NEWNANS LAKE STATE FOREST 2018 LAND MANAGEMENT PLAN

EXHIBITS

Exhibit A

Management Accomplishment Summary

NEWNANS LAKE STATE FOREST 3 YEAR ACCOMPLISHMENT REPORT

Planting		ACTIVITIES		TOTAL						
Bareroot (B) or	1	Bareroot LL	No.	70,000						
Containerized (C))		Baroroot EE	Acres	103						
Contamorized (O))	2	Containerized LLReplanted	No.	40,000						
	_	Containenzed EL - Replanted	Acres	98						
			Auto	30						
Seedling Survival										
Checks		Survival Checks	Acres	201						
Ollooko			, (0100							
Timber Inventory		2016 New Inventory	Acres	425						
	\Box	2017 New Inventory	Acres	492						
			, 10.00							
Exotic Species 1 Camphor Acres										
Control	2	Chinese Tallow	Acres	38 48						
	3	Cogon Grass	Acres	0.2						
	4	Japanese Climbing Fern	Acres	3						
	5	Natal Grass	Acres	4						
	6	Tropical Soda Apple	Acres	6						
	7	Coral Ardisia	Acres	84						
	8	Other	Acres	13						
Timber Sales	1	Marking	Acres	125						
Tilliber odies	2	Cruising	Acres	125						
2015	3	Harvest	Acres	125						
2013	1 Harvest									
	1	Day Use	No.	5,112						
Recreation	2	Overnight - Primitive	No.	99						
Hooroution	_	o vorringine i riminare								
	1	Wildfire	No.	0						
Fire	2	Wildfire	Acres	0						
	3	Prescribed Burning	Acres	531						
	-	1 10001111011 2 111111119	710.00							
Roads & Bridges	1	Road Repaired	Miles	1						
oudo a Dilagos	2	Interior Roads Mowed	Miles	3						
	3	Culverts installed/repaired	No.	2						
	4	Low W. Cross. Inst.	No.	1						
		20 1 0.000	110.							
Boundary Maint.	1	Maintenance/Marking/Firelines	Miles	8						
Dodinary Mante.		iviaintenance/iviaiking/i-ileililes	IVIIIes	0						

NEWNANS LAKE STATE FOREST 3 YEAR ACCOMPLISHMENT REPORT

Other Activities	1	OOF Hunt	No.	6
Volunteers	2	Individual Volunteer	Hrs	300
	3	Volunteer Groups	Hrs	235

Exhibit B

Location/Boundary/Road Map

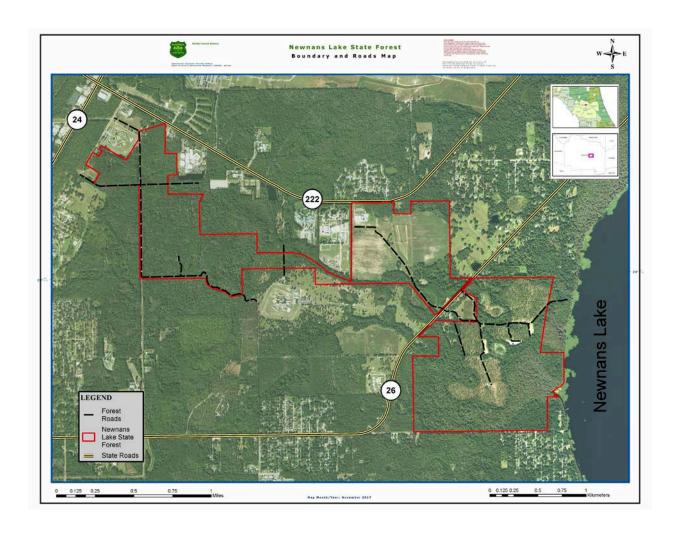




Exhibit C

Optimal Management Boundary Map

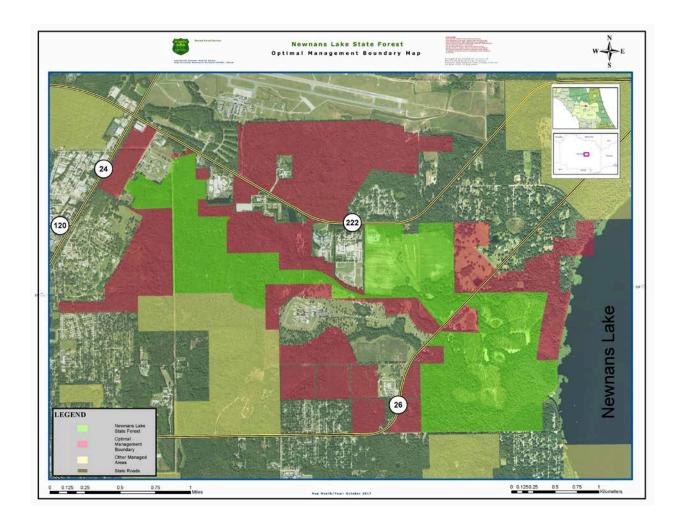


Exhibit D

NLSF Facilities, Recreation, and Improvements Map

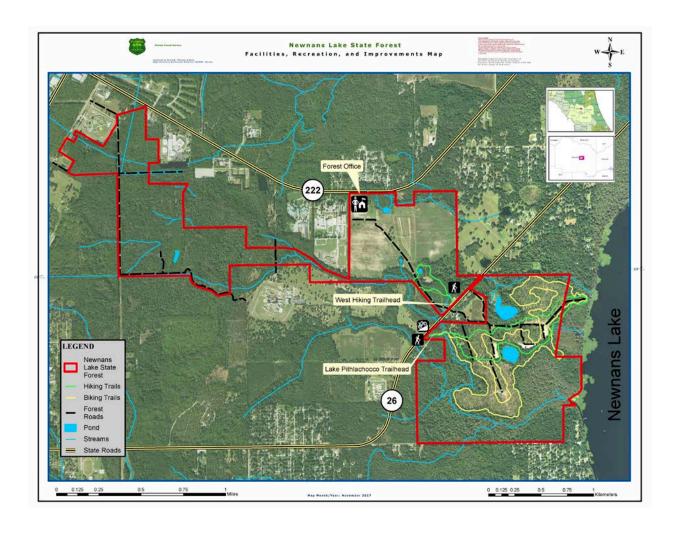


Exhibit E

Proximity to Significant Managed Lands

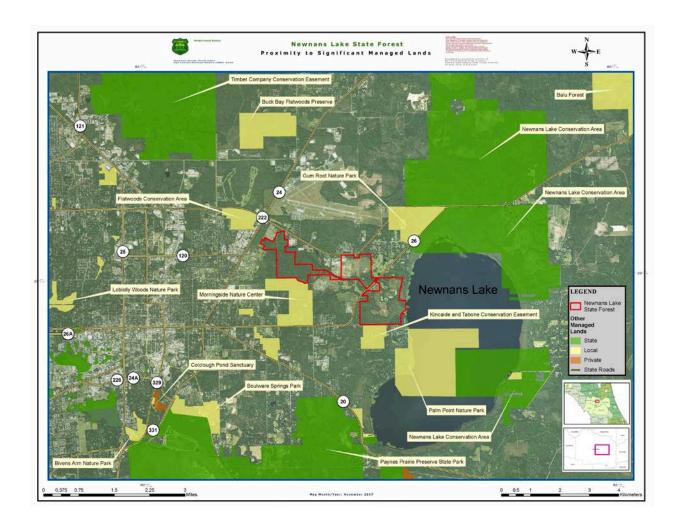


Exhibit F

Florida Forever Projects near NLSF

Lake Santa Fe

Alachua and Bradford Counties

Purpose for Acquisition

Acquiring this project will achieve Florida Forever goals by increasing the protection of Florida's biodiversity at the species, natural community, and landscape levels. The project will also provide protection to the only remaining shoreline of Lake Santa Fe that supports wading bird nesting and resting, natural shoreline fauna, historic cypress fringe, swamps with attendant habitat qualities, and mostly undisturbed wetlands. It will protect, restore, and maintain the quality and natural functions of land, water, and wetland systems of the state; will help to protect existing publicly-owned wetlands and swamp systems by maintaining water quality and preventing additional development; will ensure that sufficient quantities of water are available to meet the current and future needs of natural systems and the citizens of the state; and contributing lands to the health and function of the Santa Fe Swamp will help to ensure adequate surface water resources and water quality. The Florida National Scenic Trail, a cross-Florida hiking and non-motorized trail, is also planned to cross this project. The trail is a congressionally designated national scenic trail.

Manager

The Florida Forest Service/FFS of the Department of Agriculture and Consumer Services, and the Fish and Wildlife Conservation Commission (FWC) are recommended as unified managers of the fee simple portions of the project that are acquired. County and WMD purchases will be managed by those entities.

Lake Santa Fe FNAI Elements	
Frosted Flatwoods Salamander	G2/S2
Florida Black Bear	G5T2/S2
Gopher Tortoise	G3/S3
Narrowleaf Naiad	G1/S1
Wood Stork	G4/S2
Sherman's Fox Squirrel	G5T3/S3
Eastern Diamondback Rattlesnake	G4/S3
Bald Eagle	G5/S3
Osprey	G5/S3S4

⁹ rare species are associated with the project

Partnerships

General Description

The Lake Santa Fe proposal includes 14 tracts in the Lake Santa Fe vicinity with a total of 10,387 (GIS) acres. This project is proposed as fee simple, with possible use of less-than-fee on some parcels, and would build upon the Suwannee River Water Management District's (SRWMD) Santa Fe Swamp Conservation Area, which includes most of the Santa Fe Swamp and Lake Alto Swamp. It is designed to protect the surface headwaters of the swamps through prevention of further development and septic input, and to protect undeveloped portions of the Lake Santa Fe shoreline. The project is segmented by lakefront residential development, limiting the lake edge protection and recreational opportunities.

Public Use

Several of the parcels in the project qualify for passive recreational opportunities including picnicking, short trails and nature appreciation. One parcel may provide opportunity for more diverse (but passive) opportunities such as canoeing, fishing, and bird watching.

Coordination

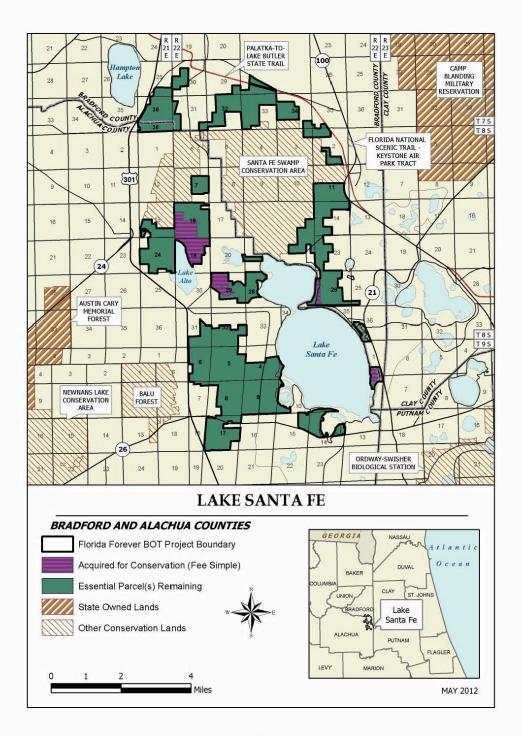
SRWMD and Alachua County are acquisition partners. Originally the SRWMD had expressed an interest in buffering the Santa Fe Swamp Conservation Area.

Acquisition Planning

On December 5, 2003, the Acquisition & Restoration Council (ARC) added the Lake Santa Fe project to Group A of the Florida Forever (FF) 2004 Priority List. This fee-simple project, sponsored by the Lake Santa Fe Dwellers Association and the Nature Conservancy

Placed on List	2004
Projects Area (GIS Acres)	10,387
Acres Acquired (GIS)	796*
At a Cost Of	\$1,721,516*
Acres Remaining (GIS)	9,591
With Estimated (tax assessed) Value of:	\$3,664,230

*includes acreage acquired and funds spent by the SRWMD and Alachua County.



(TNC), consisted of approximately 10,574 (GIS) acres, multiple owners, and a 2003 taxable value of \$3,914,013. The Rayonier tract was identified as essential to this project with the Lake Santa Fe shoreline protection a concurrent priority.

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

On April 20, 2012 the ARC removed 174.5 acres from the project at the landowner's request.

Location and Proximity to Other Managed Areas

The Lake Santa Fe project is in northeastern Alachua County and southeastern Bradford County, centered on Lake Santa Fe. It is fragmented by residential development. Balu Forest (Alachua County) and Austin Cary Memorial Forest are within three miles to the west of the general project area; Camp Blanding Military Reservation is three miles to the northeast; the (Ordway-) Swisher Memorial Nature Preserve is three miles to the southeast. All of the parcels in this proposed project boundary are for the most part in, but also adjacent to and near a medium priority multi-use trail corridor.

Management Policy Statement

The primary management goals for the Lake Santa Fe project are to protect Florida's surface water quality; to protect wetland and aquatic habitat for species associated with freshwater swamps and lakes; to preserve nesting and resting habitat for upland and aquatic species; to provide natural-resource based outdoor recreation opportunities for the people of Florida including, but not limited to, fishing, boating, hiking, camping and nature appreciation; to help buffer and protect existing conservation lands at the Santa Fe Swamp Conservation

Area; and to protect Florida's biodiversity at the species, natural community and landscape levels.

Unified Management Prospectus

Qualifications for state designation Several parcels are adjacent to, and would provide buffer for the SRWMD's Santa Fe Swamp Conservation Area, and also several smaller named lakes including Bonnet Lake, Hickory Lake, Lake Alto and Little Lake Santa Fe. The project area is two miles west of the Camp Blanding Military Reservation, and three miles northeast of the Austin Cary Memorial Forest (managed by the University of Florida). This project is designed to protect the last remnants of undeveloped land around the Lake Santa Fe-Santa Fe Swamp headwaters system,

by protecting shoreline, and upland and wetland natural communities. This would benefit the entire Santa Fe River system, including its associated fish and wildlife, hydrology and water quality. The project area includes functional wetlands (32 percent, or 3,429 acres), and provides protection for surface water (67 percent, or 7,247 acres of project area) and natural floodplain function (26 percent, or 2,817 acres of project area). Part of the project area (25 percent, or 2,635 acres) recharges the Floridan aquifer. This project is also significant as an ecological greenway, with 92 percent (9,894 acres) of the project area qualifying as priorities 4, 6 and 7 in potential importance, according to the Florida Natural Areas Inventory (FNAI) Florida Forever Measures Evaluation.

About 70 percent of the project is upland natural plant communities. Most uplands are pine plantation (6,136 acres), while remaining cover types (570 acres) include upland mixed forest and mesic flatwoods, which together make about 570 acres. Most of the uplands are pine plantation, which is 6,136 acres of flatwoods. About 775 acres of uplands are in agricultural use, most as improved pasture, with about 160 acres in row crops. There are 80 acres of residential properties within the project uplands. Wetland communities consist mostly of basin and dome swamp, which together comprise 2,300 acres. Other wetland communities include baygall and depression marsh. The FNAI indicates that 6 percent (677 acres) of the project area are underrepresented natural communities. The flatwoods salamander is an imperiled animal species documented at a breeding location in the proposed project. Focal species, which are indicators of natural communities and suitable habitat conditions for other species of wildlife, occur widely in the project area. FWC reports that more than 25 percent (2,725 acres) of the project area includes at least seven focal species. Another 55 percent (5,876 acres) of the project is a habitat conservation priority for rare species with the greatest conservation need, according to the FNAI.

Management Goals The FFS and the FWC are prepared to share all management responsibilities for Lake Santa Fe under the unified management concept that both agencies are developing. Under unified management, agencies will identify mutually acceptable goals that further the long-term protection of the site's plant and wildlife resources, promote sound stewardship of land, timber and water resources, and provide the public with access and quality recreational opportunities. Both agencies agree that the project has the capability to provide important protection for fish and wildlife habitat in a manner that is compatible with

sound silvicultural practices. Since the project goals include protecting biodiversity and providing resourcebased public recreational and educational opportunities, programs would be developed to manage ecosystems for multiple use. Multiple use means the harmonious and coordinated management of timber, recreation, conservation of fish and wildlife, forage, archaeological and historic sites, habitat and other biological resources, or water resources so that they are utilized in the combination that will best serve the people of the state, making the most judicious use of the land for some or all of these resources and giving consideration to the relative values of the various resources. Conservation and protection of environmentally unique native habitats, and threatened and endangered species should be an important management goal for the project. Particular attention should be directed to the protection of wetlands which are important habitat to the state and federally listed flatwoods salamander. Wetland drainage and converting wetlands to silviculture have contributed to the decline of this species throughout its range. Management programs would promote recreation and environmental education in the natural environment. The project area will be managed to provide opportunities for bicycling, boating, canoeing, fishing, hiking, horseback riding, hunting, kayaking, picnicking, and wildlife viewing. The Department of Environmental Protection and University of Florida Statewide Greenways System Planning Project shows 27 percent (2,937 acres) of the project area to be suitable for priority 1 or 2 recreational trails. The managing agencies would promote recreation and environmental education in the natural environment. This project contributes to the following goals in accordance with the Florida Forever Act (259.105(4),

- (a) Enhance the coordination and completion of land acquisition projects;
- (b) Increase the protection of Florida's biodiversity at the species, natural community, and landscape levels;
- (c) Protect, restore, and maintain the quality and natural functions of land, water, and wetland systems of the state:
- (d) Ensure that sufficient quantities of water are available to meet the current and future needs of natural systems and the citizens of the state;
- (e) Increase natural resource-based public recreational and educational opportunities; and
- (g) Increase the amount of forestland available for sustainable management of natural resources.

Manager The FFS of the Department of Agriculture and Consumer Services, and the FWC are recommended as unified managers of the fee simple portions of the project that are acquired. County and WMD purchases will be managed by those entities.

Conditions affecting intensity of management Most of the project is a medium-need tract that will require upfront resource management, including frequent prescribed fire where appropriate. About 60 percent of the project area has been subjected to ground cover disturbance due to past silviculture. Consequently, additional effort will be required to restore to a desired future condition. The FFS and FWC propose to work cooperatively to assess site management needs and develop the Conceptual Management Plan (CMP) for the site. Examples of situations that will require cooperative effort include restoring flatwoods previously managed for timber production, removing off-site species, practices that promote regeneration of native ground cover, and reforesting ruderal and recently harvested areas. As part of the unified management approach, the managing agencies will conduct an historic vegetation analysis to determine appropriate desired future conditions, and identify appropriate restoration methods and tools. This effort will help conserve habitats and populations of imperiled or rare species. Other unified management priorities include protecting and restoring forested wetlands, and the identification, control, and follow-up monitoring of invasive exotic species. Biotic surveys would be conducted as part of early unified management activities. Due to the presence of imperiled or rare species expected to occur within the proposed project, it is anticipated that resource inventories would be an initial priority under the unified management approach. Environmentally sensitive areas such as erosion-prone sites, listed species habitats, outstanding natural areas, and wetlands, are to be identified during the initial resource inventory to implement appropriate protective measures for each specific area. Such inventories are considered vital to unified management planning efforts directed at facility and infrastructure development, and design and implementation of recreational use programs.

Timetable for implementing management provisions

During the first year after full acquisition, both agencies operating under the unified management approach will emphasize site security, posting boundaries, public access for low-intensity outdoor recreation, fire management, resource inventory, and removing refuse. Both managing agencies will meet frequently to coordinate task assignments, and cooperate with, and seek the assistance of other state agencies, local governments, and other appropriate participants as it affects management of the project site. Both managing agencies will participate in the joint development of a Combined Management Plan specifying area

management goals and objectives. Goals intended for long-term implementation would emphasize multiple use management and the conservation of the site's natural resources including timber, fish and wildlife, and water. These goals would include restoring habitat and hydrology, and conserving and protecting imperiled or rare species of flora and fauna. Following completion of plant community inventory and historic vegetation analysis, quantified vegetation management objectives would be developed pursuant to an objectivebased vegetation management process. practical, disturbed sites would be restored to conditions expected to occur in naturally functioning ecosystems, including re-establishment of species expected to occur naturally on specific sites. Management would emphasize enhancement of abundance, and spatial distribution of imperiled and rare species. Essential roads would be stabilized to provide all-weather public access and management operations. Programs providing multiple recreational uses would also be implemented. Both agencies will work towards the development of a fire management plan that will apply prescribed burning in a manner that natural resource protection enhancement. Most of this project area has not been burned by prescribed fire in recent years. Whenever possible, existing roads, black lines, foam lines and natural breaks will be utilized to contain and control prescribed and natural fires. Growing-season prescribed burning would be used where appropriate to best achieve management objectives. Timber resources will be managed using acceptable silvicultural practices. Thinning of timber, introduction of prescribed fire, and sustainable forestry management practices could provide silvicultural products, ecological, and recreational benefits. Archaeological and historic sites would be managed in coordination with the Department of State's Division of Historical Resources. Both agencies will work to develop a road plan identifying roads to be used for access by the public, and roads that are required for administrative use. Unnecessary roads, fire lanes and hydrological disturbances would be restored as practical. The road plan would ensure that the public has appropriate access, and that sensitive resources are protected. Other existing infrastructure necessary for management would be protected to the extent possible. Infrastructure development would be the minimum required to serve needs of the public, and would include provisions for facilities necessary for the security and management of the project area.

Revenue-generating potential Timber sales would be conducted as needed to improve or maintain desirable ecosystem conditions, under a multiple-use management concept. Additional revenue would be generated from sales of hunting licenses, fishing licenses, wildlife management area permits, and other special hunting permits. Future revenues might be realized in the future from recreational user fees and ecotourism activities, if such projects can be economically developed. Fifteen percent (15 percent) of all gross revenues will be returned to the county from which funds were generated.

Recommendations as to other governmental agency involvement The unified managers (FFS and FWC) should cooperate with other state and local governmental agencies, including the Suwannee River Water Management District, to manage the project area. The project should be designated as a state forest and wildlife management area.

Revenue sources, management costs and employees needed* Both agencies have agreed to a unified management framework whereby all CARL management funds, site generated revenues, and management expenditures are to be evenly divided between the FFS and FWC.

Category	Start-up	Recurring
Source of Funds	CARL	CARL
Resource Management	\$170,478	\$184,467
Administration	\$75,494	\$25,133
Support	\$149,080	\$31,566
Capital Improvements	\$1,412,903	\$124,743
Visitor/Recreation	\$2,404	\$141
Law Enforcement	\$7,518	\$7,518
TOTAL	\$1,817,877	\$373,568

^{*}includes employee salaries

Updated March 26, 2015

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 850-245-6333 for project review information.

July 20, 2017

Alan L. Davis Land Planning Coordinator Florida DA&CS 3125 Conner Boulevard Tallahassee, FL 32399-1650

E-mail: Alan.Davis@freshfromflorida.com

Master

Re: Newnans Lake State Forest

In response to your inquiry of July 17, 2017, the Florida Master Site File lists four archeological sites found at the designated area for Newnans Lake State Forest, Alachua County, Florida.

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 850-245-6333.

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

Sincerely.

Eman M. Vovsi Florida Master Site File

Eman. Vovsi@DOS.MyFlorida.com

Florida Master Site File Created: 7/20/2017



Cultural Resource Roster

SiteID	Туре	Site Name	Address	Additional Info	SHPO Eval	NR Status
AL04792	AR	LAKE PITHLACHOCCO CANOE SITE	GAINESVILLE		Eligible	NR Listed - Mar 27, 2001
AL05473	AR	North Hill	Gainesville		Insufficient Info	
AL05474	AR	Little Middle	Gainesville		Insufficient Info	
AL05475	AR	Lots of Turkeys	Gainesville		Insufficient Info	

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 March 2013)

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

A. General Discussion

Historic resources are both archaeological sites and historic structures. Per Chapter 267, Florida Statutes, '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 State Policy relative to historic properties, state agencies of the executive branch must allow the Division of Historical Resources (Division) the opportunity to comment on any undertakings, 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 project, permit, grant, etc.

State agencies shall preserve the historic resources which are owned or controlled by the agency.

Regarding proposed demolition or substantial alterations of historic properties, consultation with the Division must occur, and alternatives to demolition must be considered.

State agencies must consult with Division to establish a program to location, inventory and evaluate all historic properties under ownership or controlled by the agency.

C. Statutory Authority

Statutory Authority and more in depth information can be found at: http://www.fiheritage.com/preservation/compliance/guidelines.cfm

D. Management Implementation

Even though the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual. Specific information regarding individual projects must be submitted to the Division for review and recommendations.

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. Recommendations may include, but are not limited to: approval of the project as submitted, cultural resource assessment survey by a qualified professional archaeologist, modifications to the proposed project to avoid or mitigate potential adverse effects.

Projects such as additions, exterior alteration, or related new construction regarding historic structures must also be submitted to the Division of Historical Resources for review and comment by the Division's architects. Projects involving structures fifty years of age or older, must be submitted to this agency for a significance determination. In rare cases, structures under fifty years of age may be deemed historically significant. These must be evaluated on a case by case basis.

Adverse impacts to significant sites, either archaeological sites or historic buildings, must be avoided. Furthermore, managers of state property should make preparations for locating and evaluating historic resources, both archaeological sites and historic structures.

E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at:

http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf.

* * *

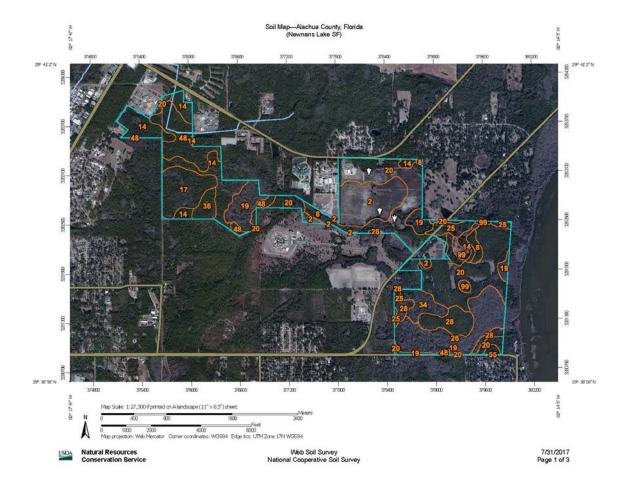
Questions relating to the treatment of archaeological and historic resources on state lands should be directed to:

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

Phone: (850) 245-6425 Toll Free: (800) 847-7278 Fax: (850) 245-6435

Exhibit I

Soil Maps and Descriptions



Soil Map—Alachua County, Florida (Newnans Lake SF)

MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:15,800. Area of Interest (AOI) Spoil Area Area of Interest (AOI) Stony Spot Please rely on the bar scale on each map sheet for map Soils Very Stony Spot Soil Map Unit Polygons measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) Soil Map Unit Lines △ Other Soil Map Unit Points .-Special Line Features Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. Special Point Features Water Features Blowout Streams and Canals Borrow Pit Transportation Clay Spot **Ж** Rails +++ This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Closed Depression 0 Interstate Highways Gravel Pit ✓ US Routes Soil Survey Area: Alachua County, Florida Survey Area Data: Version 17, Sep 20, 2016 Gravelly Spot Α. Major Roads ~ Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Candfill Local Roads A Lava Flow Background Date(s) aerial images were photographed: Dec 29, 2010—Jan Aerial Photography 4 Marsh or swamp Mine or Quarry The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident. Miscellaneous Water 0 Perennial Water Rock Outcrop + Saline Spot Sandy Spot Severely Eroded Spot Sinkhole Slide or Slip Sodic Spot 88



Map Unit Legend

	Alachua County, Florida (FL001)						
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI				
2	Candler fine sand, 0 to 5 percent slopes	102.1	9.49				
8	Millhopper sand, 0 to 5 percent slopes	21.2	2.0%				
14	Pomona sand, 0 to 2 percent slopes	137.8	12.7%				
17	Wauchula sand	69.6	6.4%				
19	Monteocha loamy sand	69.4	6.4%				
20	Tavares sand, 0 to 5 percent slopes	324.0	29.9%				
25	Pomona sand, depressional	26.3	2.4%				
26	Samsula muck	120.9	11.1%				
28	Chipley sand	60.1	5.5%				
34	Placid sand, depressional	31.6	2.9%				
36	Arents, 0 to 5 percent slopes	19.2	1.8%				
48	Myakka-Myakka, wet, sands, 0 to 2 percent slopes	83.4	7.7%				
55	Lake sand, 0 to 5 percent slopes	4.7	0.4%				
99	Water	15.0	1.4%				
Totals for Area of Interest		1,085.3	100.0%				

Component Legend

This report presents general information about the map units and map unit components in the selected area. It shows map unit symbols and names and the components in each map unit. It also shows the percent of the components in the map units, the kind of component, and the slope range of each component.

Report—Component Legend

Component Legend-Alachua County, Florida									
Map unit symbol and name	Map unit	Pct. of map	Component name	Component	Pct. slope				
	acres	unit			Low	RV	High		
2—Candler fine sand, 0 to 5 percent slopes	24,941								
		90	Candler	Series	0.0	3.0	5.0		
8—Millhopper sand, 0 to 5 percent slopes	51,974								
		85	Millhopper	Series	0.0	3.0	5.0		
14—Pomona sand, 0 to 2 percent slopes	57,160								
		70	Pomona	Series	0.0	1.0	2.0		
17—Wauchula sand	17,973								
		70	Wauchula, non-hydric	Series	0.0	1.0	2.0		
		15	Wauchula, hydric	Series	0.0	1.0	2.0		
19-Monteocha loamy sand	15,735								
		80	Monteocha	Series	0.0	0.9	2.0		
20—Tavares sand, 0 to 5 percent slopes	19,137								
		85	Tavares	Series	0.0	3.0	5.0		
25—Pomona sand, depressional	9,256								
		85	Pomona	Series	0.0	0.9	2.0		
26—Samsula muck	6,253								
		80	Samsula	Series	0.0	0.9	2.0		
28—Chipley sand	14,823								
		85	Chipley	Series	0.0	1.0	2.0		
34—Placid sand, depressional	3,770								
		85	Placid	Series	0.0	0.9	2.0		
36—Arents, 0 to 5 percent slopes	329								
		100	Arents	Taxon above family	0.0	3.0	5.0		

	С	ompone	nt Legend–Alachua County, F	lorida				
Map unit symbol and name	Мар	Pct. of	Component name	Component	Pct. slo		pe	
	unit acres	map unit		kind	Low	RV	High	
48—Myakka-Myakka, wet, sands, 0 to 2 percent slopes	4,309							
		75	Myakka	Series	0.0	1.0	2.0	
		15	Myakka, wet	Series	0.0	1.0	2.0	
55—Lake sand, 0 to 5 percent slopes	4,048							
		85	Lake	Series	0.0	3.0	5.0	
99—Water	43,500							
		100	Water	Miscellaneous area				

Data Source Information

Soil Survey Area: Alachua County, Florida Survey Area Data: Version 17, Sep 20, 2016

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)

Alachua County, Florida

Map Unit: 2-Candler fine 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. 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 (4%)

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

Component: Millhopper (3%)

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

Component: Adamsville (3%)

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

Map Unit: 8-Millhopper sand, 0 to 5 percent slopes

Component: Millhopper (85%)

The Millhopper 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 and loamy 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 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. 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 (5%)

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

Component: Tavares (4%)

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

Component: Arredondo (3%)

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

Component: Gainesville (1%)

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

Component: Kanapaha (1%)

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

Component: Sumterville, bouldery subsurface (1%)

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

Map Unit: 14-Pomona sand, 0 to 2 percent slopes

Component: Pomona (70%)

The Pomona component makes up 70 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. Shrinkswell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during July, August, September. 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: Wauchula, non-hydric (6%)

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

Component: Sparr (6%)

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

Component: Pelham (6%)

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

Component: Newnan (6%)

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

Component: Myakka, non-hydric (6%)

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

Map Unit: 17-Wauchula sand

Component: Wauchula, non-hydric (70%)

The Wauchula, non-hydric component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches during June, July, August, September. 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: Wauchula, hydric (15%)

The Wauchula, hydric component makes up 15 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrinkswell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September. 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: Pomona (3%)

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

Component: Pelham (3%)

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

Component: Mulat, non-hydric (3%)

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

Component: Riviera (2%)

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

Component: Sparr (2%)

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

Component: Newnan (2%)

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

Map Unit: 19-Monteocha loamy sand

Component: Monteocha (80%)

The Monteocha component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrinkswell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during February, March, April, May, June, July, August, September. Organic matter content in the surface horizon is about 10 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: Placid (7%)

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

Component: Samsula (7%)

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

Component: Surrency (6%)

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

Map Unit: 20—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. Shrinkswell 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: 25-Pomona sand, depressional

Component: Pomona (85%)

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

Component: Plummer, non-hydric (4%)

Generated brief soil descriptions are created for major soil components. The Plummer 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: Monteocha (4%)

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

Component: Surrency (3%)

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

Map Unit: 26-Samsula muck

Component: Samsula (80%)

The Samsula 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 herbaceous organic material over sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during February, March, April, May, June, July, August, September, October. Organic matter content in the surface horizon is about 60 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Terra Ceia (4%)

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

Component: Placid (4%)

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

Component: Surrency (4%)

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

Component: Okeechobee (4%)

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

Component: Monteocha (4%)

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

Map Unit: 28-Chipley sand

Component: Chipley (85%)

The Chipley 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 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. 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 1 within 30 inches of the soil surface.

Component: Myakka, non-hydric (4%)

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

Component: Tavares (4%)

Generated brief soil descriptions are created for major soil components. The Tavares 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: Zolfo (3%)

Generated brief soil descriptions are created for major soil components. The

Zolfo soil is a minor component.

Map Unit: 34-Placid sand, depressional

Component: Placid (85%)

The Placid component makes up 85 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 high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 6 inches during February, March, April, May, June, July, August, September. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Samsula (10%)

Generated brief soil descriptions are created for major soil components. The Samsula 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.

Map Unit: 36-Arents, 0 to 5 percent slopes

Component: Arents (100%)

The Arents component makes up 100 percent of the map unit. Slopes are 0 to 5 percent. This component is on sanitary landfills, rises on marine terraces on coastal plains. The parent material consists of altered 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 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 2 percent. Nonirrigated land capability classification is 7s. 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.

Map Unit: 48—Myakka-Myakka, wet, sands, 0 to 2 percent slopes

Component: Myakka (75%)

The Myakka component makes up 75 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Myakka, wet (15%)

The Myakka, wet component makes up 15 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during June, July, August, September. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Basinger (5%)

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

Component: EauGallie (4%)

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

Component: Placid, depressional (1%)

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

Map Unit: 55-Lake sand, 0 to 5 percent slopes

Component: Lake (85%)

The Lake component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges, marine terraces, coastal plains. The parent material consists of eolian deposits or sandy fluvial or 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 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 2 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.

Component: Arredondo (4%)

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

Component: Gainesville (4%)

Generated brief soil descriptions are created for major soil components. The Gainesville 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: 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: Alachua County, Florida Survey Area Data: Version 17, Sep 20, 2016

Exhibit J

Department of Environmental Protection Outstanding Florida Waters



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

> Noah Valenstein Secretary

July 20, 2017

Mr. Alan L. Davis Land Planning Coordinator Florida Forest Service Florida Department of Agriculture and Consumer Services The Conner Building 3125 Conner Boulevard, Suite J-237 Tallahassee, Florida 32399-1650

RE: Newnans Lake State Forest

Dear Mr. Davis:

Thank you for your inquiry regarding the surface water quality classifications on and near Newnans Lake State Forest in Alachua County. There are no Outstanding Florida Waters (OFW) located on or adjacent to the site. All of the surface waters on or adjacent to the site are classified as Class III waters (subparagraph 62-302.400(17)(b)1., FAC), which is the statewide default classification.

If you have any questions or need additional information, please feel free to contact me at the letterhead address (mail station 6511), by phone at 850/245-8429, or via E-mail at Eric.Shaw@dep.state.fl.us.

Sincerely,

Eric Shaw

Environmental Manager Water Quality Standards Program Florida Department of Environmental Protection 2600 Blair Stone Road, MS 6511

Tallahassee, FL 32399-2400

Phone: (850) 245-8429

Email: Eric.Shaw@dep.state.fl.us

Exhibit K

Water Resources

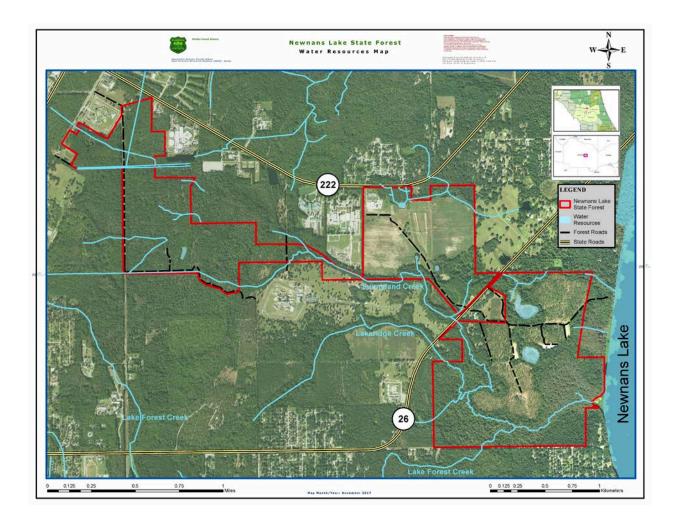


Exhibit L

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.fnal.org August 9, 2017

Alan Davis FDACS, Florida Forest Service 3125 Conner Boulevard Tallahassee, FL 32399

Dear Mr. Davis.

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project:

Newnans Lake State Forest

Date Received:

8/7/2017

Location:

Alachua County

Element Occurrences

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

Federally Listed Species

Our data indicate federally listed species are present on or very near this site (see table for details). This statement should not be interpreted as a legal determination of presence or absence of federally listed species on a property.

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

Likely and Potential Rare Species

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

STATE CHINE

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.

Florida Resources and Environmental Analysis Center

Institute of Science and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

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.

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. FNAI data may not be resold for profit.

This report is made available at no charge due to funding from the Florida Department of Environmental Protection, Division of State Lands.

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

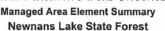
Sincerely,

Elyse Sachs
Elyse Sachs
GIS / Data Services

Encl



Florida Natural Areas Inventory Managed Area Element Summary





NALUTAL PITERS						
INVENTORY SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status	
PLANTS						
Ctenium floridanum	Florida tootheache grass	G2	S2	N	E	
Matelea floridana	Florida spiny-pod	G2	S2	N	E	
REPTILES						
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	UR	N	
Gopherus polyphemus	Gopher Tortoise	G3	S3	С	ST	
BIRDS						
Haliaeetus leucocephalus	Bald Eagle	G5	S3	RT	N	



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



Natural Areas

COMMON NAME

Global State rank rank

ne red

Federal status State 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



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



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.
- LE = Endangered: species in danger of extinction throughout all or a significant portion of its range.
- LE, LT = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
- LE, PDL = Species currently listed endangered but has been proposed for delisting.
- LE, PT = Species currently listed endangered but has been proposed for listing as threatened.
- LE, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
- LT = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
- 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.

- 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
- F(XN) = 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. (ST* for Ursus americanus floridanus (Florida black bear) indicates that this status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. ST* for Neovison vison pop.1 (Southern mink, South Florida population) indicates that this status applies to the Everglades population only.)
- 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* indicates that a species has SSC status only in selected portions of its range in Florida. 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, 58-40.001. 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/.

LE = 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



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



to the U.S. Endangered Species Act.

LT = 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.



Florida Natural Areas Inventory Aggregated Biodiversity Matrix Report



Natural Areas				. 18	51 .
INVENTORY		Global	State	Federal	State
Scientific Name	Common Name	Rank	Rank	Status	Listing
Documented					
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	С	ST
Haliaeetus leucocephalus	Bald Eagle	G5	S3	N	N
Monotropa hypopithys	Pinesap		S1	N	E
Nymphalis antiopa	Mourning Cloak		S2	N	N
Pituophis melanoleucus	Pine Snake	G4	S3	N	ST
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3Q	S3	LT	FT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork		S2	LT	FT
Sandhill		G3	S2	N	N
Sandhill upland lake			S2	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC
Upland hardwood forest		G5	S3	N	N
Detection					
Potential Agrimonia incisa	Incised Groove-bur	G3	S2	N	T
Ambystoma cingulatum	Frosted Flatwoods Salamander	G2	S2	LT	FT
Ambystoma tiiginatani Ambystoma tigrinum	Tiger Salamander	G5	S3	PS	N
		G5T2T3			ST
Antigone canadensis pratensis Aphodius troglodytes	Florida Sandhill Crane	G2G3	S2S3 S2	N	
	Gopher Tortoise Aphodius Beetle	G2	S2		N T
Arnoglossum diversifolium	Variable-leaved Indian-plantain	G2		N	
Asplenium heteroresiliens	Wagner's Spleenwort	010	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii Ataenius brevicollis	Curtiss' Spleenwort	GNA	S1	N	N
	An Ataenius Beetle	G3G5	S1S2	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	ST
Bolbocerosoma hamatum	Bicolored Burrowing Scarab Beetle	G3G4	S3	N	И
Brickellia cordifolia	Flyr's Brickell-bush	G3	S2	N	E
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	Ţ
Ceratocanthus aeneus	Shining Ball Scarab Beetle	-00	S2	N	N
Copris gopheri	Gopher Tortoise Copris Beetle	G2	S2	N	N
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Ctenium floridanum	Florida Toothache Grass	G2	S2	N	E
Dasymutilla archboldi	Lake Wales Ridge Velvet Ant	G2G3	S2S3	N	N
Eudocimus albus	White Ibis	G5	S4	N	N
Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3	N	ST
Hartwrightia floridana	Hartwrightia	G2	S2	N	Ţ
Heterodon simus	Southern Hognose Snake		S2	N	N
Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	ST
Lithobates capito	Gopher Frog		S3	N	N
Litsea aestivalis	Pondspice	G3?	S2	N	E
Matelea floridana	Florida Spiny-pod	G2	S2	N	E
Mustela frenata olivacea	Southeastern Weasel	G5T4	S3?	N	N
Myotis austroriparius	Southeastern Bat	G4	S3	N	N
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass		S3	N	T
Notophthalmus perstriatus	Striped Newt	G2G3	S2	С	N
Onthophagus polyphemi polyphemi	Punctate Gopher Tortoise Onthophag	G2G3T2T3	S2	N	N

Definitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity. Potential - This site lies within the known or predicted range of the species listed.



Florida Natural Areas Inventory Aggregated Biodiversity Matrix Report



Global	State	Federal	04+4-
Rank	Rank	Status	State Listing
G3	S3	N	N
	S3	N	N
G2G3	S2S3	N	N
G2	S1	N	N
G3	S3	N	N
	S2	LE	FE
	S3	N	N
G2G3	S2	N	Т
G3	S3	N	Т
G1	S1	N	E
G2Q	S2	N	E
G5T2	\$2	N	N
G2	S2	N	E
G4	S4	N	N
	G2G3 G2 G3 G2G3 G3 G1 G2Q G5T2 G2	G3 S3 S3 G2G3 S2S3 G2 S1 G3 S3 S2 S2 S3 G2G3 S2 G3 S3 G1 S1 G2Q S2 G5T2 S2 G2 S2	G3 S3 N S3 N G2G3 S2S3 N G2 S1 N G3 S3 N S2 LE S3 N G2G3 S2 N G3 S3 N G1 S1 N G2Q S2 N G5T2 S2 N G2Q S2 N

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