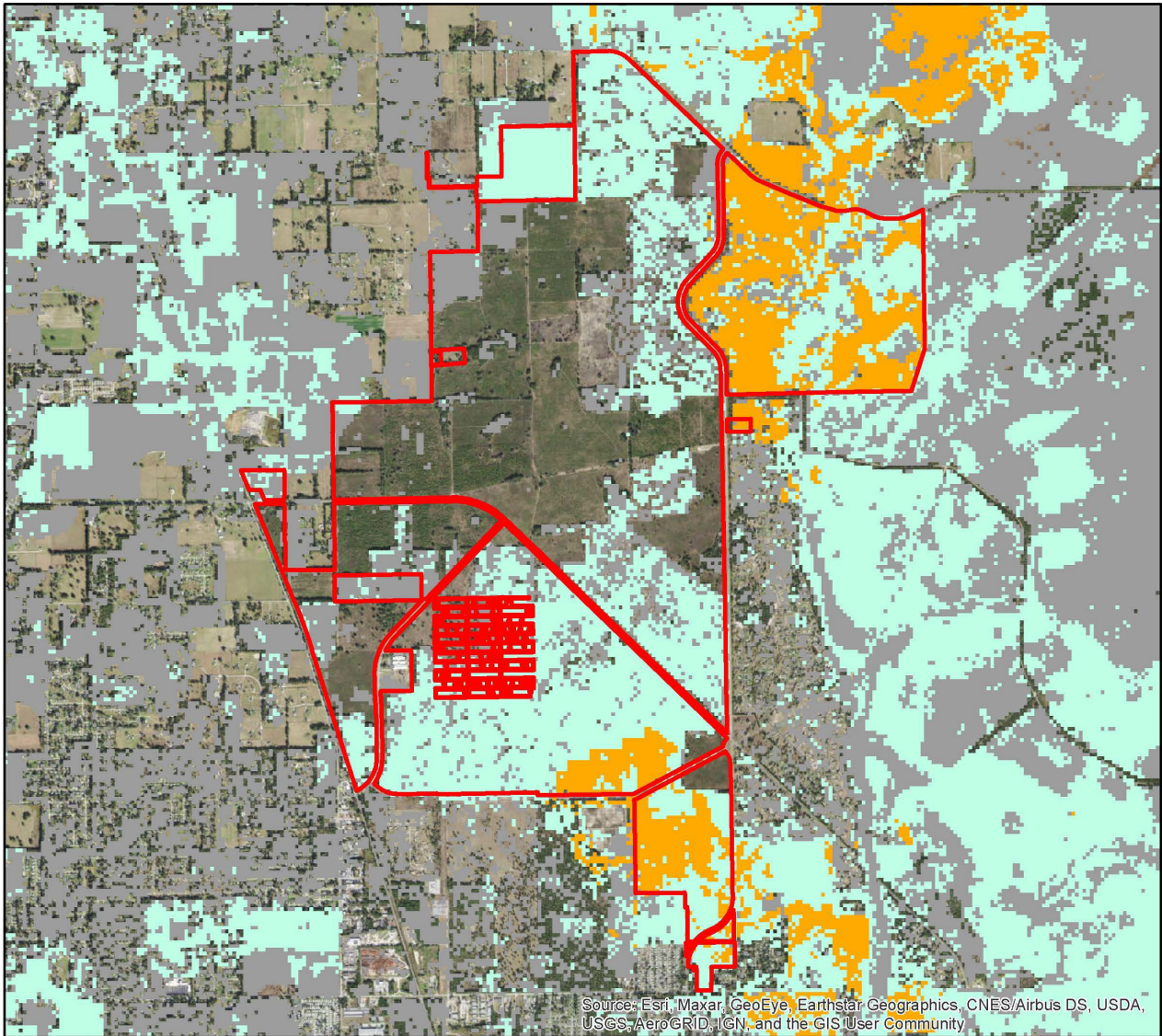


- | | |
|---------------------------|---------------------------------|
| * Rare and Imperiled Fish | ● Red Cockaded Woodpecker |
| * Bog Frog | ● Scrub-jay |
| * Pine Barrens Treefrog | ● Snail Kite |
| * Flatwoods Salamander | ● Shorebirds |
| * Sand Skink | ● Wading Bird Rookeries 1999 |
| * Striped Newt | ■ Caracara Nests |
| ● Indigo Snake | ■ Eagles Nests |
| ● Burrowing Owl | ■ Florida Wood Stork Nests -FWC |
| ● Painted Buntings 08-10 | ■ Shore Birds Nests 2002 |
| ▲ Bear Calls | ◆ Panther Locations |
| ▲ Bear Roadkill | ◆ Panther Mortality |
| ▲ Black Bear Telemetry | ◆ Wildlife Observations |
| ▲ Bear Captures | ■ Snowy Plover Nests 2002-2006 |



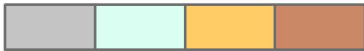
Florida Fish and Wildlife
Conservation Commission
MyFWC.com

FWC ID: 2021_6486 March 9, 2021



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Species Richness



1-3
4-6
7-9
10-13



State Forest site boundary

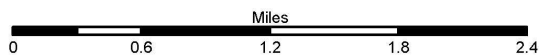


Indian Lake State Forest

This dataset represents the richness of potential habitat for selected focal species in Florida. Potential habitat includes areas that have been occupied by the species and areas where occupancy is unknown based on available occurrence records. We combined the potential habitats generated for Florida into a single grid layer indicating diversity. Pixel cell value indicates the total number of species potential habitat identified at the specific location.



Florida Fish and Wildlife
Conservation Commission
MyFWC.com



FWC ID: 2021_6532 December 21, 2021

Exhibit N

ILSF Fire History

Indian Lake State Forest Burn Acres by Fiscal Year

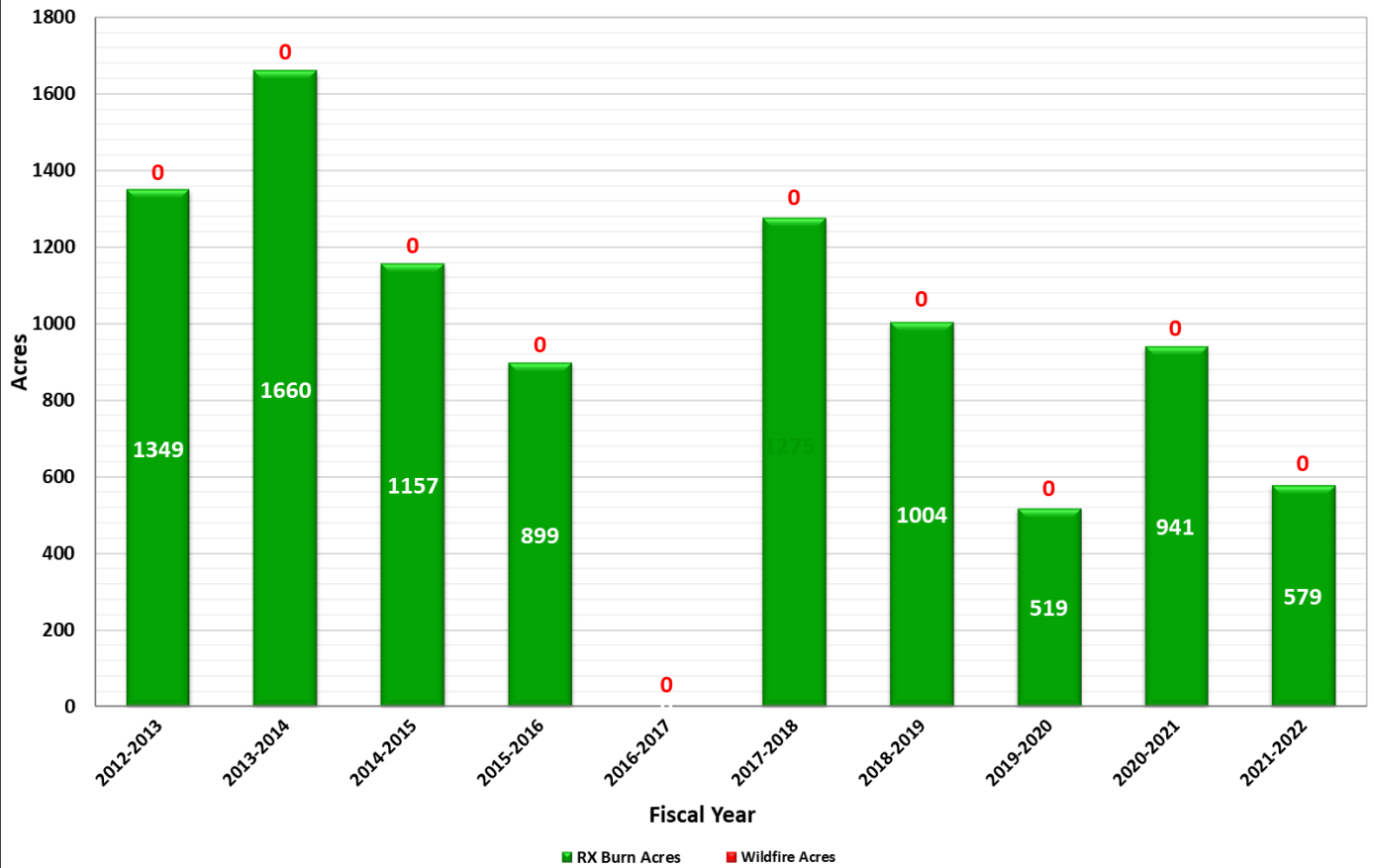


Exhibit O

Non-Native Invasive Species Map



Florida Forest Service

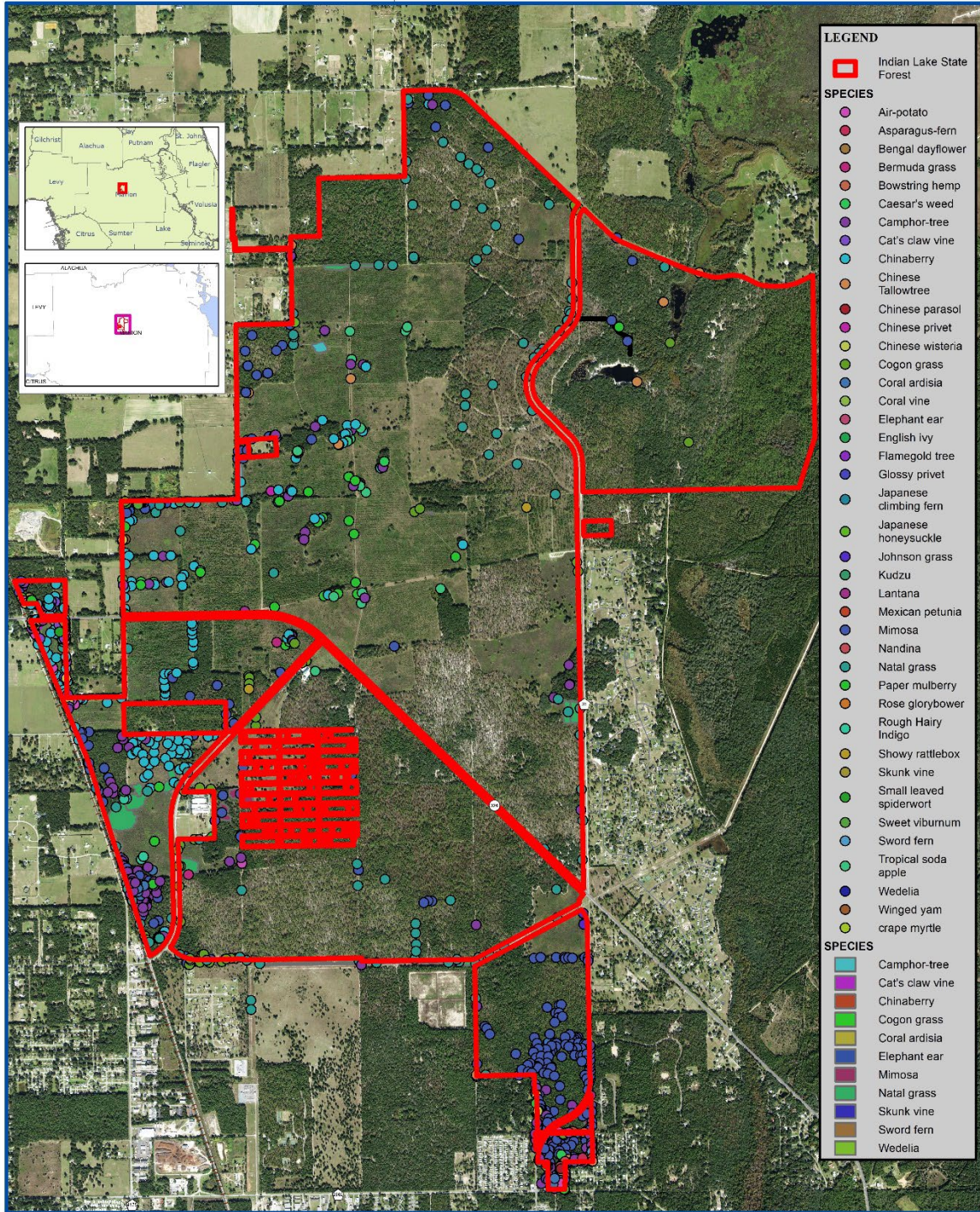
Indian Lake State Forest

Non-Native Invasive Species Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
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Revised Area boundary the courtesy of
the Florida Forest Service, 2022.
Florida, June 2022. 100,000:1
From the US Army Corps of Engineers



LEGEND

Indian Lake State Forest

SPECIES

- Air-potato
- Asparagus-fern
- Bengal dayflower
- Bermuda grass
- Bowstring hemp
- Caesar's weed
- Camphor-tree
- Cat's claw vine
- Chinaberry
- Chinese Tallowtree
- Chinese parasol
- Chinese privet
- Chinese wisteria
- Cogon grass
- Coral ardisia
- Coral vine
- Elephant ear
- English ivy
- Flamegold tree
- Glossy privet
- Japanese climbing fern
- Japanese honeysuckle
- Johnson grass
- Kudzu
- Lantana
- Mexican petunia
- Mimosa
- Nandina
- Natal grass
- Paper mulberry
- Rose glorybower
- Rough Hairy Indigo
- Showy rattlebox
- Skunk vine
- Small leaved spiderwort
- Sweet viburnum
- Sword fern
- Tropical soda apple
- Wedelia
- Winged yam
- crape myrtle

SPECIES

- Camphor-tree
- Cat's claw vine
- Chinaberry
- Cogon grass
- Coral ardisia
- Elephant ear
- Mimosa
- Natal grass
- Skunk vine
- Sword fern
- Wedelia

0.5 0.25 0 Miles



Map Month/Year: November 2022

1,000 500 0 1,000 Yards

Exhibit P

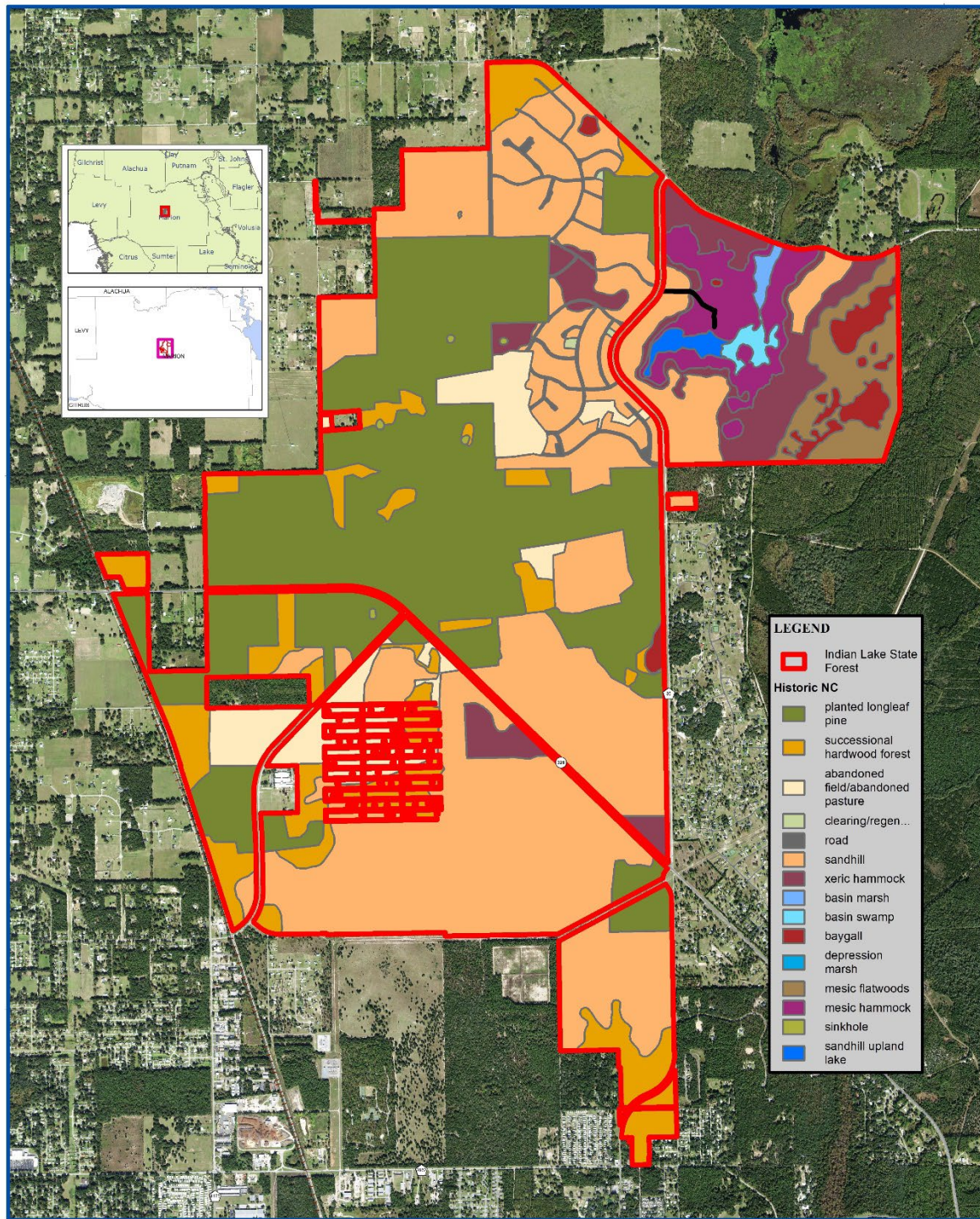
Current Natural Communities Map



Current FNAI Natural Communities and Cover Type

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
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Map Month/Year: April 2021



Exhibit Q

Historic Natural Communities Map



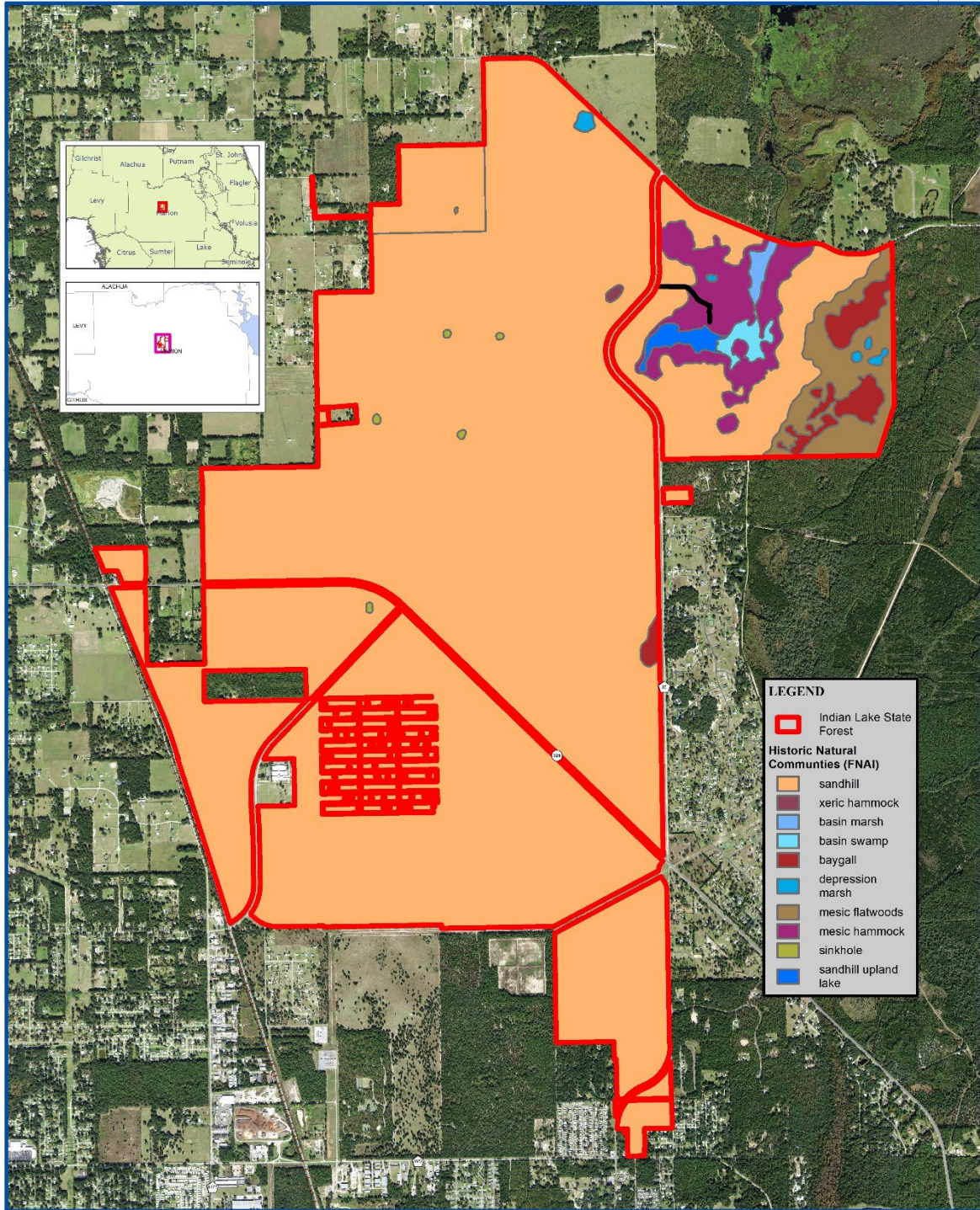
Florida Forest Service

Indian Lake State Forest

Historic FNAI Natural Communities and Cover Type

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

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0.5 0.25 0 Miles



Map Month/Year: March 2021

1,000 500 0 1,000 Yards

Exhibit R

Management Prospectus

**Florida's First Magnitude Springs**

Bay, Citrus, Columbia, Gilchrist, Hamilton, Hernando, Jackson, Lafayette, Lake, Leon, Levy, Madison, Marion, Suwannee, Wakulla, Walton, Washington

Partnerships and Regional Incentives

Project-at-a-Glance

<i>Placed on List</i>	<i>1991</i>
<i>Project Area</i>	<i>16,583</i>
<i>Acres Acquired</i>	<i>10,610</i>
<i>at a Cost of</i>	<i>\$106,192,527</i>
<i>Acres Remaining</i>	<i>5,972</i>

Purpose for State Acquisition

Large springs of clear, continuously flowing water are among Florida's most famous and important natural and recreational resources. The cavernous, water-filled rock of the Floridan Aquifer supplies the largest springs. By preserving land around springs, this project will aid in the protection of springs, karst windows, and the Floridan Aquifer from the effects of commercial, residential, and agricultural runoff, clearcutting and mining; and unsupervised recreation. This project will ensure that Floridians and visitors from all over the world will be able to enjoy Florida springs for years to come.

Manager(s)

Spring or Property	Managers
Morrison Springs	Walton County
Blue Springs Park	DRP
Brunson Landing and Cypress Spring	Leased from owner, managed by NFWFMD
Gainer Springs	DRP / NFWFMD
Jackson Blue Springs	Jackson County
River Sink Spring	US Forest Service
Church Sink	Leon County
St. Marks Springs	DRP
Hardee Spring	Florida Forest Service
Madison Blue Springs	DRP
Damascus Peanut Tract and Falmouth Spring	NFWFMD
Lafayette Blue Springs	Lafayette County
Troy Spring	DRP
Fanning Springs	DRP / OGT / NFWFMD
Silver Springs Sandhill	Marion County
Weeki Wachee Springs	FWC
Springs Coast Research	Wildlands Conservation
Horne Spring	FFS

General Description

Because of the thick, water-filled limestone underlying it, Florida has more large springs (including river rises and karst windows) than any other state or even country. Those discharging an average of 100 cubic feet of water per second or more are called first-magnitude springs. The 33 recognized first magnitude springs in Florida are scattered in the northern peninsula and the eastern panhandle where the limestone of the Floridan Aquifer arches close to the surface. Each day, these 33 springs send out much more water than is used for drinking water by all the people in the state. The springs, with generally clear, continuously flowing waters, are among Florida's most important natural resources and some are famous tourist attractions. The tracts harbor at least seven FNAI-listed plants and eighteen FNAI-listed animals. The Weeki Wachee tract includes one of the best remaining scrubs on Florida's West Coast.

Several archaeological or historic sites are known from these springs, from remains over 2000 years old to an historic Sinclair gas station. All these springs are vulnerable to development and unsupervised use.

FNAI Element Occurrence Summary 2019

<u>FNAI Element</u>	<u>Score</u>
Reticulated Flatwoods Salamander	G2/S1
Manatee	G2/S2
Gopher Tortoise	G3/S3
Florida Mouse	G3/S3
Florida Black Bear	G5T4/S4
Suwannee Moccasinshell	G1/S1
Withlacoochee Tiny Sand-loving Scarab	G1/S1
Woodville Karst Cave Crayfish	G1/S1
<i>ciliate-leaf tickseed</i>	G1G2/S1
Jackson County Cave Amphipod	G1G2/S1
Gulf Moccasinshell	G2/S1
Coastal Lowland Cave Crayfish	G1G2/S1S2

71 rare species are associated with the project

Source: Florida Natural Areas Inventory (FNAI, January 2020)

Public Use

The project sites are designated for use as state parks, geological sites and wildlife and environmental areas, with high recreational potential for swimming, canoeing, camping, and nature appreciation.

Acquisition Planning

1990

On December 7, 1990, the Land Acquisition Advisory Council (LAAC) added the Florida's First Magnitude Springs – Phase I project to the CARL Priority list. This fee-simple acquisition, sponsored by the Department of Environmental Regulations, consisted of approximately 2,907 acres, 36 landowners,

136 parcels, and a taxable value (TAV) of \$5,718,493. In 1990, five springs made up the project: Falmouth Spring (Suwannee County, 75 acres, 1 parcel, 1 landowner, TAV \$45,000), Fanning Springs (Levy County, 525 acres, 98 parcels, 17 landowners, TAV \$1,187,610), Gainer Springs (Bay County, 1,258 acres, 19 parcels, 7 landowners, TAV \$3,256,739), River Sink Spring (Wakulla County, 105 acres, 4 parcels, 4 landowners, TAV \$64,956), and St. Marks Springs (Leon County, 890 acres, 19 parcels, 6 landowners, TAV \$1,164,188). According to the 1990 Project Design document, the DRP will manage St. Marks Springs. The US Forest Service will manage River Sink Spring. The OGT, DRP, and SRWMD will manage Fanning Springs. A lead manager has not been determined for Falmouth Springs. The lead manager is still unclear for Gainer Springs; however, the NFWFMD and Bay County both expressed an interest. A portion of the Fanning Springs sites have been acquired. The NFWFMD has acquired 214 acres of the Gainer Springs sites.

1991

On June 28, 1991, the LAAC approved a 218-acre addition to the Falmouth Springs site, located in Suwannee County, within the project boundary. It was sponsored by the landowner, Nemours Foundation, who already has acreage within the current boundary and is not willing to sell only a portion of the tract. The taxable value of the addition is \$129,600. SRWMD will manage if acquired.

1992

On December 10, 1992, the LAAC approved Phase II that added three springs, 1,880 acres with a taxable value of \$5,180,452. This addition consisted of Jackson Blue Springs (Jackson County, 348 acres, 3 parcels, 2 landowners, TAV \$256,556); Troy Spring (Lafayette County, 265 acres, 6 parcels, 2 landowners, TAV \$261,897); and Weeki Wachee Springs (Hernando County, 1,267 acres, 59 parcels, 24 landowners, TAV \$4,661,999). The FWC will manage the Weeki Wachee Springs sites. The DRP will manage the Troy Spring site. Jackson County will manage the Jackson Blue Springs sites. Portions of Troy Spring, Weeki Wachee Springs, and Jackson Blue Springs sites have been acquired. On December 10, 1992, the LAAC also approved a fee-simple, 1,635-acre addition (Gainer Springs Expansion) and combined it with the Gainer Springs site. The majority of the addition is owned by Hunt Petroleum/Rosewood Timber Co. and St. Joe Paper. There are also several small ownerships. The estimated taxable value is \$3,000,000. Phase I was combined with the new Florida's First Magnitude Springs Phase II. The springs are located in Bay and Washington counties. The NFWFMD will manage the 214-acre Harder tract that it acquired.

1995

On October 30, 1995, the LAAC approved a fee-simple, 20-acre addition (Jackson Blue Springs) to the project boundary in Jackson County. It was sponsored by the two landowners, Carolyn D. Huff and Wayne Mixon, located along Spring Run of Merritt's Mill Pond in Jackson County, and has a taxable value of \$258,790. Jackson County will manage. Both properties were acquired in 1997.



1998

On December 3, 1998, the Land Acquisition Management Advisory Council (LAMAC) transferred the St. Marks Springs, River Sink Spring, Fanning Springs, and Gainer Springs sites to the Negotiation Impasse group. On July 29, 1999, the LAMAC approved a fee-simple, 65-acre addition (Madison Blue Springs) in Madison County to the project, sponsored by the landowners' representative. It contains 45 parcels, 22 landowners, and a taxable value of \$604,000. The addition was designated essential and added to the Priority portion of the project. Madison County will manage it. Approximately 44 acres have been acquired.

2000

On August 22, 2000, the ARC approved a fee-simple, 40-acre addition (Cypress Spring) in Washington County to the project boundary. The addition was sponsored by Conservation Properties for the landowner, Harold Vickers, and had a taxable value of \$131,400. Mr. Vickers was willing to manage it if acquired; however, property was sold to a third party in 2002.

2003

On April 18, 2003, the ARC approved a fee-simple, 200-acre addition (Morrison Springs) in Walton County to the project boundary with a taxable value of \$63,880. The addition was sponsored by Conservation Properties, Inc. and Walton County will manage the site. Also, on April 18, 2003 ARC approved a fee-simple, 4,552-acre addition (Silver Springs Addition) north of Silver Springs in Marion County to the project boundary. The addition was sponsored by the Silver Springs Basin Working Group, consisted of one landowner, Avatar Properties Inc., and had a taxable value of \$3,406,945. The FFS will manage this if it is acquired.

On August 15, 2003, the ARC approved a fee-simple, 172-acre addition (Lafayette Blue Springs) in Lafayette County to the project boundary. The addition was sponsored by Conservation Properties, consisted of one landowner, Union Land and Timber Corp., 9 parcels, and a taxable value of \$97,000. Lafayette County will manage if acquired. On October 17, 2003, the ARC approved a fee-simple, 365-acre addition (Silver Springs Addition No. 2) in Marion County to the project boundary. The addition was sponsored by the Silver Springs Basin Working Group and the Marion County Audubon, Inc., consisted of one landowner, Seldin, 2 parcels, and a taxable value of \$2,889,223. Marion County will manage the site. In 2005, 330 acres were acquired.

On December 5, 2003, the ARC approved a fee-simple, 1,717-acre addition (Jackson Blue Springs) in Jackson County to the project boundary. The addition, sponsored by Conservation Properties, consisted of 11 parcels, 5 landowners (Edinburgh Investment Corp; AJ Green; Howard Muncaster Partnership; LH Alford Farms Inc.; Doyle Green), and a taxable value of \$303,367. Jackson County will manage it if acquired. On October 15, 2004, the ARC approved a fee-simple, 5-acre addition (Church Sink) in Leon



County to the project boundary. The addition was sponsored by the landowner, J. Lee Vause Trust, consisted of one parcel, and a taxable value of \$47,700. Leon County will manage if acquired.

2006

On October 13, 2006, ARC approved a fee-simple 305-acre addition (Hardee Spring) to the boundary in Hamilton County. The addition was sponsored by Harold Hardee and involved one parcel with a taxable value of \$57,001. The FFS would manage the site as part of the Twin Rivers State Forest if acquired. In July 2007, the BOT acquired 4,471 acres of the Avatar property in Marion County.

2009

On February 25, 2009, the BOT acquired 54.74 acres from the Rakestraw family in the St. Marks Site.

2010

On January 6, 2010, FFS purchased approximately 1 acre for \$16,065 from Kaiser/TNC in the Indian Lake State Forest. On May 11, 2010, FFS purchased 0.12 acres for \$2,550. FFS will manage both purchases. In July 2010, FFS purchased two parcels (0.23 for \$5,100 and 0.12 for \$2,800) and will manage both. On November 15, 2011, FFS purchased to manage .23 acres in Indian Lake State Forest (Potter-\$5,100).

In October 2010, FFS purchased 5 parcels (Silver Spring Addition--Bloom, Dinkins, Dupras, Hanson, Szymialis ownerships) making 1/2 acre for a combined \$10,200 and will manage all. In November 2010 FFS purchased 2 parcels (Silver Spring Addition--Stovall, Landry) or .29 acre for \$6,375 and will manage these.

2011

On May 2, 2011, FFS purchased and will manage .23 acre (Jean and Giselle Raymond-\$12,000). On August 3, 2011, the Felburn Foundation donated 2.42 acres in Silver Springs (valued at \$100,000) for FFS to manage. On 9/16/2011, DRP purchased to manage 55.73 acres (Gerrell Plantation, Inc.-\$457,000), as an addition to Natural Bridge Historic State Park.

On December 9, 2011, this project was placed in the Partnerships and Regional Incentives category of Florida Forever projects.

2013

On February 15, 2013 ARC changed the design of the Florida's First Magnitude Springs project in Madison County to add the 608-acre Damascus Peanut Tract, then found that conveying the tract to the Suwannee River Water Management District in exchange for the District's 670-acre Ellaville tract would make a greater conservation value and that the Damascus Peanut Tract was no longer needed for conservation by the Board of Trustees.



2014

In April 2014, ARC agreed to add the 360-acre Brunson Landing Tract on Holmes Creek, north of Vernon, to the project boundary to protect water resources from development. It provides over 2,200 feet of frontage along Homes Creek and is adjacent to NFWMD land. It would also be managed by the NFWMD if acquired.

2015

On June 19, 2015, ARC voted to add the 405-acre Blue Springs Park on the Santa Fe River in Gilchrist County to the Florida's First Magnitude Springs. The park has a just value of \$1,361,547 and has a second-magnitude spring and two smaller springs. Blue Springs was then added by ARC to the boundary of the existing Florida's First Magnitude Springs project. On April 20, 2012 the ARC added 63.4 acres to the project that had been authorized for sale from the US Forest Service.

The 470-acre Silver Springs Sandhill on the edge of Ocala was proposed for fee-simple acquisition, considered, and approved by ARC as a stand-alone project on June 19, 2015. It was then immediately added by ARC to the boundary of the existing Florida First Magnitude Springs project.

2017

On October 2, 2017, the state purchased 465 acres of the Sandhill tract to be managed by Marion County as part of the Coehadjoe Park.

On October 6, 2017, DEP closed on 399 acres of Blue Springs Park in Gilchrist County.

In October 2017, ARC approved the Springs Coast Research Station as a Florida Forever project. The project had an estimated tax value of \$643,154. This 28-acre parcel in southwest Citrus County is north of the town of Chassahowitzka. It shares northern and western boundaries with the Chassahowitzka River and Coastal Swamps (managed by SFWMD). The parcel is at the edge of Crab Creek, which is the site of Crab Spring, part of the Chassahowitzka first magnitude spring group. The facilities on the property have been well maintained, and the campus layout and functions of the residence and satellite buildings would make it suitable as a research center for springs systems and habitats. The project was proposed by Wildlands Conservation, a nonprofit conservation group based in Tampa, who would manage the property as a springs research campus in coordination with several educational institutions, as well as protecting the surrounding public lands and underwater acreage. In December 2017, ARC voted to add the 28-acre Springs Coast Research Station Florida Forever project boundary to that of the Florida's First Magnitude Springs project.

In calendar year 2017, a total of 863.45 acres in this project were acquired using Florida Forever program funding.



2018

On June 15, 2018 ARC members voted to add 556 acres in Columbia County to the project. This is the Santa Fe Springs Tract, on the north side of the Santa Fe River. The Florida Forest Service (FFS) will manage this site through the Florida Forest Service's Suwannee Forestry Center if acquired, however it may be managed as a standalone Forest property. The FFS estimates the budget needs for the one year of interim management to require a total of \$167,974 from the Land Acquisition Trust Fund (1 fulltime employee at \$44,439, Expenses of \$71,935, and Operating Capital Outlay of \$167,974).

Coordination

Hernando County has limited acquisition funds but is very supportive of state acquisition efforts. The NFWFMD has acquired the 214-acre Harder tract in Gainer Springs.

Management Policy Statement

The primary goals of management of the Florida's First Magnitude Springs project are to preserve land around springs, karst windows, and springs to aid in the protection of the Floridan Aquifer from the effects of commercial, residential, and agricultural runoff; clearcutting and mining; and unsupervised recreation.

Management Prospectus

Qualifications for state designation

Blue Spring has the diversity of resources and recreational opportunities to qualify as a state park. The location of the Weeki Wachee project adjacent to the Chassahowitzka Wildlife Management Area (WEA), as well as its sensitive natural resources, qualifies it as a WEA. River Sink spring is a first-magnitude karst window. This qualified it as a state geological site. St. Marks, Fanning, Troy, Falmouth, and Gainer Springs have the diversity of resources and recreational opportunities to qualify as a state park.

Manager

FWC (Weeki Wachee Springs excluding the springhead, which is part of the Chassahowitzka WMA; Jackson County (Jackson Blue Springs); U.S. Forest Service (River Sink Springs); DRP (St. Marks, Fanning, Troy, Gainer Springs, Madison County Blue Springs, and Blue Springs Park of Gilchrist County); Walton County (Morrison Springs); Leon County (Church Sink); Marion County (Silver Springs); FFS (Hardee Springs); OGT (Fanning Springs); NFWFMD (Gainer Springs); SRWMD (Fanning Springs, Falmouth Springs); Lafayette County (Lafayette Blue Springs), Marion County (Silver Springs Sandhills); and Florida Forest Service (Santa Fe Springs tract).

Conditions affecting intensity of management

River Sink and Blue Spring are moderate-need tracts, requiring more than basic resource management and protection. Gainer Springs is a high-need management area including public recreational use and development compatible with resource management. Florida Forest would manage the Santa Fe Spring parcel for Operation Outdoor Freedom Hunts.

Timetable for implementing management and provisions for security and protection of infrastructure

Jackson County Blue Spring is now being used by the public and Jackson County has no plans to curtail activities. The County would continue to open the swim area in season and maintain year-round access for boating, fishing, and nature appreciation. The smaller second spring may need restrictions to ensure public safety and preservation of the limestone bluffs. A lifeguard will be on duty while the swim area is open. Access will be controlled primarily by fences. River Sink would immediately fall under the National Forests in Florida's Land and Resource Management Plan (Forest Plan). Within the first few years after acquisition, management activities would focus on site security, resource inventory, removal of existing trash, and any necessary prescribed fire management. In the first year after Gainer Springs is acquired, the Division of Recreation and Parks will concentrate on site security, natural and cultural resource protection, and the development of a plan for long-term public use and resource management.

Revenue-generating potential

The Blue Springs swim area generated \$21,946 in revenue in fiscal year 1992-1993 and \$13,045 in fiscal year 1993-94. DRP expects Gainer Springs to generate no significant revenue initially. The amount of any revenue generated would depend on the nature and extent of public use and facilities. As facilities are developed, River Sink may become a national recreational fee area. Fees collected from use of this area would be activities of the Federal Government. It is estimated that the area will receive more than 5,000 visits annually once it is developed.

Cooperators in management activities

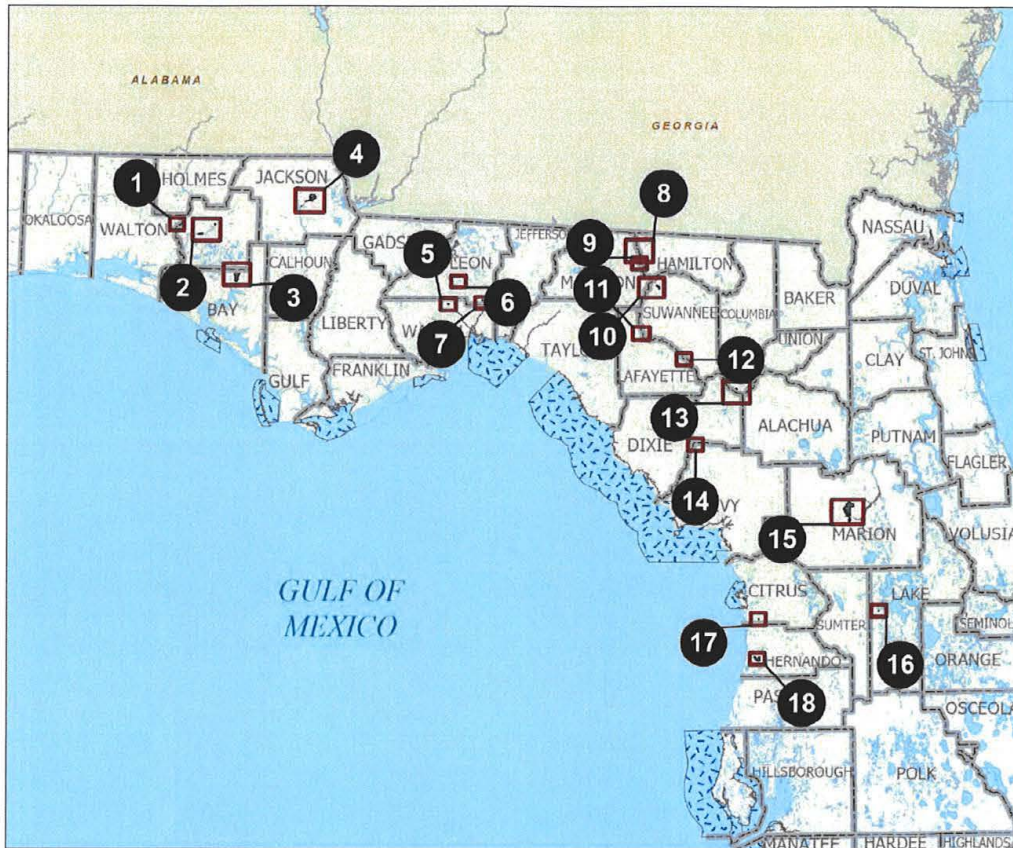
Jackson County expects the FWC to cooperate in managing wildlife on the Blue Spring project area. Other appropriate agencies may wish to become involved in the project. As funds become available and subject to public approval, the USDA Forest Service may enter into a cooperative agreement to manage the property.



Management Cost Summary

<u>DRP</u>	<u>Startup</u>	<u>Recurring</u>	<u>Startup</u>	<u>Recurring</u>
<i>Source of Funds</i>	<i>Federal</i>	<i>Federal</i>	<i>CARL</i>	<i>CARL</i>
<i>Salary</i>	\$0	\$5,000	\$22,167	\$22,167
<i>OPS</i>	\$0	\$0	\$7,280	\$7,280
<i>Expense</i>	\$3,000	\$5,000	\$5,424	\$5,424
<i>OCO</i>	\$0	\$0	\$6,978	\$6,978
<i>FCO</i>	\$0	\$0	\$0	\$0
<i>TOTAL</i>	\$3,000	\$10,000	\$41,849	\$41,849

Source: Management Prospectus as originally submitted



FLORIDA'S FIRST MAGNITUDE SPRINGS: OVERVIEW

BAY, CITRUS, COLUMBIA, GILCHRIST, HAMILTON, HERNANDO, JACKSON, LAFAYETTE, LAKE, LEON, LEVY, MADISON, MARION, SUWANNEE, WAKULLA, WALTON, AND WASHINGTON COUNTIES

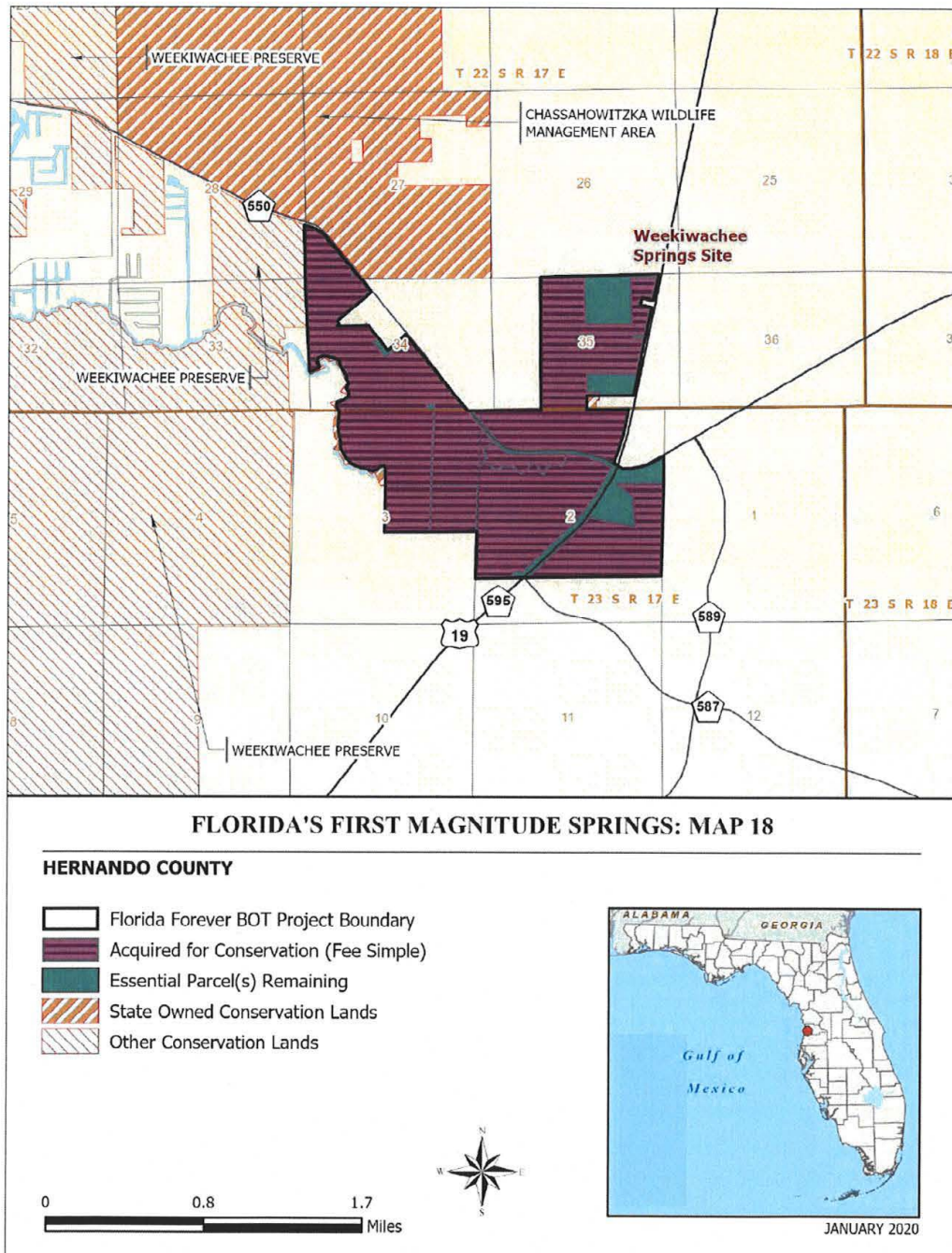
- | | |
|--|---|
| ☐ Map 1 Morrison Springs Site | ☐ Map 10 Falmouth Spring Site |
| ☐ Map 2 Brunson Landing Tract Site | ☐ Map 11 Lafayette Blue Springs Site |
| ☐ Map 2 Cypress Spring Site | ☐ Map 12 Troy Spring Site |
| ☐ Map 3 Gainer Springs Site | ☐ Map 13 Blue Springs Park Site |
| ☐ Map 4 Jackson Blue Springs Site | ☐ Map 13 Santa Fe Springs Site |
| ☐ Map 5 River Sink Spring Site | ☐ Map 14 Fanning Springs Site |
| ☐ Map 6 Church Sink Site | ☐ Map 15 Silver Springs Site |
| ☐ Map 7 St. Marks Springs Site | ☐ Map 16 Bugg Spring Site |
| ☐ Map 8 Hardee Spring Site | ☐ Map 17 Springs Coast Research Station Site |
| ☐ Map 9 Madison Blue Springs Site | ☐ Map 18 Weekiwachee Springs Site |
| ☐ Map 10 Damascus Peanut Tract Site | |

0 50 100
Miles



JANUARY 2020

Project Map 91: Source → Florida Natural Areas Inventory (FNAI, January 2020)



Project Map 109: Source → Florida Natural Areas Inventory (FNAI, January 2020)

Exhibit S

Land Management Reviews (2013, 2017, and 2022)

Name of Site: Indian Lake State Forest

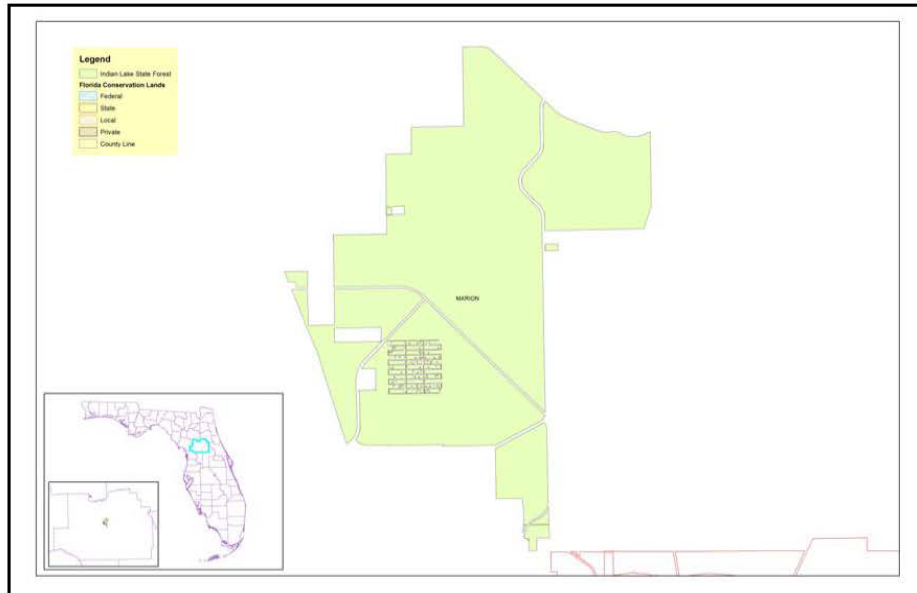
County: Marion

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

Acres: 4,461.04

Review Date: 06/18/13

Management Plan Approval Date: 2/24/11



Review Team Determination

Managed in accordance with
acquisition purpose? Yes = 8, No = 0



Management practices, including public access,
in compliance with the management plan? Yes = 8, No = 0



Categories	Management Plan Review	Field Review
Natural Communities	0.99	2.97
Listed Species	0.79	2.42
Natural Resource Survey	0.64	1.98
Cultural Resources	1.00	3.81
Prescribed Fire	0.96	4.00
Restoration	0.98	3.70
Exotic Species	0.73	2.69
Groundwater Monitoring	0.86	3.60
Surface Water Monitoring	0.33	3.00
Resource Protection	0.91	3.48
Adjacent Property Concerns	0.87	3.45
Public Access & Education	0.59	2.51
Managed Area Uses	1.00	N/A
Buildings, Equipment, Staff & Funding	N/A	1.36

Consensus Commendations to the Managing Agency

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

1. The team commends the FFS staff for their excellent efforts at establishing and maintaining firelines, and for instituting a dynamic prescribed fire program throughout the majority of the sandhill and old agricultural lands in an expeditious manner. (VOTE: 8+, 0-)



2. The team commends the FFS for their efforts to plan and initiate burning exotic plan control, and reforestation goals for the restoration of agriculture fields. (VOTE: 8+, 0-)



3. The team commends the FFS for their exotic plant survey efforts, and their ongoing treatments of cogongrass. (VOTE: 8+, 0-)



4. The team commends the FFS for their archaeological management and protection efforts at the forest. (VOTE: 8+, 0-)



Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The management plan must include responses to the recommendations identified below.

1. The team recommends that FFS continue efforts to increase the amount of sandhill treated with growing season fire. (VOTE: 8+, 0-)



Managing Agency Response: FFS will continue to implement efforts to burn the sandhill natural community on the ILSF, consistent with Goal 1 Objective 2 in the management plan.

2. The team recommends that FFS contract with FNAI for natural community mapping. (VOTE: 8+, 0-)



Managing Agency Response: FFS will continue to seek funding for a FNAI map. On-site managers will update current mapping in GIS as new information and natural community boundaries are ascertained.

3. The team recommends that FFS pursue plant animal surveys, which includes ongoing monitoring. (VOTE: 8+, 0-)



Managing Agency Response: FFS will continue to seek funding and/or opportunities to implement plant surveys and monitoring as identified in the various Goal 8 objectives in the management plan.

Field Review Checklist Findings

The following items received high scores on the review team checklist, indicating the management actions in the field exceeded expectations.

- Natural Communities, specifically basin swamp and sinkhole lake.
- Cultural Resources, specifically cultural resource survey, protection and preservation.
- Resource Management, Prescribed Fire, specifically area being burned (no. acres), frequency and quality.

- Forest Management, specifically, timber inventory, timber harvesting and reforestation/afforestation.
- Ground Water Monitoring, specifically ground water quality and quantity.
- Resource Protection, specifically boundary survey and signage.
- Adjacent Property Concerns, specifically inholdings/additions.

Items Requiring Improvement Actions 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 .5 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan must include responses to the checklist items identified below:

1. The review team average score indicates a need for acknowledgement of non-native, invasive & problem species, specifically prevention of plants. Please provide documentation in the management plan.

Managing Agency Response: FFS will continue to have a section on exotic and invasive species maintenance and control, including plants, in future plans. Goal 5 Objective 1 of the current management plan discusses the need to write a "Non-Native Invasive Species Control Plan", including guidelines for detection, monitoring, prevention, and treatment of such species". As stated, prevention will be a component of this operational plan.

2. The review team average score indicates a need for acknowledgement of surface water monitoring, specifically water quality and quantity. Please provide documentation in the management plan.

Managing Agency Response: FFS will continue to interact with the water management district regarding water monitoring activities when writing future plans. The current plan has a significant section addressing local water quality needs as it relates to the protection of the nearby Silver Springs and the local aquifer.

3. The review team average score indicates a need for acknowledgement of environmental education & outreach, specifically wildlife, invasive species, habitat management activities and management of visitor impacts. Please provide documentation in the management plan.

Managing Agency Response: Outreach and extension are important missions for FFS.

PLAN REVIEW		1	2	3	4	5	6	7	8	AVERAGE
Natural Communities (I.A)										
Sandhill	I.A.1	1	1	1	1	1	1	1	1	1.00
Mesic Flatwoods	I.A.2	1	1	1	1	1	1	1	1	1.00
Mesic Hammock	I.A.3	1	1	1	1	1	1	1	1	1.00
Baygall	I.A.4	1	1	1	1	1	1	1	1	1.00
Basin Marsh	I.A.5	1	1	1	1	1	1	0	1	0.88
Basin Swamp	I.A.6	1	1	1	1	1	1	1	1	1.00
Sinkhole Lake	I.A.7	1	1	1	1	1	1	1	1	1.00
Depression Marsh	I.A.8	1	1	1	1	1	1	1	1	1.00
Sinkhole	I.A.10	1	1	1	1	1	1		1	1.00
Listed species:Protection & Preservation (I.B)										
Animal Inventory	I.B.1	1	1	1	1	1		0	1	0.86
Plant Inventory	I.B.2	1	1	1	0	1		0	1	0.71

Law enforcement presence	III.G.4	0	1	1	0	0	1	1	1	0.63
Adjacent Property Concerns (III.H)										
Land Use										
Expanding development	III.H.1.a		1	1	0	1	1	1	1	0.86
Inholdings/additions	III.H.2	1	1	1	1	1	1	1	1	1.00
Discussion of Potential Surplus Land Determination	III.H.3	0	1	1	1	1	1	0	1	0.75
Surplus Lands Identified?	III.H.4	0	1	1	1	1	1	1	1	0.88
Public Access & Education										
Public Access										
Parking	IV.1.b	0	1	1	1	1	1	1	1	0.88
Environmental Education & Outreach										
Wildlife	IV.2.a	0	1	1	0	0		0	1	0.43
Invasive Species	IV.2.b	0	1	1	0	0		0	1	0.43
Habitat Management Activities	IV.2.c	0	1	1	0	0		0	1	0.43
Interpretive facilities and signs	IV.3	0	1	1	0	1		1	1	0.71
Recreational Opportunities	IV.4	0	1	1	1	1		1	1	0.86
Management of Visitor Impacts	IV.5	0	1	1	0	0		0	1	0.43
Managed Area Uses										
Existing Uses										
Hiking	VI.A.1	1	1	1	1	1	1	1	1	1.00
Nature Study	VI.A.2	1	1	1	1	1	1	1		1.00
Wildlife Photography	VI.A.3	1	1	1	1	1	1	1		1.00
Proposed Uses										
Equestrian Trail	VI.B.1		1	1	1	0	1	1	1	0.86
Primitive Camping	VI.B.2		1	1	1	0		1	1	0.83

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 2.5 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan must include responses to the checklist items identified below:

- The review team average score indicates a need for acknowledgement of natural communities, specifically sandhill and mesic flatwoods. Please provide documentation in the management plan.**
Managing Agency Response: It is acknowledged that the average score here of approximately a "2" reflects a composite team score that would suggest 20-40% of these communities is currently in "maintenance condition". FFS will continue to implement efforts to burn both the mesic flatwoods and sandhill natural communities on the ILSF, consistent with Goal 1 Objective 2 in the management plan. Invading hydric vegetation (e.g. loblolly bay) and areas of heavy midstory oaks will be reduced through prescribed fire and mechanical treatments or harvest, as necessary.
- The review team average score indicates a need for acknowledgement of listed species: protection & preservation, specifically animal and plant inventory. Please provide documentation in the management plan.**

Natural Resources Survey/Management Resources (I.C)										
Listed species or habitat monitoring	I.C.2	1	0	1	0	1		0	1	0.57
Other non-game species or habitat monitoring	I.C.3	1	0	1	0	1		0	1	0.57
Fire effects monitoring	I.C.4	1	0	1	0	1		0	1	0.57
Other habitat management effects monitoring	I.C.5	1	0	1	0	1	1	0	1	0.63
Invasive species survey / monitoring	I.C.6	1	0	1	1	1		1	1	0.86
Cultural Resources (Archeological & Historic sites) (II.A,II.B)										
Cultural Res. Survey	II.A	1	1	1	1	1	1	1	1	1.00
Protection and preservation	II.B	1	1	1	1	1	1	1	1	1.00
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	1	1	1	1	1	1	1	1	1.00
Frequency	III.A.2	1	1	1	1	1	1	1	1	1.00
Quality	III.A.3	1	1	1	1	1	1	0	1	0.88
Restoration of Ruderal Areas (III.B)										
Sandhill Restoration	III.B.1	1	1	1	1	1	1	0	1	0.88
Forest Management (III.C)										
Timber Inventory	III.C.1	1	1	1	1	1	1	1	1	1.00
Timber Harvesting	III.C.2	1	1	1	1	1	1	1	1	1.00
Reforestation/Afforestation	III.C.3	1	1	1	1	1	1	1	1	1.00
Site Preparation	III.C.4	1		1	1	1	1	1	1	1.00
Non-Native, Invasive & Problem Species (III.E)										
Prevention										
prevention - plants	III.E.1.a	1	1	1	0	0		0	0	0.43
prevention - animals	III.E.1.b	0	1	1	1	0		0	1	0.57
prevention - pests/pathogens	III.E.1.c	1	1	1	1	0		0	1	0.71
Control										
control - plants	III.E.2.a	1	1	1	1	1		1	1	1.00
control - animals	III.E.2.b		1	1	1	0		1	1	0.83
control - pest/pathogens	III.E.2.c		1	1	1	1		0	1	0.83
Ground Water Monitoring (III.F.2)										
Ground water quality	III.F.2.a		1	1	1	1	1	0	1	0.86
Ground water quantity	III.F.2.b		1	1	1	1	1	0	1	0.86
Surface Water Monitoring (III.F.3)										
Surface water quality	III.F.3.a		1		0	0	1	0	0	0.33
Surface water quantity	III.F.3.b		1		0	0	1	0	0	0.33
Resource Protection (III.G)										
Boundary survey	III.G.1	1	1	1	1	1	1	1	1	1.00
Gates & fencing	III.G.2		1	1	1	1	1	1	1	1.00
Signage	III.G.3		1	1	1	1	1	1	1	1.00

Managing Agency Response: FFS will continue to seek funding and/or opportunities to implement plant surveys and monitoring as identified in the various Goal 8 objectives in the management plan.

3. The review team average score indicates a need for acknowledgement of natural resources survey/management resources, specifically other non-game species or habitat monitoring, fire effects monitoring and other habitat management effects monitoring. Please provide documentation in the management plan.

Managing Agency Response: FFS will implement and document the various objectives found in Goal 8 of the management plan. FFS will continue to conduct the timber inventory and fire effects monitoring discussed in the FFS State Lands Handbook

4. The review team average score indicates a need for acknowledgement of non-native, invasive & problem species, specifically prevention of plants, animals and pest/pathogens. Please provide documentation in the management plan.

Managing Agency Response: FFS will continue to treat known populations of invasive plants on ILSF – with a particular focus on the control of cogon grass. With an eye to prevention, FFS will be contacting Marion County to request right of way populations of cogon grass adjacent to ILSF receive treatment priority. As stated in the current management plan, FFS will be preparing a formal “Non-Native Invasive Species Control Plan”, including guidelines for detection, monitoring, prevention, and treatment of such species”. As stated, prevention will be a component of this operational plan.

5. The review team average score indicates a need for acknowledgement of resource protection, specifically law enforcement presence. Please provide documentation in the management plan.

Managing Agency Response: FFS is waiting on FWC to evaluate the potential for ILSF to be a Wildlife Management Area.

6. The review team average score indicates a need for acknowledgement of environmental education & outreach, specifically wildlife, invasive species, habitat management activities and interpretive facilities and signs. Please provide documentation in the management plan.

Managing Agency Response: FFS agrees that outreach and extension are important missions.

FIELD REVIEW		1	2	3	4	5	6	7	8	AVERAGE
Natural Communities (I.A)										
Sandhill	I.A.1	2	3	3	1	2	X	2	3	2.29
Mesic Flatwoods	I.A.2	1	3	2	2	2	X		3	2.17
Mesic Hammock	I.A.3	1	3	3	3	3	X	4	3	2.86
Baygall	I.A.4	2	3	4	2	4	X	5	4	3.43
Basin Marsh	I.A.5	2	3	4	1	2	X	4	3	2.71
Basin Swamp	I.A.6	2	3	4	5	3	X	5	4	3.71
Sinkhole Lake	I.A.7	2	3	4	5	5	X	5	4	4.00
Depression Marsh	I.A.8	1	3	3	3	2	X	5	3	2.86
Sinkhole	I.A.10	1	3	3	2	4	X	3	3	2.71
Listed species:Protection & Preservation (I.B)										
Animal Inventory	I.B.1	2	3	3		3	X	1	3	2.50
Plant Inventory	I.B.2	2	3	3		2	X	1	3	2.33
Natural Resources Survey/Management Resources (I.C)										
Listed species or habitat monitoring	I.C.2	2	1	2	1	2	X	1	3	1.71
Other non-game species or habitat	I.C.3	2	1	2	2	3	X	2	2	2.00

[illegible]

Parking	IV.1.b		2	3	3	3	3	3	3	2.86
Environmental Education & Outreach										
Wildlife	IV.2.a		2	2	2	X	X	2	3	2.20
Invasive Species	IV.2.b		2	2	1	X	X	2	3	2.00
Habitat Management Activities	IV.2.c		2	2	2	X	X	2	3	2.20
Interpretive facilities and signs	IV.3		2	2	2	4	X	3	2	2.50
Recreational Opportunities	IV.4		2	2	4		X	3	3	2.80
Management of Visitor Impacts	IV.5		3	2	3	X	X	4	3	3.00
Management Resources										
Infrastructure										
Buildings	V.2.a	1		1					2	1.33
Equipment	V.2.b	1	2	1	2	2	1	3	3	1.88
Staff	V.3	1	1	1	1	1	1	1	2	1.13
Funding	V.4	1	1	1	1	1	1	1	2	1.13

Forest Service Manager and Key Staff Present:

Justin Kilcrease, FFS Forester
Ernie Ash
Charlie Pedersen

APPENDIX:

The following comments represent individual comments, and may not represent the consensus of the land management review team.

I.A. Natural Communities

- I don't feel qualified to pass judgement on the field review. No monies provide by state legislature to accomplish goals.
- Need to figure out what is xeric hammock & what/how to address!
- Need to verify if xeric hammock exists & management goals. Need FNAI inventory.
- FFS hasn't had the property very long; they've done a lot of work in the short period of time that they've managed it.
- While little of the sandhill has made it to maintenance condition, it is well on its way-management has improved the conditions significantly in a very short time. Much of the habitat communities are on their way but not quite to maintenance condition-any low score should not be a reflection of the quality of work that has been done-for only 5 years-it looks great.
- Through the discussions regarding management, practical and proper management steps have been taken. Limitation of funding and abilities to burn seem to be the limiting factors. Abilities to burn are considered to be seasonal conditions and surrounding community smoke concerns.
- Area needs an FNAI to map natural communities.
- Excellent efforts to initiate burning throughout much of the largely intact sandhill. Initial burns have had positive impact on reducing vigor of midstory turkey oaks. Full groundcover recovery will require continued effort at increasing frequency of growing season fires. Suggest assessing sandhill for sections/pockets of denser pine stocking for potential thinning. Several areas of sandhill observed had particularly dense midstory of turkey oaks which may require some level of herbicide treatment. Suggest a more structured assessment of groundcover composition to determine effects of recent prescribed fires and help establish priorities for transitioning towards greater growing season fire frequency. This would also help determine which stands/bur unit have returned to within a range of desired condition. The mgt. plan/maps indicate presence of dome swamps, however field inspection indicated these sites were fire-suppressed depression marshes. It is suggested that FFS pursue FNAI natural community mapping for this property when funds become available. Really good effort to execute a thinning harvest (to an average of 60-70 basal area) slash pine in the small mesic flatwoods stand east of Indian Lake. Groundcover and midstory loblolly bay vegetation remains too dense in areas, however, future prescribed fires should reduce this undesired component within a few fire cycles. Burns will have to be cool at first due to the thick duff layer that's built up after years of fire suppression. Good job to remove a strip of trees along the east boundary along Rayonier's property which will be worked into a solid fire break to be used during future burns. Generally speaking, the depression and basin marshes have too much woody vegetation present in areas and will need one or more prescribed burns to reduce densities and encourage grassy and herbaceous species. More research and field assessment is needed regards the existing and desired densities and composition of trees and shrubs growing in, and at the edge, of the property sinkholes.

I.B. Listed Species: Protection and Preservation

- Need FNAI to inventory then revisit plan!
- A mosaic of open ruderal areas adjacent to sandhill communities needs to be kept in a mostly open condition-few pines should be planted simultaneously.
- Now that many burns have been implemented, a detailed plan for plants must be established. The single sentence provided in the plan is no longer sufficient.
- Planting of ruderal areas with closed canopy tree plantations will be detrimental to many listed species and rare species, including gopher tortoise, Sherman's fox squirrel, Florida mouse, southeastern kestrel, and Florida pine snake.
- Surveys for gopher tortoise have been suggested to provide some baseline data and support for whether the property might have potentials as a mitigation park-however as of yet no funding has been identified. Other known wildlife species continue to be observed/monitored, however, no formal documentation is made. Suggest pursuing active support from local chapter of FNPS to

conduct field surveys to improve knowledge of location and identification of native plants and groundcover species.

I.C. Natural Resources Survey/Management Natural Resources

- Need plan, funding & proper staff to address!
- More detail should be given to these components as more acreage enters maintenance conditions. A shift should begin to other long term objectives that include much of species monitoring.
- So far, no funding has been received to establish/implement monitoring protocols for native plants and wildlife. Suggest current staff establish some level of documentation for incidental observation of rare species to include data and location of observance. Good effort at locating and mapping invasive plants particularly in disturbed/agriculture areas that are being restored.

II.A.B. Cultural Resources

- Address further as sites are identified & listed.
- Identification of historic resources is good; if it is questioned that there is likely unmarked graves- it could help to try to have them identified with the radar DHR mentioned.
- Previous cultural surveys have identified approximately eleven sites and one on-site cemetery which are all mapped and monitored. Good efforts at maintaining fence and security of the Indian Lake Cemetery. The manager is trained as an archeological site monitor.

III.A. Resource Management

- Commendation for acres burned in short period of management.
- Great job getting onto a schedule of growing season burns. Prescribed fire preparation (e.g. firebreaks) is good.
- Burn program has been very well implemented, adaptive, and very successful-especially given the short time frame!
- Excellent effort at introducing prescribed fire to the majority of the sandhill sites, with a few burn units having been done during the growing season. Continued focus on burning will be needed to have impact on reducing density of turkey oaks and enhancing groundcover species. Desired 1-3 year fire frequency will require burning of nearly 500 acres per year. The recent timber thinning harvest in the mesic flatwoods should help reduce the difficulty of introducing fire to this area of the forest. Great job establishing harrowed firelines throughout the property.

III.B. Restoration

- Not much emphasis is given in the plan to groundcover & wiregrass restoration.
- The plan only addresses reforestation not full restoration.
- Excellent work to initiate burning and reforestation on the nearly 1700 acres of old agricultural lands. While the majority of this has now been burned twice, poor funding has limited reforestation to approximately 300 acres. FFS stated however they were anticipating the funding of 500 acres of reforestation during the next fiscal year.

III.C. Forest Management

- Good thinning-provided revenue & facilitates prescribed burning.
- Scalping will not be good for long-term groundcover restoration.
- All forest stands have been inventoried and mapped. The recent flatwoods thinning harvest was well executed, reducing basal areas down to 60-70 BA. Reforestation efforts with longleaf pine seedlings has had very good success following scalping of the bahia and old crop fields - with 400-500+ trees per acre surviving.

III.D. Non-native, Invasive & Problem Species

- Feral hogs are included in the plan table as increasing, but there's no discussion in the plan as to control.
- Prevention of invasives is not addressed in the plan. Measures such as vehicle washing should be considered. This area of the plan could use more detail, most notably with pest and pathogens.
- Suggest FFS research and establish protocol for inspecting & cleaning equipment at entry to the property if having had worked in cogon grass areas. This should also be the case regarding "quarantine" period for fill material brought on site. Excellent work to identify and treat all known on site populations of cogon grass. Suggest pursuing county to prioritize treatment of all adjacent road shoulder populations of cogon grass to minimize re-introduction onto state forest. More funding will be required to address other invasive trees in the southern-most area of the property. No hog damage was observed.

III.E. Hydrologic/Geologic Functions

- St. Johns water mgt. Silver Springs water quality.
- Water management district is monitoring.
- All wells have been capped. SJRWMD maintains four onsite monitoring wells.

III.F. Resource Protection

- Need money to do boundary survey, gates, fencing and signage from state legislature.
- Good job on fence maintenance and boundary signs along the majority of the forest boundary.

III.G. Adjacent Property Concerns

- Good job by FFS at acquiring many of the small private plots in the area just northeast of the Ocala Springs Elementary School.

IV. Public Access and Education

- Park/state forest needs to be passive.
- More attention should be given to planning of outreach-school is close by. There is no website or brochure. This should be addressed.
- Good start on public access/recreation with the recent completion of parking/trailhead for the (Indian Lake) Bear'n Oak hiking trail. Work is soon to commence on the planned equestrian parking area and trailhead. More funding is needed for FFS to assess project of removing old Ocala Springs campground and development of day use and primitive camping facilities at that location.

V. Infrastructure/ Management Resources

- Equipment comes from other areas. ILSF needs dedicated staff & sufficient funding to be managed properly.
- Equipment is shared with Ross Prairie-not any dedicated equipment for this site. No dedicated staff for this property-funding levels need to increase to meet the needs of this property.
- Much of the equipment is borrowed from Ross Prairie. No dedicated staff for ILSF. No funding was given until the last year and it was not much. No \$ and no staff means not meeting some crucial goals.
- Equipment: Root Rake. Need staff or Indian Lake; dedicated staff specifically for this state forest. Need staff for plant inventory and funding for FNAI maps.
- Staff has a need for a root rake to assist with reforestation efforts. This property has no additional FTE positions assigned to it since its acquisition. It is currently managed by the Ross Prairie State Forest forester and (Marion County) FFS forest rangers. Very little expense funding is provided so there has been slow progress in developing public access recreation sites and facilities. No biological monitoring or natural community mapping has been funded. The cleanup of the large abandoned campground at Indian Lake has not been funded. Reforestation expenses have been unfunded for past three years. Invasive plant treatment work outside of the priority restoration sites has been unfunded as well.

VI. Managed Area Uses

- Staff needs to designate twin tracks & other improved roads for on road bicycle trails & provide a map.

Management Review Determination

- Restoration of the sandhill thus far has been successful. Public use still in infancy, but is moving forward. Management is moving forward very well in implementing plan goals.
- FFS/manager are very sensitive to the potential impacts of mgt./activities on groundwater quality and protection of Silver Springs.

2017 Land Management Review Team Report for Indian Lake State Forest

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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 case 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 or jurisdictional water management 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 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: Indian Lake State Forest

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

Acres: 4,461.04

County: Marion

Purpose(s) for Acquisition: to protect and restore the natural and cultural values of the property and provide the greatest benefit to the citizens of the state.

Acquisition Program(s): Florida Forever

Original Acquisition Date: 7/25/07

Area Reviewed: Entire Property

Last Management Plan Approval Date: 2/14/11

Review Date: 10/26/17

Agency Manager and Key Staff Present:

- Pat Deren, Manager
- Ernie Ash, FFS
- Terry Sheehan, FFS
- Nicole Barberi, FFS
- Charlie Pederson, FFS
- Alan Davis, FFS

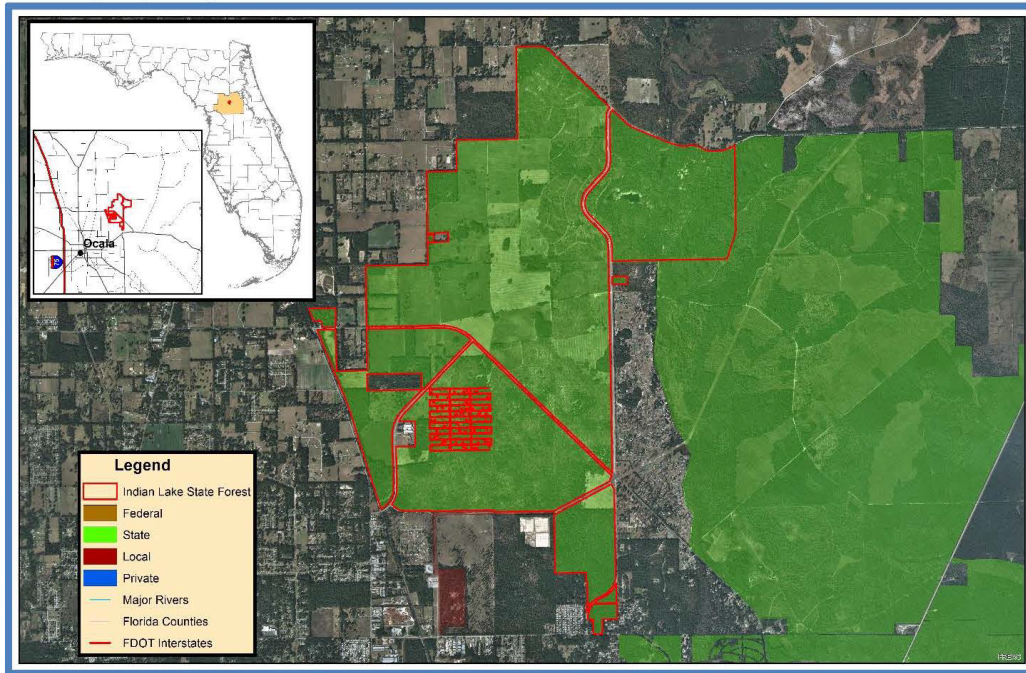
Review Team Members Present (voting)

- Allegra Buyer, DRP District
- Guy Marwick, Local Rep.
- Travis Blunden, FWC
- Jason Seyfert, DEP District
- Jeremy Olsen, SJRWMD
- Wendy Poag, Conservation Org.
- Private Land Manager, None
- Bill Korn, FFS

Other Non-Team Members Present (attending)

- James Parker, DEP/DSL
- Keith Singleton, DEP/DSL
- Athena Philips, FNPS
- Greg Ballinger, FNPS

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 = 7, No = 0

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

Yes = 7, 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

Table 1: Results at a glance.

Major Land Management Categories	Field Review	Management Plan Review
Natural Communities / Forest Management	4.35	4.23
Prescribed Fire / Habitat Restoration	3.75	3.75
Hydrology	3.95	3.79
Imperiled Species	3.83	3.00
Exotic / Invasive Species	3.93	3.70
Cultural Resources	4.86	4.86
Public Access / Education / Law Enforcement	3.96	3.87
Infrastructure / Equipment / Staffing	3.35	N/A
Color Code (See Appendix A for detail)		
Excellent	Above Average	Below Average
		Poor

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*.

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 blocking off driving access around Indian Lake. (7+, 0-)
2. The team commends the FFS for efforts at increasing the amount of growing season fire throughout the intact sandhill. (7+, 0-)
3. The team commends the FFS for successful reintroduction of longleaf pine to the majority of altered areas of sandhill which had been converted to agriculture prior to state acquisition. (7+, 0-)
4. The team commends the FFS for recent efforts to increase public access opportunities for hikers and equestrians as well as the improvements at Indian Lake for day use and primitive camping. (7+, 0-)
5. The team commends the FFS for efforts to identify, map and treat exotic invasive species onsite, especially the cogongrass infestations. (7+, 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:

1. The team recommends that the FFS conduct an initial survey for gopher tortoise, both for density and distribution. (7+, 0-)

Managing Agency Response: If funding and/or staffing becomes available, FFS will conduct a gopher tortoise survey and address the results in the next resource management plan.

2. The team recommends that the FFS conduct an initial survey for endemic and listed plant species. (7+, 0-)

Managing Agency Response: If funding and/or staffing becomes available, FFS will conduct a listed plant survey and address the results in the next resource management plan.

3. The team recommends that the FFS continue efforts to acquire inholdings in the 100-acre property within the optimal boundary with cooperation with local organizations. (7+, 0-)

Managing Agency Response: Local forestry center staff will work with the FFS land acquisition section to identify possible parcels.

4. The team recommends that the FFS seek more staff for evolving recreational opportunities. (7+, 0-)

Managing Agency Response: FFS will seek opportunities to increase recreational staff.

5. The team recommends that the FFS consider the impacts of tree density on evapotranspiration and aquifer recharge in the next management plan update. (7+, 0-)

Managing Agency Response: FFS will work with the agencies hydrology section for proper tree density.

6. The team recommends that the FFS maintain open areas where appropriate to benefit wildlife and create diversity. (7+, 0-)

Managing Agency Response: The FFS will continue to identify and maintain some limited open areas to benefit wildlife.

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 hammock, baygall, basin marsh, basin swamp, sandhill upland lake, sinkhole, xeric hammock
2. Listed species; Protection & Preservation, specifically plants
3. Natural resources survey/monitoring specifically invasive species survey/monitoring.
4. Cultural resources, specifically cultural resource survey, and protection and preservation
5. Resource management (prescribed fire), specifically frequency and quality.
6. Restoration, specifically sandhill restoration.
7. Forest Management, specifically timber inventory/assessment, timber harvesting, reforestation/afforestation, site preparation.
8. Non-native, invasive, and problem species, specifically prevention and control of plants
9. Ground Water Monitoring, specifically quality and quantity
10. Resource protection, specifically boundary survey, gates and fencing, signage and law enforcement presence.
11. Adjacent property concerns, specifically inholdings/additions.
12. Public access, specifically parking
13. Environmental education and outreach, specifically recreational opportunities
14. Management resources, specifically waste disposal, sanitary facilities, 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:

1. *The maintenance condition of the Natural Communities, specifically mesic flatwoods and depression marsh, received below average scores. The review team is asked to evaluate, based on*

their perspective, what percent of the natural community is in maintenance condition. The scores range from 1 to 5, with 1 being 0-20% in maintenance condition, 2 being 21-40%, 3 being 41-60%, 4 being 61-80% and 5 being 81-100%.

Managing Agency Response: The mesic flatwoods and associated depression marsh communities (120 acres) are a small component of ILSF, occurring along the eastern side of the forest. Up until recently they have had no history of prescribed burning.. This area has been a challenge to manage, since it is often too wet to access. The mature timber in the area was thinned by FFS several years ago. Since the October 2017 LMR, the southern half of this flatwoods community was burned by FFS. When conditions are right, FFS will continue to prescribe burn the remaining portion of this flatwood community. Areas of the heaviest fuel accumulation may first require a mechanical treatment (mowing or chopping) to reduce the midstory vegetation and to provide more ground fuels. Overall these management actions will serve to increase the maintenance condition of these two natural communities.

2. *Natural Resources Survey, specifically listed species or their habitat received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether survey and monitoring of the resources or their habitats are sufficient.*

Managing Agency Response: See response to Consensus Recommendation #1 and #2.

3. **Environmental** *Education & Outreach, specifically, invasive species received a below average score. The review team is asked to evaluate, based on information provided by the managing agency, whether education and outreach is sufficient.*

Managing Agency Response: FFS staff will continue to coordinate with the Big Scrub CISMA or other cooperators on invasive species outreach and seek other cooperators for invasive species outreach.

4. *Management Resources, specifically equipment, staff, and funding, received a below average score. The review team is asked to evaluate, based on information provided by the managing agency, whether management resources are sufficient.*

Managing Agency Response: See response to Consensus Recommendation #4.

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)										
Sandhill	I.A.1	3	3	3	3	3	3	3		3.00
Mesic Flatwoods	I.A.2	2	1	2	1	1	1	1		1.29
Mesic Hammock	I.A.3	5	5	5	5	5	5	5		5.00
Baygall	I.A.4	5	5	5	5	5	5	5		5.00

Basin Marsh	I.A.5	5	5	5	5	5	5	4		4.86
Basin Swamp	I.A.6	5	5	5	5	5	5	5		5.00
Sandhill Upland Lake	I.A.7	5	5	5	5	5	5	5		5.00
Depression Marsh	I.A.8	2	2	3	4	3	2	2		2.57
Sinkhole	I.A.9	5	5	4	5	5	4	5		4.71
Xeric Hammock	I.A.9	5	5	5	4	5	5	5		4.86
Natural Communities Average Score										4.05
Listed species:Protection & Preservation (I.B)										
Animals	I.B.1	4	3	4						3.67
Plants	I.B.2	4	4	4						4.00
Listed Species Average Score										3.83
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	3	1	3	3		2	2		2.33
Fire effects monitoring	I.C.4	5	3	5	5	4	2	3		3.86
Other habitat management effects monitoring	I.C.5	4	4	5	4	3	3	4		3.86
Invasive species survey / monitoring	I.C.6	5	5	5	5	5	4	4		4.71
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	5	5	5	4	5	5		4.86
Protection and preservation	II.B	5	5	5	5	4	5	5		4.86
Cultural Resources Average Score										4.86
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A1	4	3	4	4	3	4	4		3.71
Frequency	III.A.2	5	5	4	5	3	4	4		4.29
Quality	III.A.3	5	5	5	5	5	5	5		5.00
Resource Management, Prescribed Fire Average Score										4.33
Restoration (III.B)										
Sandhill Restoration	III.B.2	4	2	x	4	2	3	4		3.17
Restoration Average Score										3.17
Forest Management (III.C)										
Timber Inventory / Assessment	III.C.1	5	5	5	5	4	4	5		4.71
Timber Harvesting	III.C.2	5	5	5	5	3	5	5		4.71
Reforestation/Afforestation	III.C.3	5	5	5	5	3	5	5		4.71
Site Preparation	III.C.4	4	5	5	5	3	4	5		4.43
Forest Management Average Score										4.64
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1.a	4	5	4	5	5	3	5		4.43
prevention - animals	III.D.1.b	4	4	4	4	3	3	4		3.71
prevention - pests/pathogens	III.D.1.c	4	4	4	4	3		3		3.67
Control										
control - plants	III.D.2.a	4	5	4	x	x	4	5		4.40
control - animals	III.D.2.b	4	4	4	x	x	3	4		3.80
control - pest/pathogens	III.D.2.c	4	4	4	x	x	3	3		3.60

Non-Native, Invasive & Problem Species Average Score										3.93
Ground Water Monitoring (III.E.2)										
Ground water quality	III.E.2.a	5	4	5	5	4	4	5		4.57
Ground water quantity	III.E.2.b	5	4	5	x	4	2	5		4.17
Ground Water Monitoring Average Score										4.37
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3.a	3	4	4		4	3	3		3.50
Surface water quantity	III.F.3.b	3	4	4	4	4	3	3		3.57
Surface Water Monitoring Average Score										3.54
Resource Protection (III.F)										
Boundary survey	III.F.1	4	5	5	5	4	5	5		4.71
Gates & fencing	III.F.2	4	4	5	5	3	4	4		4.14
Signage	III.F.3	4	5	5	5	4	4	4		4.43
Law enforcement presence	III.F.4	4	4	5	4	3	4	4		4.00
Resource Protection Average Score										4.32
Adjacent Property Concerns (III.G)										
Land Use										
Expanding development	III.G.1.a									
Inholdings/additions	III.G.2	3	5	5	5	5	4	5		4.57
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Parking	IV.1.b	4	5	5	5	5	5	3		4.57
Environmental Education & Outreach										
Wildlife	IV.2.a	3	3	3	4	4	2	3		3.14
Invasive Species	IV.2.b	3	3	3	2	3	2	3		2.71
Habitat Management Activities	IV.2.c	3	3	3	4	3	2	4		3.14
Interpretive facilities and signs	IV.3	3	3	5	4	3	3	3		3.43
Recreational Opportunities	IV.4	4	5	5	5	3	4	4		4.29
Management of Visitor Impacts	IV.5	4	5	5	4	4	2	3		3.86
Public Access & Education Average Score										3.59
Management Resources (V.1, V.2, V.3, V.4)										
Maintenance										
Waste disposal	V.1.a	3	4	5	4	5	4	4		4.14
Sanitary facilities	V.1.b	4	5	5	5	5	4	4		4.57
Infrastructure										
Buildings	V.2.a	4	4	5	5	5	4	5		4.57
Equipment	V.2.b	2	2	2	2	3	2	2		2.14
Staff	V.3	2	2	2	2	3	2			2.17
Funding	V.4	3	2	3	3	2	2			2.50
Management Resources Average Score										3.35

Color Code:

Excellent	Above Average	Below Average	Poor
	Missing Vote	Insufficient Information	

See Appendix A for detail

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, xeric 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.*

Managing Agency Response: In the current plan xeric hammock is not included as a historic natural community. It's discussed as Xeric Hammock Ruderal Sandhills within the historic Sandhill community. Since the plan was written FNAI surveyed the property and determined that there was 2.2 acres of historic xeric hammock. In future plans we will add a discussion of xeric hammock in the historical natural communities section. Historic sandhills which have succeeded into xeric hammocks will continue to receive priority for growing season fire. Some historical sandhills will need small parcel land acquisition for prescribed fire to be practical, making these acquisitions a priority.

2. *Natural Resources Survey and Monitoring Resources, specifically listed species or their habitat monitoring received a below average score. This is an indication that the management plan does not sufficiently address survey or monitoring.*

Managing Agency Response: Typically, FFS does not generally focus on surveying and monitoring of individual species, preferring to focus on total ecosystem management strategies – such as prescribe burning. The current management plan acknowledges that no surveys have been done, however, it does identify listed species surveying as a goal for the next 10 years, and indicates the need for \$20,000 for future surveys.

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)										
Sandhill	I.A.1	5	4	5	4	4	4	4		4.29
Mesic Flatwoods	I.A.2	5	4	5		4	4	4		4.33
Mesic Hammock	I.A.3	5	4	5	5	4	4	4		4.43
Baygall	I.A.4	4	4	5	3	4	4	4		4.00
Basin Marsh	I.A.5	3	4	4	5	4	5	4		4.14
Basin Swamp	I.A.6	5	5	4	5	4	5	4		4.57

Sandhill Upland Lake	I.A.7	4	5	5	5	4	4	4		4.43
Depression Marsh	I.A.8	3	4	4	4	4	4	3		3.71
Sinkhole	I.A.9	5	5	4	5	4	4	5		4.57
Xeric Hammock	I.A.10	2	3	2	3	1	1	1		1.86
Natural Communities Average Score										4.03
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	4	3	4			2	2		3.00
Plants	I.B.2	3	4	4			2	2		3.00
Listed Species Average Score										3.00
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	3	2	3	3	3	2	2		2.57
Fire effects monitoring	I.C.4	4	3	5	5	4	2	4		3.86
Other habitat management effects monitoring	I.C.5	3	3	5	4	4	2	5		3.71
Invasive species survey / monitoring	I.C.6	4	5	5	5	4	3	5		4.43
Cultural Resources (Archeological & Historic sites) (II.A,II.B)										
Cultural Res. Survey	II.A	5	5	5	5	4	5	5		4.86
Protection and preservation	II.B	5	5	5	5	4	5	5		4.86
Cultural Resources Average Score										4.86
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	3	5	4	4	4	4			4.00
Frequency	III.A.2	3	5	4	5	4	4			4.17
Quality	III.A.3	3	5	5	5	4	4			4.33
Resource Management, Prescribed Fire Average Score										4.17
Restoration (III.B)										
Sandhill Restoration	III.B.2	4	3		5	2	3	3		3.33
Restoration Average Score										3.33
Forest Management (III.C)										
Timber Inventory / Assessment	III.C.1	4	5	5	5	4	4	4		4.43
Timber Harvesting	III.C.2	4	5	5	5	4	4	3		4.29
Reforestation/Afforestation	III.C.3	4	5	5	5	4	5	4		4.57
Site Preparation	III.C.4	4	5	5	5	4	5	3		4.43
Forest Management Average Score										4.43
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1.a	3	3	4	5	4	4	5		4.00
prevention - animals	III.D.1.b	3	3	4	4	4	4	3		3.57
prevention - pests/pathogens	III.D.1.c	3	3	4	4	3	4	3		3.43
Control										
control - plants	III.D.2.a	4	5	4			4	4		4.20
control - animals	III.D.2.b	4	3	4			3	3		3.40
control - pest/pathogens	III.D.2.c	4	4	4			3	3		3.60
Non-Native, Invasive & Problem Species Average Score										3.70

Ground Water Monitoring (III.E.2)										
Ground water quality	III.E.2.a	3	4	5		4	4	4		4.00
Ground water quantity	III.E.2.b	3	4	5	4	4	2	4		3.71
Ground Water Monitoring Average Score										3.86
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3.a	3	4	5	5	4	2	3		3.71
Surface water quantity	III.E.3.b	3	4	5	5	4	2	3		3.71
Surface Water Monitoring Average Score										3.71
Resource Protection (III.F)										
Boundary survey	III.F.1	4	5	5	5	4	4	3		4.29
Gates & fencing	III.F.2	4	3	5	5	4	4	3		4.00
Signage	III.F.3	4	4	5	5	5	4	3		4.29
Law enforcement presence	III.F.4	4	4	5	4	4	4	4		4.14
Resource Protection Average Score										4.18
Adjacent Property Concerns (III.G)										
Land Use										
Inholdings/additions	III.G.2	4	5	5	5	4	4	5		4.57
Discussion of Potential Surplus Land Determination	III.G.3	5	5	3		4	5	5		4.50
Surplus Lands Identified?	III.G.4	4	5	5	5	5	5	5		4.86
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Parking	IV.1.b	3	5	5		5	4			4.40
Environmental Education & Outreach										
Wildlife	IV.2.a	3	3	3	4	3	2	3		3.00
Invasive Species	IV.2.b	3	3	3	4	3	2	3		3.00
Habitat Management Activities	IV.2.c	3	3	3	4	3	2	3		3.00
Interpretive facilities and signs	IV.3	3	3	5	5	3	2	3		3.43
Recreational Opportunities	IV.4	4	5	5	5	4	3	4		4.29
Management of Visitor Impacts	IV.5	4	5	5	4	4	2	3		3.86
Public Access & Education Average Score										3.57
Managed Area Uses (VI.A, VI.B)										
Existing Uses										
Hiking	VI.A.1	5	5	5	5	5	5	5		5.00
Nature Study	VI.A.2	5	5	5	5	5	5	5		5.00
Wildlife Photography	VI.A.3	5	5	5	5	5	5	5		5.00
Proposed Uses										
Equestrian Trail	VI.B.1	3	5	5	5	4	4	4		4.29
Primitive Camping	VI.B.2	4	5	3	5	4	4	4		4.14

Color Code:

Excellent

Above
Average

Below
Average

Poor

Missing Vote

Insufficient
Information

See
Appendix A
for detail

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*

2022 Land Management Review Team Report for Indian Lake State Forest

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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 or jurisdictional water management 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 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.

Property Reviewed in this Report

Name of Site: Indian Lake State Forest

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

Acres: 4,461

County: Marion

Purpose(s) for Acquisition: to protect and restore the natural and cultural values of the property and provide the greatest benefit to the citizens of the state.

Acquisition Program(s): Florida Forever

Original Acquisition Date: 7/25/07

Area Reviewed: Entire Property

Last Management Plan Approval Date: 2/14/11

Review Date: 9/13/22

Agency Manager and Key Staff:

- Justin Kilcrease, Manager
- Charlie Pedersen
- Terry Sheehan

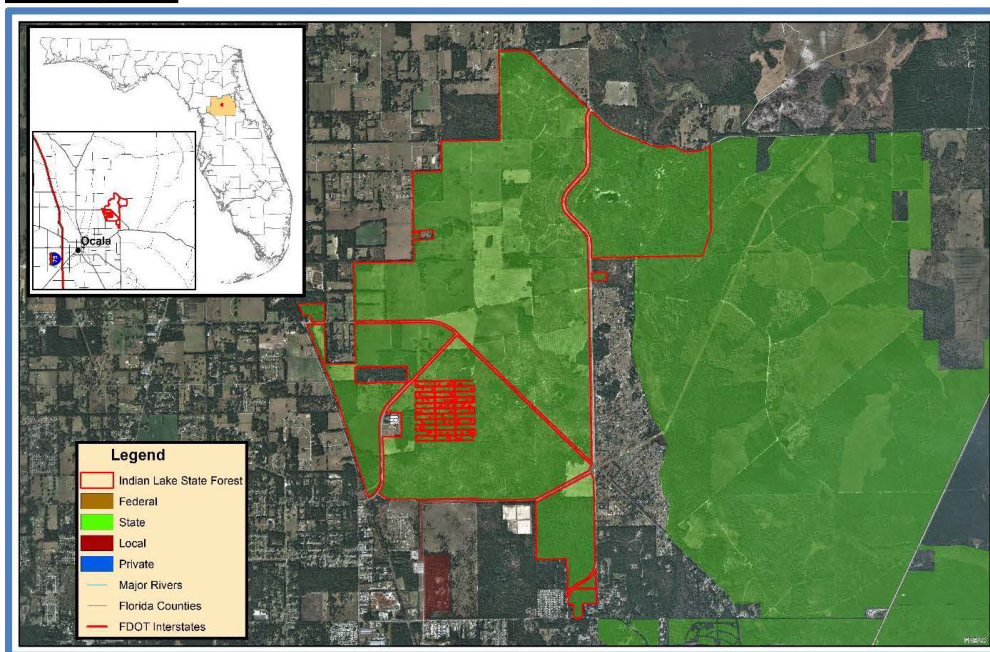
Review Team Members (voting)

- Laurie Dolan, DRP District
- Jim Couillard, Local Gov't.
- Aaron Johnson, FWC
- Charlie Nolan, DEP District
- Jason Love, FFS
- Amy Copeland, SJRWMD
- Michael Bubb, Conservation Org.
- Private Land Manager, None

Non-Team Members (attending)

- Keith Singleton, DEP/DSL

Property Map



Overview of Land Management Review Results

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

Yes = 7, No = 0

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

Yes = 7, 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	4.44	4.46
Prescribed Fire / Habitat Restoration	4.29	4.45
Hydrology	3.90	3.90
Imperiled Species	3.86	3.93
Exotic / Invasive Species	3.90	3.90
Cultural Resources	4.29	4.21
Public Access / Education / Law Enforcement	4.09	4.17
Infrastructure / Equipment / Staffing	4.22	N/A
Color Code (See Appendix A for detail)		
Excellent	Above Average	Below Average
		Poor

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 their prescribed burning program in the sandhill communities. (7+, 0-)

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.

Field Review Details

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 sandhill, mesic hammock, baygall, basin marsh, basin swamp, sinkhole lake, depression marsh, sinkhole, and xeric hammock.
2. Natural resources survey/monitoring resources; specifically fire effects monitoring, and invasive species survey and monitoring.

3. Cultural resources, specifically cultural resource survey, and protection and preservation.
4. Prescribed fire, specifically area being burned, frequency and quality.
5. Restoration, specifically sandhill restoration.
6. Forest management, specifically timber inventory, timber harvesting, reforestation/afforestation and site preparation.
7. Non-native, invasive, and problem species, specifically prevention of animals, and control of plants.
8. Ground water monitoring, specifically quality.
9. Resource protection, specifically boundary survey, gates and fencing, and signage.
10. Adjacent property concerns, specifically inholdings and additions.
11. Public access, specifically parking.
12. Environmental education and outreach, specifically wildlife, habitat management activities, recreational opportunities, and management of visitor impacts.
13. Management resources, specifically waste disposal, sanitary facilities, buildings, and equipment.

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.

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)										
Sandhill	I.A.1	4	4	4	5	5	5	4		4.43
Mesic Flatwoods	I.A.2	5	3	5	2	2	4	4		3.57
Mesic Hammock	I.A.3	4	5	5	5	5	5	5		4.86
Baygall	I.A.4	4	5	5	5	5	5	5		4.86
Basin Marsh	I.A.5	5	5	4	4	4	4	3		4.14
Basin Swamp	I.A.6	5	5	5	5	5	5	5		5.00
Sinkhole Lake	I.A.7	5		5	5	5	5	5		5.00
Depression Marsh	I.A.8	5	5	5	5	5	5	3		4.71
Sinkhole	I.A.9	5	4	5	4	5	5	4		4.57
Xeric Hammock	I.A.10	4	3	4	5	5	5	5		4.43
Natural Communities Average Score										4.56
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	4	4	4	3	4	5	3		3.86
Plants	I.B.2	4	4	4	3	4	5	3		3.86
Listed Species Average Score										3.86

Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	3	5	4	4	4	4	3		3.86
Other non-game species or their habitat monitoring	I.C.3	3	4	4	3	4	4	2		3.43
Fire effects monitoring	I.C.4	4	5	5	4	5	5	4		4.57
Other habitat management effects monitoring	I.C.5	4	4	3	3	4	4	3		3.57
Invasive species survey / monitoring	I.C.6	5	4	5	4	4	5	4		4.43
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	3	5	4	4	5	4		4.29
Protection and preservation	II.B	5	3	5	4	4	5	4		4.29
Cultural Resources Average Score										4.29
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	4	5	5	4	4	5	4		4.43
Frequency	III.A.2	5	5	5	5	4	5	4		4.71
Quality	III.A.3	4	5	5	5	5	5	3		4.57
Resource Management, Prescribed Fire Average Score										4.57
Restoration (III.B)										
Sandhill Restoration	III.B.1	4	4	4	3	4	5	4		4.00
Restoration Average Score										4.00
Forest Management (III.C)										
Timber Inventory	III.C.1	5	4	5	4	4	5	4		4.43
Timber Harvesting	III.C.2	5	3	5	4	4	5	3		4.14
Reforestation/Afforestation	III.C.3	5	5	5	4	5	5	4		4.71
Site Preparation	III.C.4	3	4	X	4	4	5	4		4.00
Forest Management Average Score										4.32
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1.a	3	5	4	3	4	5	3		3.86
prevention - animals	III.D.1.b	5	4	4	4	4	5	2		4.00
prevention - pests/pathogens	III.D.1.c	5		4	3	3	5	3		3.83
Control										
control - plants	III.D.2.a	3	5	4	4	4	5	3		4.00
control - animals	III.D.2.b	5	4	4	3	4	5	2		3.86
control - pests/pathogens	III.D.2.c	5		4	3	3	5	3		3.83
Non-Native, Invasive & Problem Species Average Score										3.90
Ground Water Monitoring (III.E.2)										
Ground water quality	III.E.2.a	5	5	5	3	5	4	4		4.43
Ground water quantity	III.E.2.b	5	3	4	3	4	4	4		3.86
Ground Water Monitoring Average Score										4.14
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3.a	5		4	3	4	4	2		3.67
Surface water quantity	III.F.3.b	5		4	3	4	4	2		3.67
Surface Water Monitoring Average Score										3.67

Resource Protection (III.F)										
Boundary survey	III.F.1	4	3	5	3	5	4	4		4.00
Gates & fencing	III.F.2	5	5	5	3	3	4	4		4.14
Signage	III.F.3	4	4	5	3	4	4	4		4.00
Law enforcement presence	III.F.4	4	4	4	3	4	4	4		3.86
Resource Protection Average Score										4.00
Adjacent Property Concerns (III.G)										
Land Use										
Inholdings/additions	III.G.2	4	4	4	3	4	5	4		4.00
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Parking	IV.1.b	5	5	5	4	5	4	4		4.57
Environmental Education & Outreach										
Wildlife	IV.2.a	5	4	4	3	5	5	3		4.14
Invasive Species	IV.2.b	3	4	3	4	5	5	3		3.86
Habitat Management Activities	IV.2.c	4		3	4	4	5	4		4.00
Interpretive facilities and signs	IV.3	4	5	4	3	3	5	3		3.86
Recreational Opportunities	IV.4	5	5	5	4	4	5	4		4.57
Management of Visitor Impacts	IV.5	4	4	5	4	5	4	4		4.29
Public Access & Education Average Score										4.18
Management Resources (V.1, V.2, V.3, V.4)										
Maintenance										
Waste disposal	V.1.a	5	5	4	3	5	5	3		4.29
Sanitary facilities	V.1.b	5	5	5	3	5	5	4		4.57
Infrastructure										
Buildings	V.2.a	5	5	5	4	5	5	4		4.71
Equipment	V.2.b	4		4	4	5	5	4		4.33
Staff	V.3	4	4	5	3	4	2	3		3.57
Funding	V.4	4	4	5	3	4	4	3		3.86
Management Resources Average Score										4.22

Color Code:

Excellent	Above Average	Below Average	Poor
	Missing Vote	Insufficient Information	

See Appendix A for detail

Land Management Plan Review Details

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:

The review team scores did not identify items requiring improvements in the management plan.

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)										
Sandhill	I.A.1	3	5	5	5	5	5	5		4.71
Mesic Flatwoods	I.A.2	5	4	5	5	4	5	4		4.57
Mesic Hammock	I.A.3	5	5	5	5	4	5	3		4.57
Baygall	I.A.4	5	5	5	5	4	5	4		4.71
Basin Marsh	I.A.5	5	4	5	5	5	5	4		4.71
Basin Swamp	I.A.6	5	4	5	5	5	5	3		4.57
Sinkhole Lake	I.A.7	1		5	5	5	5	3		4.00
Depression Marsh	I.A.8	5	5	5	5	4	5	4		4.71
Sinkhole	I.A.9	5	3	5	5	5	5	5		4.71
Xeric Hammock	I.A.10	2	3	X	5	4	5	3		3.67
Natural Communities Average Score										4.50
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1	4	4	4	4	5	5	2		4.00
Plants	I.B.2	2	4	4	4	5	5	3		3.86
Listed Species Average Score										3.93
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	3	5	5	4	4	4	3		4.00
Other non-game species or their habitat monitoring	I.C.3	4	4	2	4	4	4	3		3.57
Fire effects monitoring	I.C.4	5	5	4	4	5	5	2		4.29
Other habitat management effects monitoring	I.C.5	4	4	3	4	4	4	2		3.57
Invasive species survey / monitoring	I.C.6	5	4	5	4	5	4	4		4.43
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	4	3	5	5	5	5	3		4.29
Protection and preservation	II.B	4	3	5	5	4	5	3		4.14
Cultural Resources Average Score										4.21
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	4	5	5	5	4	5	4		4.57
Frequency	III.A.2	5	5	5	5	4	5	4		4.71
Quality	III.A.3	5	5	4	4	4	5	2		4.14
Resource Management, Prescribed Fire Average Score										4.48
Restoration (III.B)										
Sandhill Restoration	III.B.1	4	5	4	4	5	5	4		4.43
Restoration Average Score										4.43
Forest Management (III.C)										
Timber Inventory	III.C.1	5	4	5	5	5	5	3		4.57

Timber Harvesting	III.C.2	5	3	5	5	5	5	3		4.43
Reforestation/Afforestation	III.C.3	5	5	5	5	4	5	4		4.71
Site Preparation	III.C.4	4	4	X	3	5	5	3		4.00
Forest Management Average Score										4.43
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1.a	3	5	5	4	4	4	3		4.00
prevention - animals	III.D.1.b	5	4	4	4	4	4	2		3.86
prevention - pests/pathogens	III.D.1.c	5		5	4	3	4	3		4.00
Control										
control - plants	III.D.2.a	4	5	5	4	4	4	3		4.14
control - animals	III.D.2.b	4	4	4	4	4	4	2		3.71
control - pests/pathogens	III.D.2.c	4		4	4	3	4	3		3.67
Non-Native, Invasive & Problem Species Average Score										3.90
Ground Water Monitoring (III.E.2)										
Ground water quality	III.E.2.a	5	5	5	4	5	3	4		4.43
Ground water quantity	III.E.2.b	5	3	4	4	4	3	4		3.86
Ground Water Monitoring Average Score										4.14
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3.a	5		4	4	4	3	2		3.67
Surface water quantity	III.E.3.b	5		4	4	4	3	2		3.67
Surface Water Monitoring Average Score										3.67
Resource Protection (III.F)										
Boundary survey	III.F.1	5	3	5	4	5	4	3		4.14
Gates & fencing	III.F.2	5	5	4	4	5	4	3		4.29
Signage	III.F.3	5	4	5	4	5	4	3		4.29
Law enforcement presence	III.F.4	5	4	5	4	5	4	4		4.43
Resource Protection Average Score										4.29
Adjacent Property Concerns (III.G)										
Land Use										
Inholdings/additions	III.G.2	4	4	4	4	5	4	4		4.14
Discussion of Potential Surplus Land Determination	III.G.3	5	4	4	4	4	1	4		3.71
Surplus Lands Identified?	III.G.4	5	4	4	4	4	5	4		4.29
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Parking	IV.1.b	4	5	5	4	5	4	4		4.43
Environmental Education & Outreach										
Wildlife	IV.2.a	5	3	4	4	5	4	2		3.86
Invasive Species	IV.2.b	5	3	3	4	4	4	2		3.57
Habitat Management Activities	IV.2.c	5		3	4	4	4	3		3.83
Interpretive facilities and signs	IV.3	5	4	4	4	4	5	3		4.14
Recreational Opportunities	IV.4	5	4	5	4	5	5	4		4.57
Management of Visitor Impacts	IV.5	4	4	5	4	4	4	3		4.00
Public Access & Education Average Score										4.06

Managed Area Uses (VI.A, VI.B)										
Existing Uses										
Hiking	VI.A.1	5	5	5	5	5	5	4		4.86
Nature Study	VI.A.2	4	5	5	5	5	5	4		4.71
Wildlife Photography	VI.A.3	4	5	4	5	5	5	4		4.57
Proposed Uses										
Equestrian Trail	VI.B.1	5	5	4	5	5	5	3		4.57
Primitive Camping	VI.B.2	5	5	4	5	5	5	3		4.57

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 T

Compliance with Local Comprehensive Plan

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

February 20, 2023

Marion County Planning and Zoning
2710 East Silver Springs Boulevard
Ocala, Florida 34470
(352) 438-2600
GrowthServices@marionfl.org

To Whom It May Concern:

Greeting from the Florida Forest Service! Attached is a draft copy of the Ten-Year Land Management Plan and Exhibits for Indian Lake State Forest, prepared in accordance with Chapter 253.034, Florida Statutes. Please review the draft plan at your earliest convenience and reply as to whether the plan is consistent with Marion County's Comprehensive Plan.

Please address all correspondence concerning the Management Plan on official letterhead to the above mailing address or via email. I can be reached by telephone at (850) 681-5890 or by email at Brian.Camposano@FDACS.gov if you have any questions.

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

Sincerely,

Brian Camposano
Assistant Chief, Forest Management Bureau
Florida Forest Service

Exhibit U

State Forest Management Plan Advisory Group Summary

Management Plan Advisory Group Public Hearing
Indian Lake State Forest
10-Year Land Management Plan

January 25, 2023

10:30 A.M.

Meeting Minutes

MPAG Members Present:

- | | |
|-----------------|---|
| • Rick Dolan | Waccasassa Forestry Center (WaFC) Manager, Florida Forest Service (FFS) |
| • Amy Copeland | St. Johns River Water Management District (Representing Jeremy Olson) |
| • Leon Gary | Local Property Owner |
| • Pat Jacobs | Local Property Owner |
| • Jim Couillard | Marion County Elected Official (Representing Commissioner Carl Zalak III) |
| • Ann Bishop | Marion County Soil & Water Conservation District |

MPAG Members Not Present:

- | | |
|----------------|---|
| • Jeremy Olson | St. Johns River Water Management District |
| • Lauren Akins | Florida Fish and Wildlife Conservation Commission |
| • Tom Kay | Alachua Conservation Trust |

FFS Staff:

- | | |
|----------------------|--|
| • Alan Davis | Land Planning Coordinator |
| • Brian Camposano | Forest Management Assistant Bureau Chief |
| • Stephen Montgomery | WAFC Forestry Resource Administrator |
| • Justin Kilcrease | WAFC Forester |
| • Greg Barton | Senior Forester |
| • Charlie Pedersen | District Biologist |

Guests:

- None

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 Indian Lake 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 Indian Lake State Forest (ILSF) 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 Ocala Star Banner on January 9, 2023; Florida Administrative Register, FFS webpage, as well as posted at the kiosks in the WaFC District. The meetings were announced at the Marion County Board of County Commissioners meeting on January 17, 2023. 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 introduced Brian Camposano (FFS) who explained the webinar features and how to share comments.
- Mr. Davis then requested MPAG Member introductions and attendance was taken.
- Mr. Davis asked the advisory group to elect an MPAG chairperson. Rick Dolan was elected to serve as chairperson.
- Mr. Davis reiterated the purpose of this meeting is to receive public input which would be later discussed in the Workshop. He acknowledged the in-person location and asked the FFS administrators to apprise of any persons attending. Greg Barton stated that no attendees were present.
- Mr. Davis then introduced Forester Justin Kilcrease who presented a PowerPoint presentation of the ILSF 10-Year Plan.
- Mr. Davis asked if there were any clarifying questions regarding the presentation. No comments were raised.
- Mr. Davis rechecked to see if there were any members of the public who had shown up to the in-person location. There were none.
- Mr. Davis asked MPAG Member Ann Bishop to introduce herself, who joined after introductions were completed. Mr. Davis also checked on MPAG Member Leon Gary, who was on the meeting but was unable to speak with MPAG staff. He was still unable to speak to the group.
- Mr. Davis asked if there are any further questions.
- Mr. Davis then thanked everyone for participating and adjourned the public hearing portion of the meetings.

Public Meeting End Time: 11:08 A.M.

Management Plan Advisory Group Workshop Meeting
Indian Lake Island State Forest
10-Year Land Management Plan

January 25, 2023

1:00 P.M.

Meeting Minutes

MPAG Members Present:

- | | |
|-----------------|---|
| • Rick Dolan | Waccasassa Forestry Center (WaFC) Manager, Florida Forest Service (FFS) |
| • Amy Copeland | St. Johns River Water Management District (Representing Jeremy Olson) |
| • Ann Bishop | Marion County Soil & Water Conservation District |
| • Leon Gary | Local Property Owner |
| • Pat Jacobs | Local Property Owner |
| • Jim Couillard | Marion County Elected Official (Representing Commissioner Carl Zalak III) |

MPAG Members Not Present:

- | | |
|----------------|---|
| • Jeremy Olson | St. Johns River Water Management District |
| • Tom Kay | Alachua Conservation Trust |
| • Lauren Akins | Florida Fish and Wildlife Conservation Commission |

FFS Staff:

- | | |
|----------------------|--|
| • Alan Davis | Land Planning Coordinator |
| • Brian Camposano | Forest Management Assistant Bureau Chief |
| • Stephen Montgomery | WAFC Forestry Resource Administrator |
| • Justin Kilcrease | WAFC Forester |
| • Greg Barton | Senior Forester |

Guests:

- None

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

- Land Planning Coordinator, Alan Davis introduced himself and opened the ILSF MPAG Workshop by conducting an MPAG member sound check. 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 Stephen Montgomery was available to make proposed changes to the draft during the page-by-page review.
- Mr. Davis asked if any MPAG members had comments regarding the public hearing conducted earlier. None followed. No attendees were reported at the in-person venue. However, MPAG Member Leon Gary joined the call from the in-person location to ensure he could communicate with the group. There were also no written comments prior to the meeting.
- Mr. Davis conducted the page by page review with no comments or change proposed by MPAG members.

- Mr. Davis then asked the group to confirm they had no changes or suggestions. No one responded.
- He then asked each MPAG member to comment on the draft plan.
- Mr. Gary asked about what the policy is going to be on fencing of the property, as he was in favor of having it fenced.
- Mr. Camposano asked for clarification and then explained that the FFS does not typically fence off the entire policy, as the forest is open to the public. Specific features or hazards can be fenced on a case by case basis. Mr. Dolan concurred.
- Ms. Jacobs had concerns about acquisitions – specifically what pieces of property north of the forest were for sale or could be acquired as part of the forest.
- Mr. Davis briefly explained the Florida Forever acquisition process and informed Ms. Jacobs that at this time, he was not aware of any properties for sale in the optimum management boundary with a willing seller. He also made the point to state that we are always open to acquisitions that make sense for the state forests as parcels come up for sale.
- 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 June 2023 public meeting.
- Mr. Davis thanked everyone for their time and participation and adjourned the meeting.

Workshop Meeting End Time: 1:21 P.M.

Exhibit V

State Forest Summary Budget

	INDIAN LAKE STATE FOREST MGT. ONLY 21-22 EXPENDITURES	Percentages Based on Total Dollar Amount of Expenditures	Assessed Needed Funding Based Upon LMUAC Resource Management
Resource Management	\$ 6,881	26.30%	\$ 22,595.44
Exotic Species Control	\$ 543	3.34%	\$ 2,870.50
Prescribed Burning	\$ 3,212	3.74%	\$ 3,212.46
Cultural Resources Management	\$ 22	0.13%	\$ 114.27
Timber Management	\$ 1,459	8.97%	\$ 7,709.38
Hydrological Management	\$ 114	0.70%	\$ 604.86
	\$ -		\$ -
OTHER RESOURCE MANAGEMENT	\$ 1,530	9.41%	\$ 8,083.98
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	\$ 1,089	6.70%	\$ 5,754.75
Central Office Headquarters	\$ 1,089	6.70%	\$ 5,754.75
District/Regions	\$ -		\$ -
Units/Projects	\$ -		\$ -
	\$ -		\$ -
Support	\$ 5,515	33.91%	\$ 29,136.34
Land Management Planning	\$ 315	1.94%	\$ 1,666.80
Land Management Reviews	\$ 30	0.19%	\$ 159.81
Training/Staff Development	\$ 1,384	8.51%	\$ 7,314.16
Vehicle Purchase	\$ 65	0.40%	\$ 345.39
Vehicle Operations and Maintenance	\$ 2,763	16.99%	\$ 14,599.10
	\$ -		\$ -
OTHER SUPPORT	\$ 956	5.88%	\$ 5,051.09
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	\$ 3,349	20.59%	\$ 17,692.99
New Facility Construction	\$ 701	4.31%	\$ 3,702.18
Facility Maintenance	\$ 2,648	16.28%	\$ 13,990.81
			\$ -
Visitor Services/Recreation	\$ 2,033	12.50%	\$ 10,739.69
Information/Education	\$ 428	2.63%	\$ 2,263.07
Operations	\$ 1,604	9.87%	\$ 8,476.62
			\$ -
Law Enforcement	\$ -	0.00%	\$ -
Total	\$ 16,261.35	100.00%	\$85,917.50

Exhibit W

Arthropod Control Plan Marion County, Florida

Mission:

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Vision: To be the Healthiest State in the Nation

Ron DeSantis
Governor

Scott A. Rivkees, MD
State Surgeon General

July 21st, 2021

Justin Kilcrease
Florida Forest Service
State Lands Forester
Indian Lake State Forest

Dear Mr. Kilcrease:

To the best of my knowledge, Marion County has never had a nuisance mosquito spraying program. Therefore, I can say with some certainty that no mosquito control has been attempted in Indian Lake State Forest and none is being proposed in the future. Therefore, no Arthropod Control Plan (ACP) is likely to exist or would be necessary.

Sincerely,

A handwritten signature in blue ink, appearing to read "Daniel Dooley".

Daniel Dooley
Environmental Administrator
Department of Health in Marion County

**Florida Department of Health
in Marion County**
1801 SE 32nd Avenue, Ocala, Florida 34471-5532
PHONE: 352/629-0137 • FAX 352/694-1613
Marion.FloridaHealth.gov

Accredited Health Department
Public Health Accreditation Board

Exhibit X

Heather Island / Ocklawaha River
Florida Forever Project

2021 Florida Forever Five-Year Plan

Heather Island/Ocklawaha River

Summary of Recommendations and Status
as of
December 2020



Division of State Lands
Florida Department of Environmental Protection



Heather Island/Ocklawaha River

Partnerships & Regional Incentives Project
Marion

Project-at-a-Glance

Year Added to Priority List	2002
Project Acres	19,953
Acquired Acres	6,290
Cost of Acquired Acres	\$1,165,000
Remaining Project Acres	13,663
2019 Assessed Value of Remaining Acres	\$35,712,575

Purpose for State Acquisition

The Heather Island/Ocklawaha River project offers important ecological benefits. Foremost among those benefits are links with existing public conservation lands, corridors for wildlife dispersal, preservation of habitat for rare species, corridors for wildlife dispersal and floodplain protection. Given its diversity of wildlife species, quality of plant communities, and strategic location, this project has substantial conservation attributes. This project may also help complete the Florida National Scenic Trail, a statewide non-motorized trail that crosses a number of Florida Forever project sites. The trail is a congressionally designated national scenic trail.

Manager(s)

The Fish and Wildlife Conservation Commission (FWC) is the lead manager for most of the southern two parcels: Marshall Swamp and Cow Hammock, approximately 5,200 acres. The remaining parcels, approximately 12,700 acres, will be managed by the Division of Recreation and Parks (DRP) (portions between Sharpes Ferry Road and the Silver River) and the Florida Forest Service/FFS.



General Description

The Heather Island/Ocklawaha River project consists of approximately 19,920 (GIS) acres in Marion County. The project area consists of a mosaic of upland and wetland communities with the majority being forested wetlands. Several conservation areas including the Ocala National Forest and the Cross- Florida Greenway Recreation and Conservation Areas border the project. The project will protect and restore the floodplain and the adjacent upland forests along the Ocklawaha River. The project area provides suitable habitat for the black bear and the rare plant pink root. The Heather Island/ Ocklawaha River project was previously on the CARL acquisition list but was removed due to an impasse reached with unwilling sellers in 2000. Recently the landowners have expressed an interest in selling to the state and/or the St. Johns Water Management District (SJRWMD). To date the SJRWMD has acquired approximately 4,465 acres within the original CARL project boundaries.

FNAI Element Occurrence Summary

<u>FNAI Elements</u>	<u>Score</u>
Gopher tortoise	G3/S3
Florida black bear	G5T4/S4
pinkroot	G2Q/S2

3 rare species are associated with the project

Public Use

The Heather Island/Ocklawaha River project can accommodate a diversity of resource-based recreation opportunities, such as hiking, environmental resource appreciation and education, picnicking, camping, horseback riding and bicycling. Depending on management emphasis the property will also support hunting. The project abuts the Ocklawaha River or public lands adjacent to the river that could accommodate shoreline freshwater fishing and or boat launching sites.

Acquisition Planning

2002

On December 5, 2002, the Acquisition and Restoration Council (ARC) added the Heather Island/Ocklawaha River project to Group A of the Florida Forever (FF) 2003 Priority list. This fee-simple project, sponsored by Office and Greenway Trails (OGT) and the St. Johns River Water Management District (SJRWMD), consisted of approximately 19,949 GIS acres, two landowners, the Rayonier Timberland Corp. and the Alawest-AI LLC, and a 2001 taxable value of



\$32,234,776. The essential parcels were identified as the Rayonier ownership. These should be mapped and appraised first.

2005

On January 25, 2005, ARC moved this project to Group B of the 2005 Florida Forever Priority list.

2011

On December 9, 2011, ARC placed this project in the Partnerships and Regional Initiatives category.

On January 11, 2011, about 400 acres (TNC/Rayonier Forest Resources LP--\$1,165,000) were purchased by DRP to be managed by DRP as the Silver River Addition.

Coordination

This project will be acquired in partnership with SJRWMD, with a mixture of state and WMD funding. Contribution percentages have not been determined.

Management Policy Statement

Priority will be given to conserving and protecting environmentally unique native habitats and threatened and endangered species. Management programs will be designed to conserve, protect, manage and/or restore important ecosystems, landscapes, forests and water resources. The tract will also be managed to provide opportunities for biking, camping, canoeing, environmental and cultural resource education, fishing, hiking, hunting, and wildlife viewing.

The connection and proximity of this project to other conservation lands, as well as its landscape diversity and high-quality wetlands, provide important habitats for wildlife populations and a unique environment for outdoor recreation in Florida. Since the principal purposes of the proposal are to protect habitat for wildlife, management goals will be oriented to conserving and protecting these species and carefully managing public access.

Management Prospectus

Qualifications for state designation

Based upon a review of the Florida Forever Act, this project meets the Goals and Measures, as outlined in Statute to increase nature-based recreation, to enhance the coordination and completion of land acquisition projects, to increase the protection of Florida's biodiversity at



the species, natural community, and landscape levels, to protect, restore, and maintain the quality and natural functions of land, water, and wetland systems of the state, and to increase the amount of forestland available for sustainable management of natural resources.

Manager

The high wildlife resource value of this Heather Island/Ocklawaha River proposal indicates that the FWC is the suitable lead manager for most of the southern two parcels (approximately 5,200 acres in Marshall Swamp and Cow Hammock), with the remaining parcels (approximately 12,700 acres between Sharpes Ferry Road and the Silver River) to be managed DRP and FFS.

Conditions affecting intensity of management

Some portions of the project include lands that are low-need tracts, requiring basic resource management including the frequent use of prescribed fire where appropriate. However, since more than 53 percent of the proposal area has been disturbed for silviculture or other purposes, significant restoration activities are contemplated for some of the acreage on which fee title is acquired. FWC will use restoration techniques recommended by specialists in the field of ecological restoration, including the most recent advancements identified by on-going research and lessons learned on the ground through adaptive management. The primary management needed to preserve the less disturbed natural communities will involve introducing prescribed fire and carefully managing public use. Biotic surveys will be a priority, since many rare or listed species are expected to be present.

Timetable for implementing management and provisions for security and protection of infrastructure

During the first year after acquisition, emphasis will be on site security, posting boundaries, public access, fire management, resource inventory and removing refuse. A conceptual management plan will be developed by the FWC describing management goals and specific objectives to implement future resource management. Long-range plans will emphasize restoring and maintaining ecosystem functions; restoring native wildlife populations and wildlife diversity, including protecting and managing threatened and endangered species; and management for sustainable public use of game wildlife populations balanced with other wildlife oriented recreational activities. Multiple use principles will be practiced where compatible with resource management goals and acquisition.

Revenue-generating potential

The harvest and sale of forest products should continue to provide revenues under State management, where silvicultural activities are consistent with wildlife habitat management



objectives. The FWC, however, will seek to expand and enhance the revenue-generating potential of the property improving wildlife diversity and providing a broad spectrum of resource-based recreational opportunities.

Additional revenue will 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 recreational user fees and ecotourism and wildlife viewing activities. The Heather Island/Ocklawaha River proposal, when acquired by the State, will require one FTE position to manage the project area. However, if certain activities are privatized, it would reduce the number of FTEs required. Funding for natural resource management and public use administration would come from the CARL Trust Fund. See the anticipated costs below. Revenue sources would likely include public use fees and timber harvests.

Cooperators in management activities

The FWC should cooperate with other state and local governmental agencies, including the Department of Environmental Protection (DEP), FFS and the SJRWMD in managing the area.

Management Cost Summary

<u>FWC</u>	<u>Startup</u>	<u>Recurring</u>
Resource Management	\$271,345	not provided
Administration	\$75,494	not provided
Support	\$149,080	not provided
Capital Improvements	\$1,130,236	not provided
Visitor Services/Recreation	\$2,361	not provided
Law Enforcement	\$13,874	not provided
TOTAL	\$1,642,389	not provided

Source: Management Prospectus as originally submitted

Management Cost Summary

<u>FFS</u>	<u>Startup</u>
Salary (2FTE)	\$80,870
Expense	\$117,500
OCO	\$225,600
TOTAL	\$423,970

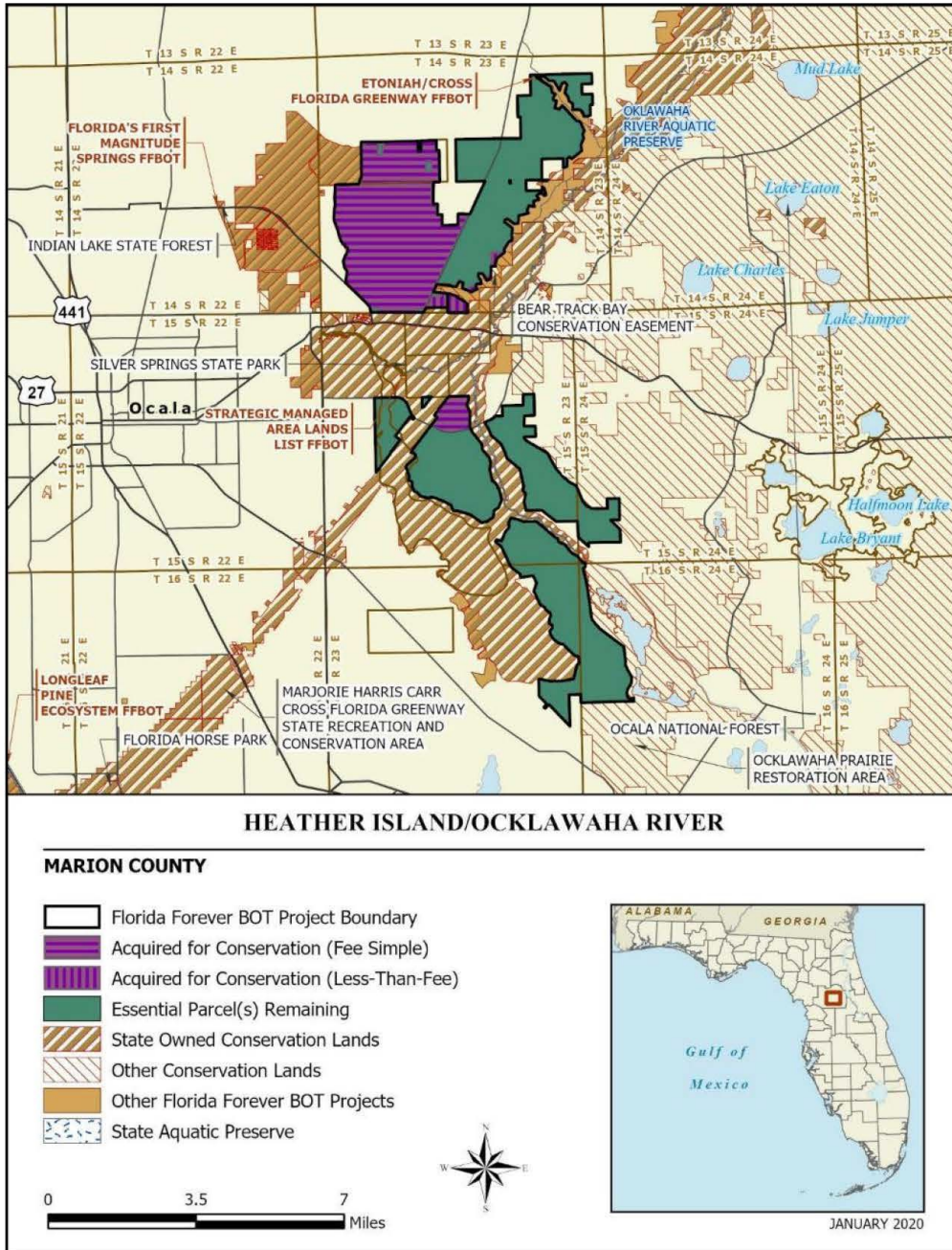
Source: Management Prospectus as originally submitted



Management Cost Summary

<u>DRP</u>	<u>Startup</u>
Expense	\$0
FCO	\$268,000
TOTAL	\$268,000

Source: Management Prospectus as originally submitted



Map 1 : FNAI, January 2021