RICE CREEK CONSERVATION AREA

LAND MANAGEMENT PLAN

PUTNAM COUNTY, FLORIDA

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

APRIL 2024


Northwest Florida
Water Management District
Suwannee River
Water Management
District
St. Johns
River Water
Management
District
Southwest
Florida Water
Management
District
South Florida
Water Management
District

FLORIDA DEPARTMENT OF
Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, FL 32399

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

April 15, 2024

Mr. Brent Bachelder
Division of Water and Land Resources
St. Johns River Water Management District
P.O. Box 1429
Palatka, Florida 32178-1429

RE: Rice Creek Conservation Area – Lease No. 4873

Dear Mr. Bachelder,

On **April 12, 2024**, the Acquisition and Restoration Council (ARC) recommended approval of the **Rice Creek Conservation Area** management plan. Therefore, Division of State Lands, Office of Environmental Services (OES), acting as agent for the Board of Trustees of the Internal Improvement Trust Fund, hereby approves the **Rice Creek Conservation Area** management plan. The next management plan update is due April 12, 2034.

Pursuant to s. 253.034(5)(a), F.S., each management plan is required to "describe both short-term and long-term management goals and include measurable objectives to achieve those goals. Short-term goals shall be achievable within a 2-year planning period, and long-term goals shall be achievable within a 10-year planning period." Upon completion of short-term goals, please submit a signed letter identifying categories, goals, and results with attached methodology to the Division of State Lands, Office of Environmental Services.

Pursuant to s. 259.032(8)(g), F.S., by July 1 of each year, each governmental agency and each private entity designated to manage lands shall report to the Secretary of Environmental Protection, via the Division of State Lands, on the progress of funding, staffing, and resource management of every project for which the agency or entity is responsible.

Pursuant to s. 259.032, F.S., and Chapter 18-2.021, F.A.C., management plans for areas less than 160 acres may be handled in accordance with the negative response process. This process requires small management plans and management plan amendments be submitted to the Division of State Lands for review, and the Acquisition and Restoration Council (ARC) for public notification. The Division of State Lands will approve these plans or plan amendments submitted for review through delegated authority unless three

or more ARC members request the division place the item on a future council meeting agenda for review. To create better efficiency, improve customer service, and assist members of the ARC, the Division of State Lands will notice negative response items on Thursdays except for weeks that have State or Federal holidays that fall on Thursday or Friday. The Division of State Lands will contact you on the appropriate Friday to inform you if the item is approved via delegated authority or if it will be placed on a future ARC agenda by request of the ARC members.

Pursuant to s. 259.036(2), F.S., management areas that exceed 1,000 acres in size, shall be scheduled for a land management review at least every 5 years.

Conditional approval of this land management plan does not waive the authority or jurisdiction of any governmental entity that may have an interest in this project. Implementation of any upland activities proposed by this management plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities. Pursuant to the conditions of your lease, please forward copies of all permits to this office upon issuance.

Sincerely,

Hank Vinson Digitally signed by Hank Vinson
Date: 2024.04.15 11:08:19 -04'00'

Hank Vinson
Office of Environmental Services
Division of State Lands

LAND MANAGEMENT PLAN EXECUTIVE SUMMARY

LEAD AGENCY: St. Johns River Water Management District (District)
COMMON NAME OF PROPERTY: Rice Creek Conservation Area
LOCATION: Putnam County

ACREAGE TOTAL: 6,291 acres
ACREAGE BREAKDOWN:

Natural Community	Acres	Natural Community	Acres
Bottomland Forest	4,325	Depression Marsh	3
Wet Flatwoods	1,183	Basin Marsh	3
Baygall	197	**Altered Landcover**	**Acres**
Sandhill	102	Utility Corridor	92
Floodplain Swamp	145	Borrow Area	4
Mesic Flatwoods	145	Pasture - Semi-Improved	12
Successional Hardwood Forest	42	Clearing/Regeneration	1
Sandhill Upland Lake	38	Canal/Ditch	<1
Dome Swamp	6	Developed	<1

LEASE/MANAGEMENT AGREEMENT NO.: 1,239 acres managed through Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) lease No. 4873.

USE:	**Management Responsibilities:**	
Single: Multiple: X	<u>Agency</u> District Board of Trustees Florida Fish and Wildlife Conservation Commission (FWC)	<u>Responsibilities</u> Co-owner and Lead Manager Co-owner Co-manager

DESIGNATED LAND USE: Conservation
SUBLEASES: None
ENCUMBRANCES: Numerous power transmission and utility easements. Terrestrial access to the Property is provided by adjacent landowners through three separate access easements. An apiary lease is active. Approximately 688 acres south of State Road (SR) 20 are incorporated into the Caravelle Ranch Wildlife Management Area (WMA) where FWC manages hunting.
TYPES OF ACQUISITION: Preservation 2000, Florida Forever, Florida Department of Transportation (FDOT) mitigation.
UNIQUE FEATURES: Headwaters of Rice Creek, several miles of Florida National Scenic Trail (Florida Trail), expansive bottomland forest, historic 18th century levee system, 55 footbridges, boardwalk.
CULTURAL AND HISTORICAL RESOURCES: One documented site.

MANAGEMENT NEEDS: Habitat restoration and enhancement, exotic and invasive species management, public access and recreation management.
ACQUISITION NEEDS/ACREAGE: An optimal boundary has been developed.
SURPLUS LANDS/ACREAGE: No surplus lands have been identified. No surplus actions have taken place.
PUBLIC INVOLVEMENT: Land Management Review Team meeting, Management Advisory Group meeting and public hearing.

DO NOT WRITE BELOW THIS LINE (FOR DIVISION OF STATE LANDS USE ONLY)
==========
ARC Approval Date: _____ BTIITF Approval Date: _____
Comments:
_____
_____
_____
_____

Land Management Plan Compliance Checklist

Section A: Acquisition Information Items			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
1	The common name of the property.	18-2.018 & 18-2.021	v
2	The land acquisition program, if any, under which the property was acquired.	18-2.018 & 18-2.021	v
3	Degree of title interest held by the Board, including reservations and encumbrances such as leases.	18-2.021	3
4	The legal description and acreage of the property.	18-2.018 & 18-2.021	2, App. A
5	A map showing the approximate location and boundaries of the property, and the location of any structures or improvements to the property.	18-2.018 & 18-2.021	6, 49
6	An **assessment** as to whether the property, or any portion, should be declared surplus. *Provide Information regarding **assessment and analysis** in the plan, and provide **corresponding map**.*	18-2.021	40
7	Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property. *Please clearly indicate parcels on a map.*	18-2.021	60
8	Identification of adjacent land uses that conflict with the planned use of the property, if any.	18-2.021	5
9	A statement of the purpose for which the lands were acquired, the projected use or uses as defined in 253.034 and the statutory authority for such use or uses.	259.032	40
10	Proximity of property to other significant State, local or federal land or water resources.	18-2.021	5
Section B: Use Items			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
11	The designated single use or multiple use management for the property, including use by other managing entities.	18-2.018 & 18-2.021	40
12	A description of past and existing uses, including any unauthorized uses of the property.	18-2.018 & 18-2.021	40
13	A description of alternative or multiple uses of the property considered by the lessee and a statement detailing why such uses were not adopted.	18-2.018	40
14	A description of the management responsibilities of each entity involved in the property's management and how such responsibilities will be coordinated.	18-2.018	60
15	Include a provision that requires that the managing agency consult with the Division of Historical Resources, Department of State before taking actions that may adversely affect archeological or historical resources.	18-2.021	59
16	Analysis/description of other managing agencies and private land managers, if any, which could facilitate the restoration or management of the land.	18-2.021	68
17	A determination of the public uses and public access that would be consistent with the purposes for which the lands were acquired.	259.032	40

18	A finding regarding whether each planned use complies with the 1981 State Lands Management Plan, particularly whether such uses represent "balanced public utilization," specific agency statutory authority and any other legislative or executive directives that constrain the use of such property.	18-2.021	40
19	Letter of compliance from the local government stating that the LMP is in compliance with the Local Government Comprehensive Plan.	BOT requirement	App. M
20	An assessment of the impact of planned uses on the renewable and non-renewable resources of the property, including soil and water resources, and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to compensate/mitigate damage caused by such uses, including a description of how the manager plans to control and prevent soil erosion and soil or water contamination.	18-2.018 & 18-2.021	60
21	*For managed areas larger than 1,000 acres, an analysis of the multiple-use potential of the property which shall include the potential of the property to generate revenues to enhance the management of the property provided that no lease, easement, or license for such revenue-generating use shall be entered into if the granting of such lease, easement or license would adversely affect the tax exemption of the interest on any revenue bonds issued to fund the acquisition of the affected lands from gross income for federal income tax purposes, pursuant to Internal Revenue Service regulations.	18-2.021 & 253.036	40
22	If the lead managing agency determines that timber resource management is not in conflict with the primary management objectives of the managed area, a component or section, prepared by a qualified professional forester, that assesses the feasibility of managing timber resources pursuant to section 253.036, F.S.	18-021	53
23	A statement regarding incompatible use in reference to Ch. 253.034(10).	253.034(10)	40

*The following taken from 253.034(10) is not a land management plan requirement; however, it should be considered when developing a land management plan: The following additional uses of conservation lands acquired pursuant to the Florida Forever program and other state-funded conservation land purchase programs shall be authorized, upon a finding by the Board of Trustees, if they meet the criteria specified in paragraphs (a)-(e): water resource development projects, water supply development projects, storm-water management projects, linear facilities and sustainable agriculture and forestry. Such additional uses are authorized where: (a) Not inconsistent with the management plan for such lands; (b) Compatible with the natural ecosystem and resource values of such lands; (c) The proposed use is appropriately located on such lands and where due consideration is given to the use of other available lands; (d) The using entity reasonably compensates the titleholder for such use based upon an appropriate measure of value; and (e) The use is consistent with the public interest.

Section C: Public Involvement Items

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
24	A statement concerning the extent of public involvement and local government participation in the development of the plan, if any.	18-2.021	5, App. C
25	The management prospectus required pursuant to paragraph (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	259.032	App. C
26	LMPs and LMP updates for parcels over 160 acres shall be developed with input from an advisory group who must conduct at least one public hearing within the county in which the parcel or project is located. *Include the advisory group members and their affiliations, as well as the date and location of the advisory group meeting.*	259.032	App. D

27	Summary of comments and concerns expressed by the advisory group for parcels over 160 acres	18-2.021	App. D
28	During plan development, at least one public hearing shall be held in each affected county. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing. *Include a copy of each County's advertisements and announcements (meeting minutes will suffice to indicate an announcement) in the management plan.*	253.034 & 259.032	App. C
29	The manager shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. *Include manager's replies to the team's findings and recommendations.*	259.036	41
30	Summary of comments and concerns expressed by the management review team, if required by Section 259.036, F.S.	18-2.021	41
31	If manager is not in agreement with the management review team's findings and recommendations in finalizing the required 10-year update of its management plan, the managing agency should explain why they disagree with the findings or recommendations.	259.036	41

Section D: Natural Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
32	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding soil types. *Use brief descriptions and include USDA maps when available.*	18-2.021	11, App. E
33	Insert FNAI based natural community maps when available.	ARC consensus	29, 30
34	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding outstanding native landscapes containing relatively unaltered flora, fauna and geological conditions.	18-2.021	34
35	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding unique natural features and/or resources including but not limited to virgin timber stands, scenic vistas, natural rivers and streams, coral reefs, natural springs, caverns and large sinkholes.	18-2.018 & 18-2.021	39
36	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding beaches and dunes.	18-2.021	39
37	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding mineral resources, such as oil, gas and phosphate, etc.	18-2.018 & 18-2.021	11
38	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding fish and wildlife, both game and non-game, and their habitat.	18-2.018 & 18-2.021	31
39	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding State and Federally listed endangered or threatened species and their habitat.	18-2.021	32

40	The identification or resources on the property that are listed in the Natural Areas Inventory. *Include letter from FNAI or consultant where appropriate.*	18-2.021	32, App. F
41	Specific description of how the managing agency plans to identify, locate, protect and preserve or otherwise use fragile, nonrenewable natural and cultural resources.	259.032	App. K
42	Habitat Restoration and Improvement	259.032 & 253.034	
42-A.	Describe management needs, problems and a desired outcome and the key management activities necessary to achieve the enhancement, protection and preservation of restored habitats and enhance the natural, historical and archeological resources and their values for which the lands were acquired.	↓	41
42-B.	Provide a detailed description of both short (2-year planning period) and long-term (10-year planning period) management goals, and a priority schedule based on the purposes for which the lands were acquired and include a timeline for completion.		66
42-C.	The associated measurable objectives to achieve the goals.		66
42-D.	The related activities that are to be performed to meet the land management objectives and their associated measures. *Include fire management plans - they can be in plan body or an appendix.*		66, App. H
42-E.	A detailed expense and manpower budget in order to provide a management tool that facilitates development of performance measures, including recommendations for cost-effective methods of accomplishing those activities.		74
43	***Quantitative data description of the land regarding an inventory of forest and other natural resources and associated acreage. *See footnote.*	253.034	16
44	Sustainable Forest Management, including implementation of prescribed fire management		
44-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		53
44-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	18-2.021, 253.034 & 259.032 ↓	66
44-C.	Measurable objectives (see requirement for #42-C).		66
44-D.	Related activities (see requirement for #42-D).		66, App. G
44-E.	Budgets (see requirement for #42-E).		74
45	Imperiled species, habitat maintenance, enhancement, restoration or population restoration	259.032 & 253.034	
45-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	46
45-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		66
45-C.	Measurable objectives (see requirement for #42-C).		66
45-D.	Related activities (see requirement for #42-D).		66
45-E.	Budgets (see requirement for #42-E).		74

45-F	Assess the feasibility of managing the lands > 40 contiguous acres as a recipient site for gopher tortoises consistent with rules of the Fish and Wildlife Conservation Commission, as prepared by the agency or cooperatively with a Fish and Wildlife Conservation Commission wildlife biologist.	259.105	46
45-G	Economic feasibility of establishing a gopher tortoise recipient site, including the initial cost, recurring management costs and the revenue projections.	259.105	46
46	***Quantitative data description of the land regarding an inventory of exotic and invasive plants and associated acreage. *See footnote.*	253.034	31
47	Place the Arthropod Control Plan in an appendix. If one does not exist, provide a statement as to what arrangement exists between the local mosquito control district and the management unit.	BOT requirement via lease language	61
48	Exotic and invasive species maintenance and control	259.032 & 253.034	
48-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	46
48-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		66
48-C.	Measurable objectives (see requirement for #42-C).		66
48-D.	Related activities (see requirement for #42-D).		66
48-E.	Budgets (see requirement for #42-E).		74

Section E: Water Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
49	A statement as to whether the property is within and/or adjacent to an aquatic preserve or a designated area of critical state concern or an area under study for such designation. *If yes, provide a list of the appropriate managing agencies that have been notified of the proposed plan.*	18-2.018 & 18-2.021	1
50	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding water resources, including water classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Water under Rule 62-302.700, F.A.C.	18-2.021	34
51	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding swamps, marshes and other wetlands.	18-2.021	16
52	***Quantitative description of the land regarding an inventory of hydrological features and associated acreage. *See footnote.*	253.034	16
53	Hydrological Preservation and Restoration	259.032 & 253.034	
53-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	53
53-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		66
53-C.	Measurable objectives (see requirement for #42-C).		66

53-D.	Related activities (see requirement for #42-D).		66
53-E.	Budgets (see requirement for #42-E).		74

Section F: Historical, Archeological and Cultural Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
54	**Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding archeological and historical resources. *Include maps of all cultural resources except Native American sites, unless such sites are major points of interest that are open to public visitation.*	18-2.018, 18-2.021 & per DHR's request	39
55	***Quantitative data description of the land regarding an inventory of significant land, cultural or historical features and associated acreage.	253.034	39
56	A description of actions the agency plans to take to locate and identify unknown resources such as surveys of unknown archeological and historical resources.	18-2.021	59, App. K
57	Cultural and Historical Resources	259.032 & 253.034	
57-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	51
57-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		67
57-C.	Measurable objectives (see requirement for #42-C).		67
57-D.	Related activities (see requirement for #42-D).		67
57-E.	Budgets (see requirement for #42-E).		74

**While maps of Native American sites should not be included in the body of the management plan, the DSL urges each managing agency to provide such information to the Division of Historical Resources for inclusion in their proprietary database. This information should be available for access to new managers to assist them in developing, implementing and coordinating their management activities.

Section G: Facilities (Infrastructure, Access, Recreation)

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
58	***Quantitative data description of the land regarding an inventory of infrastructure and associated acreage. *See footnote.*	253.034	59
59	Capital Facilities and Infrastructure	259.032 & 253.034	
59-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	59
59-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		67
59-C.	Measurable objectives (see requirement for #42-C).		67
59-D.	Related activities (see requirement for #42-D).		67
59-E.	Budgets (see requirement for #42-E).		74
60	*** Quantitative data description of the land regarding an inventory of recreational facilities and associated acreage.	253.034	47
61	Public Access and Recreational Opportunities	259.032 & 253.034	
61-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	47

61-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		66
61-C.	Measurable objectives (see requirement for #42-C).		66
61-D.	Related activities (see requirement for #42-D).		66
61-E.	Budgets (see requirement for #42-E).		74

Section H: Other/ Managing Agency Tools

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
62	Place this LMP Compliance Checklist at the front of the plan.	ARC and managing agency consensus	vii
63	Place the Executive Summary at the front of the LMP. Include a physical description of the land.	ARC and 253.034	v
64	If this LMP is a 10-year update, note the accomplishments since the drafting of the last LMP set forth in an organized (categories or bullets) format.	ARC consensus	69
65	Key management activities necessary to achieve the desired outcomes regarding other appropriate resource management.	259.032	63
66	Summary budget for the scheduled land management activities of the LMP including any potential fees anticipated from public or private entities for projects to offset adverse impacts to imperiled species or such habitat, which fees shall be used to restore, manage, enhance, repopulate, or acquire imperiled species habitat for lands that have or are anticipated to have imperiled species or such habitat onsite. The summary budget shall be prepared in such a manner that it facilitates computing an aggregate of land management costs for all state-managed lands using the categories described in s. 259.037(3) which are resource management, administration, support, capital improvements, recreation visitor services, law enforcement activities.	253.034	74
67	Cost estimate for conducting other management activities which would enhance the natural resource value or public recreation value for which the lands were acquired, include recommendations for cost-effective methods in accomplishing those activities.	259.032	74
68	A statement of gross income generated, net income and expenses.	18-2.018	74

*** The referenced inventories shall be of such detail that objective measures and benchmarks can be established for each tract of land and monitored during the lifetime of the plan. All quantitative data collected shall be aggregated, standardized, collected, and presented in an electronic format to allow for uniform management reporting and analysis. The information collected by the DEP pursuant to s. 253.0325(2) shall be available to the land manager and his or her assignee.

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Appendices

1. Introduction and General Information

The Rice Creek Conservation Area (RCCA, Conservation Area or Property) (Figure 1) comprises approximately 6,291 acres in Putnam County. The Property is within the Etoniah Creek Basin, a sub-basin of the Lower St. Johns River Basin. Many natural communities can be found on the Conservation Area. Wetlands in the form of bottomland forest — associated with the headwaters of Rice Creek — dominate the RCCA landscape. These natural areas provide valuable floodplain water storage and treatment and important habitat for a diverse assemblage of plants and animals. The RCCA also provides a significant linkage between a multitude of publicly owned land and conservation easements. Recreational opportunities include hiking, bicycling, horseback riding, photography, fishing, camping, and wildlife viewing. Hunting is currently allowed on a portion of the Property.

The Property is managed by the St. Johns River Water Management District (District) for the conservation and protection of natural and cultural resources as well as nature-based public outdoor recreation. A wide range of resource management actions are conducted on RCCA each year including prescribed burning, habitat restoration and enhancement, forest management, threatened and endangered species management, invasive species maintenance and control, recreation management, and cultural resources monitoring and protection.

This document provides guidelines for land management activities to be implemented at RCCA over the next 10 years. This plan updates the management plan approved by the District's Governing Board in December 2009.

1.1 Location

The Property lies within portions of Sections 1, 2, 3, 9, 10, 11, 12, 13, 14,15, 16, 22, 37 of Township 10 South, Range 25 East; Sections 34, 35, 36, 37, 39 of Township 9 South, Range 25 East; Sections 30, 40 of Township 9 South, Range 26 East; Section 6 of Township 10 South, Range 26 East.

The RCCA is located approximately six miles west of the City of Palatka (Figure 2). The Property stretches along both the east and west side of Rice Creek from State Road (SR) 100 in the north to 0.75 mile south of SR 20. Currently, public access is through the parking area located at the northeast corner of the Property on SR 100. Access is also possible via the Florida Trail, which traverses the length of the Property. Additional public access will be established at the Nine Mile Swamp tract, on the southwest corner of the Property, as outlined in this plan.

The Conservation Area is not located within an Aquatic Preserve or an Area of Critical State Concern (Section 380.05, F.S.).

1.2 Acquisition

Acquisition of Rice Creek Conservation Area began in 2002 and currently consists of seven parcels totaling 6,291 acres (Figure 3). All acreage in this section is derived from deed and parcel information.

The seven parcels that currently comprise the Property are listed below:

Plum Creek-Rice Creek (4,192 acres) – Land Acquisition No. 2001-061-P1
The Plum Creek–Rice Creek parcel originally totaled 4,202 acres and was acquired by the District through a single purchase on March 21, 2002, for $5,358,079 using FDOT mitigation, P2000 and Florida Forever funds. The District surplused 10 acres of this acquisition to the FDOT for a road project on December 3, 2002, for $26,740.

Alford (142 acres) – Land Acquisition No. 2006-045-P1
The Alford parcel totaled 142 acres, acquired by the District on May 21, 2007, for $354,050 using FDOT mitigation funds.

ITERA Putnam Timberland (189 acres) – Land Acquisition No. 2006-046-P1
The ITERA Putnam Timberland parcel totals 189 acres, acquired by the District on September 4, 2008, for $448,057 using Florida Forever funds.

Medlock (162 acres) – Land Acquisition No. 2008-003-P1
The Medlock parcel totals 162 acres, acquired by the District on October 17, 2008, for $381,491 using Florida Forever funds.

Motes (215 acres) – Land Acquisition No. 2008-004-P1
The Motes parcel totals 215 acres, acquired by the District on October 17, 2008, for $739,745 using Florida Forever funds.

Plum Creek-Rice Creek Area Addition (152 acres) – Land Acquisition No. 2008-025-P1
The Plum Creek-Rice Creek Area Addition (211 acres) was split into two parcels for management purposes and were acquired by the District on January 21, 2009, for $411,731 using Florida Forever funds. Based on a March 28, 2011, lease agreement, the Office of Greenways and Trails (OGT) assumes lead management responsibilities over 59 acres of this acquisition.

Nine Mile Swamp Park and Trail (1,239 acres) – Land Acquisition Agreement No. 2071 The Nine Mile Swamp Park and Trail are titled to the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (TIITF). This parcel is managed as part of the Conservation Area through a lease agreement (Lease No. 4873) (Appendix A).

1.3 Title Interest and Encumbrances

One parcel, referred to as Nine Mile Swamp, totaling approximately 1,239 acres at RCCA is titled to the TIITF and managed through a lease agreement (Lease No. 4873). The remainder of the Property is titled full fee to the District. Numerous power transmission and utility easements exist on the Property (Figure 4 and Appendix B). Terrestrial access to the Property is provided by adjacent landowners through three separate access easements. An apiary lease is active, allowing honeybee colonies to be maintained at five locations on the Property. Approximately 688 acres south of SR 20 are incorporated into the Caravelle Ranch WMA where FWC manages hunting.

1.4 Proximity to Other Public Lands

The land of RCCA provides a significant linkage between a multitude of publicly owned land and proprietary conservation easements within Florida Forever's Etoniah Creek/Cross Florida Greenway project area. As such, the Conservation Area is an integral component of a larger network of publicly owned lands in Putnam County. In addition to the State of Florida's Florida Forever program, numerous governmental and non-governmental organizations maintain projects focused on conservation land acquisition within the Rice Creek region, including efforts to protect conservation lands within the Ocala-to-Osceola Wildlife Corridor.

According to Florida Natural Areas Inventory (FNAI) data, there are 99 management areas totaling approximately 739,000 acres and 17 Florida Forever Projects located within 20 miles of RCCA (Figure 5). Conservation lands in this region are managed by a wide range of parties including federal, state, county, and local municipalities, as well as numerous private individuals, land trusts and other non-governmental organizations (NGOs). A subset of these conservation lands is provided in Table 1. Management areas to the north of the RCCA include Etoniah Creek State Forest, Belmore State Forest, Camp Blanding Military Reservation, Jennings State Forest, Cary State Forest and numerous other publicly owned lands and conservation easements through portions of Putnam, Clay, Duval, and Nassau counties.

Through RCCA, the lands described above are linked to a vast expanse of conservation lands to the south including the Ocala National Forest, Marjorie Harris Carr Cross Florida Greenway, Caravelle Ranch Wildlife Management Area and numerous other publicly owned conservation areas and easements south through the Wekiwa Springs State Park in Orange County. The contiguous network of publicly owned lands from the RCCA south encompasses over 780,000 acres. These lands provide for the protection of water quality and storage, natural systems, and resource-based recreational opportunities.

Table 1 – Publicly Owned Conservation Lands over 500 acres within a 20-mile radius

Management Area	**Managing Agency**
Ocala National Forest	USFS
Camp Blanding Military Reservation	FDMA
Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area	OGT
Caravelle Ranch Wildlife Management Area	FWC
Belmore State Forest	FFS

Lake George Conservation Area	SJRWMD
Lochloosa Wildlife Conservation Area	SJRWMD
Bayard Conservation Area	SJRWMD
Ordway-Swisher Biological Station	UF
Santa Fe Swamp Conservation Area	SRWMD
Etoniah Creek State Forest	FFS
Dunns Creek State Park	FPS
Lochloosa Slough Preserve	AC
Deep Creek Conservation Area (SJRWMD)	SJRWMD
Orange Creek Restoration Area	SJRWMD
Dunns Creek Conservation Area	SJRWMD
Rodman Bomb Target	DOD
Mike Roess Gold Head Branch State Park	FPS
Welaka State Forest	FFS
Murphy Creek Conservation Area	SJRWMD
Phifer Flatwoods Preserve	AC
McCullough Creek Conservation Area	SJC
Little Orange Creek Preserve	ACT
Little Orange Creek Nature Park	CH
Little Rain Lake Preserve	NFLT
Putnam Land Conservancy Putnam Parcels	PLC
Putnam Lakes Preserve	NFLT
Palatka-to-Lake Butler State Trail	FPS
Fox Pen Preserve	ACT
Watson Island State Forest	FFS

Acronym Key	Agency Name
AC	Alachua County
ACT	Alachua Conservation Trust
CH	City of Hawthorne
DOD	United States Department of Defense
FDMA	Florida Department of Military Affairs
FFS	Florida Forest Service
FPS	Florida Park Service
FWC	Florida Fish and Wildlife Conservation Commission
NFLT	North Florida Land Trust
OGT	Office of Greenways and Trails
PLC	Putnam Land Conservancy
SJC	St. Johns County
SJRWMD	St. Johns River Water Management District
SRWMD	Suwanee River Water Management District
UF	University of Florida
USFS	United States Forest Service

1.5 Adjacent Land Uses

The lands adjacent to the Conservation Area are occupied by agricultural, silvicultural, wetland and roadway land uses. A very small portion of the Property boundary borders sparse residential development on the west side of the Nine Mile Swamp tract. Currently there are no land uses that conflict with the planned use of the Property. Future expansion of residential development west of the Property could eventually introduce additional challenges to managing smoke from prescribed burns on RCCA.

1.6 Public Involvement

A noticed public hearing was held on December 5, 2023 (Appendix C). The objective of the public hearing was to receive public input regarding the draft management plan.

This plan was prepared with input from the Rice Creek Conservation Area Management Advisory Group. This group held a meeting on December 5, 2023. A summary of this meeting is in Appendix D.

The Acquisition and Restoration Council (ARC) public hearing and meeting provide an additional forum for public input and review.

The District's Governing Board will also be approving this management plan. This will be the third forum for the public to provide input to the plan.

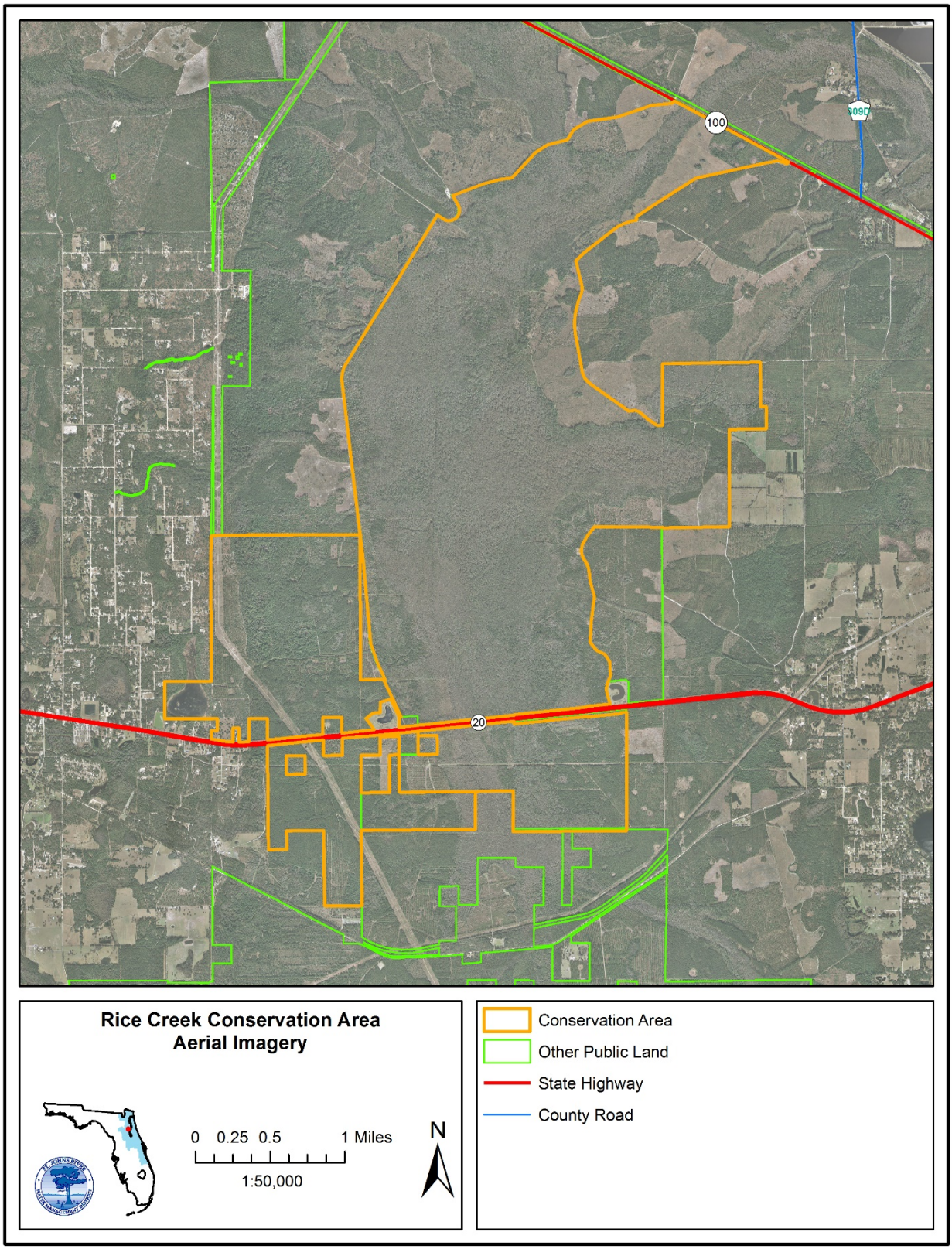

Figure 1: Aerial Map – 2017 Imagery

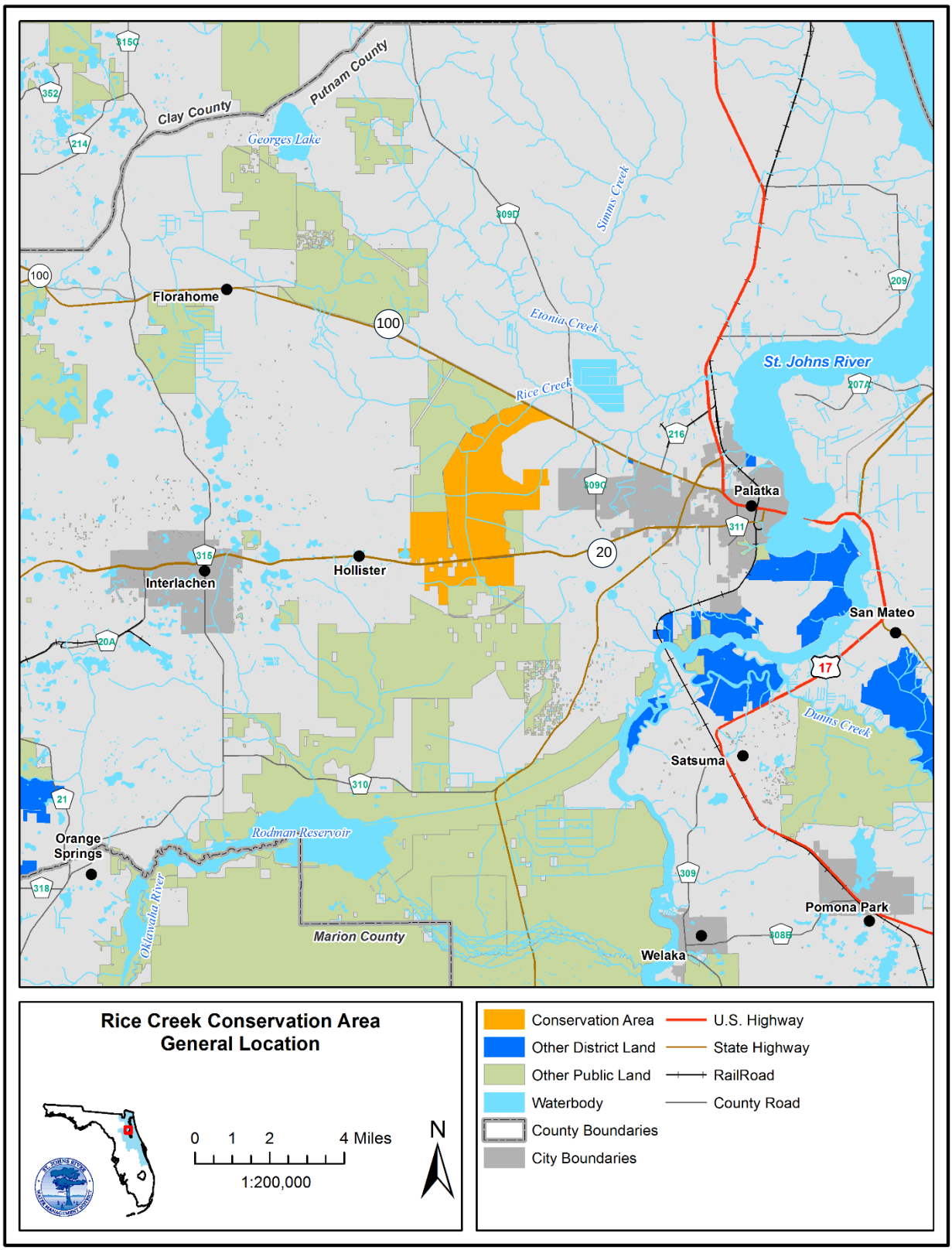

Figure 2: Location Map

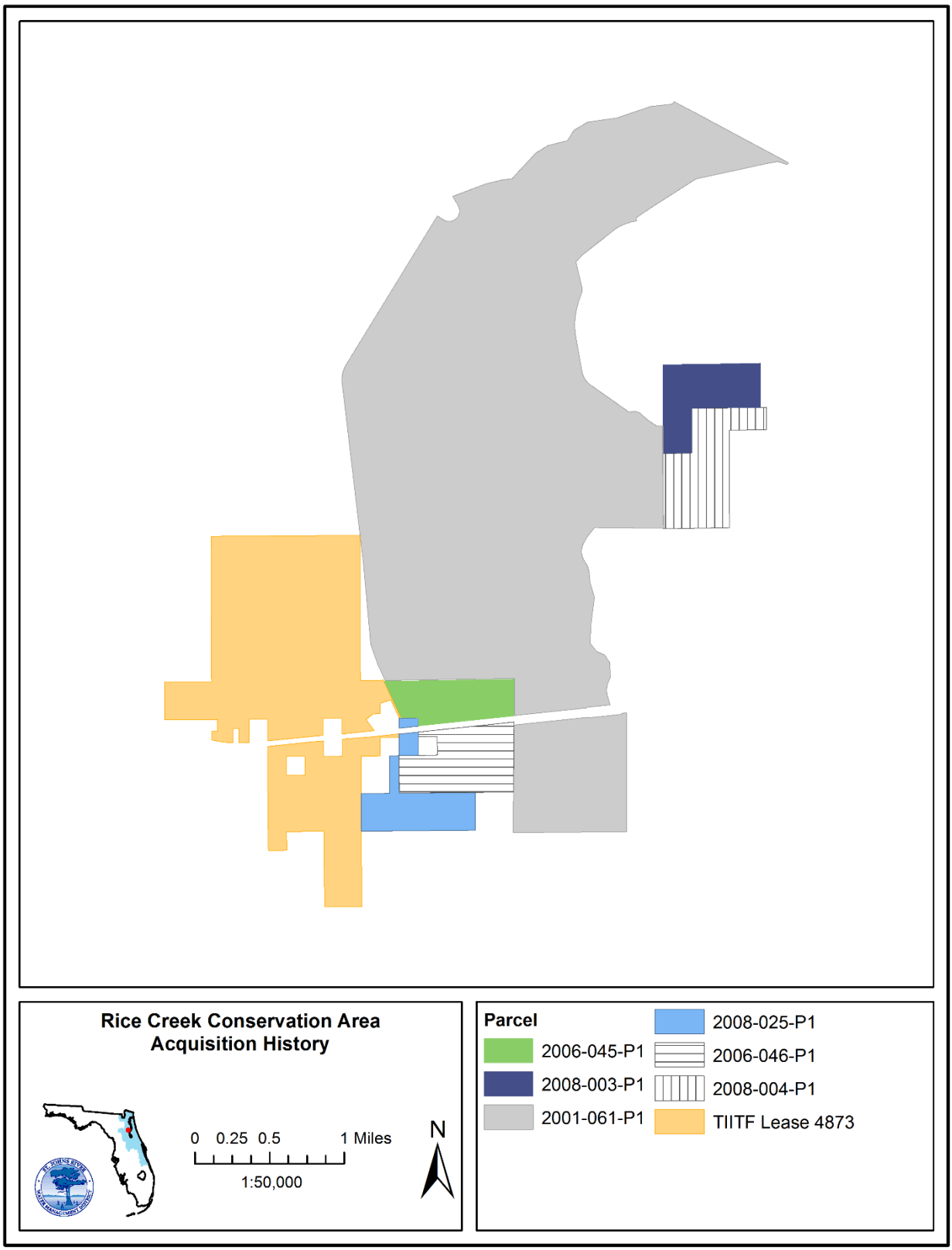

Figure 3: Acquisition Map

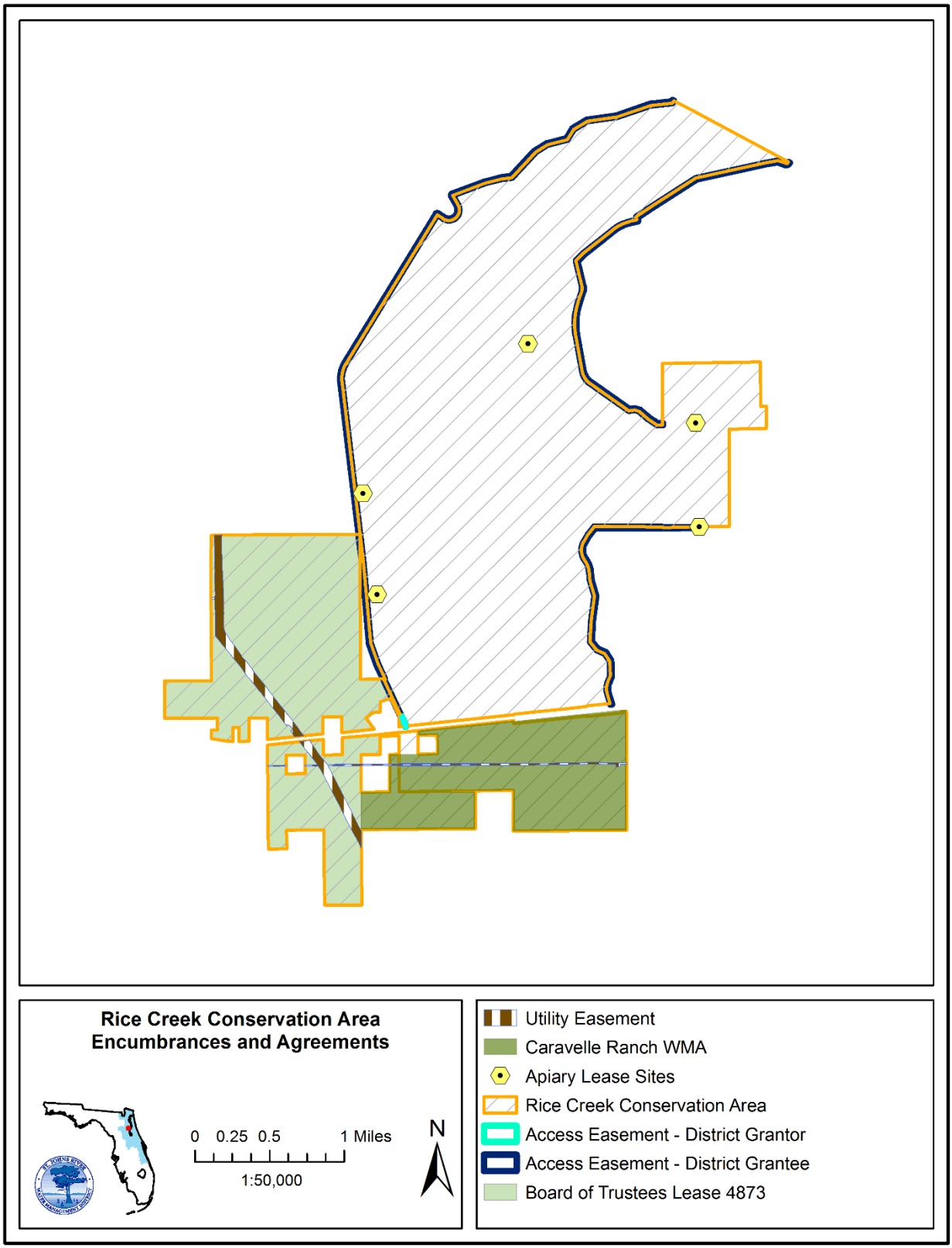

Figure 4: Encumbrances Map

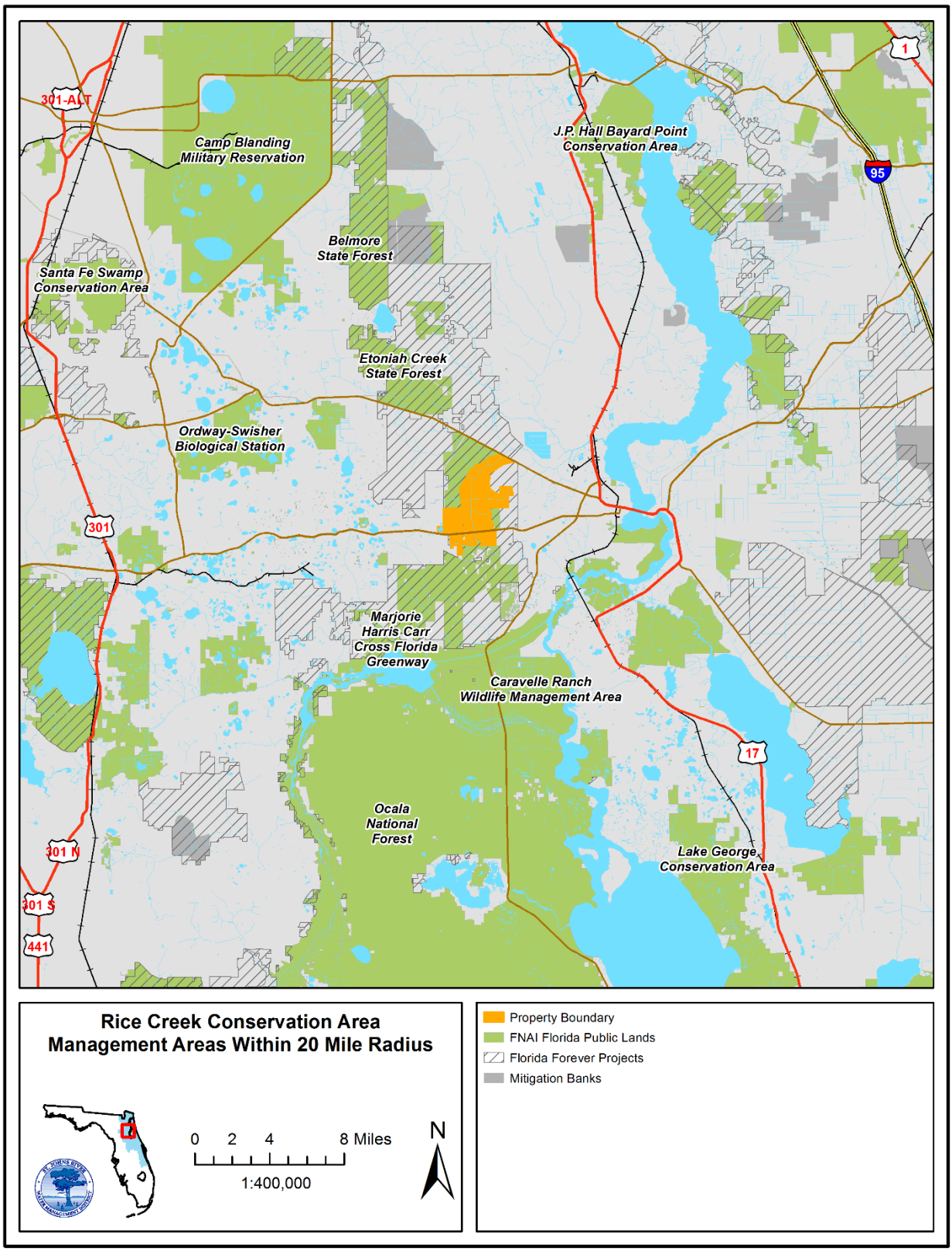

Figure 5: Proximity to Public Land Map

2. Natural and Cultural Resources

2.1 Physiography

a. Physiography/Mineral Resources

Rice Creek Conservation Area is primarily located within the northernmost reach of the St. Johns River Offset Province, which is a part of the Lakes District (Williams 2022). The St. Johns River Offset Province is an unusual reach of the St. Johns River Valley. This westerly deviation of the St. Johns River Valley is narrower and has higher elevations in the adjacent parts of the surrounding provinces than the Lower St. Johns River Valley and Upper St. Johns River Valley provinces (Barrier Island Sequence District). The province is noted for several important springs that occur along its margins.

The southwestern portion of the Property lies within the southern Duval Upland Province of the Barrier Island Sequence District. The Duval Upland Province is a broad, marine terrace located between the St. Marys Plain and Lower St. Johns River Valley provinces to the east and Trail Ridge Province to the west. Low ridges and swales are better developed on the terrace in the northern and southern parts of the province than in the central part of the province. Karst landforms are not widespread in the Duval Upland Province.

There are no known outstanding mineral resources on this Property.

b. Topography

Most of the land within RCCA is associated with exceptionally flat forested wetlands that form the headwaters of Rice Creek. The State of Florida Geographic Information Office (FGIO) 2018 light detection and ranging (LiDAR) based Digital Elevation Model (DEM) covers the Property (Figure 6). Based on this DEM, elevations on the Property are generally between 4 to 92 feet NAVD88, with higher elevations in the western portion of the Nine Mile Swamp tract and the lowest elevations in the bottom of Rice Creek's channel. Most of the headwater and floodplain wetlands are between the 9 to 14 ft. NAVD88.

c. Soils

The NRCS soil survey data were used to identify the RCCA soil series and soil depth to water table (https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx). The map units described in the soil survey of the Property are distributed as shown in Figure 7. The NRCS defines a soil map unit as, "a collection of soil areas or non-soil areas (miscellaneous areas) delineated in a soil survey." Soil map units may contain multiple soil components, which are given names that are unique identifiers.

Soils found within the Conservation Area are generally level, poorly drained sandy soils. The three most common soil types found at the Property are Bluff sandy clay loam, Holopaw fine sand and Tomoka muck, which make up approximately 17%, 15% and 12% of the area respectively. Other prominent soils include Riviera,

Pompano, Palmetto fine sands. Analyses of depth to water table for map units occurring within RCCA indicate that >95% of the Property has a water table within 18 inches of the soil surface (Figure 8). A comprehensive list of soil map unit descriptions can be found in Appendix E.

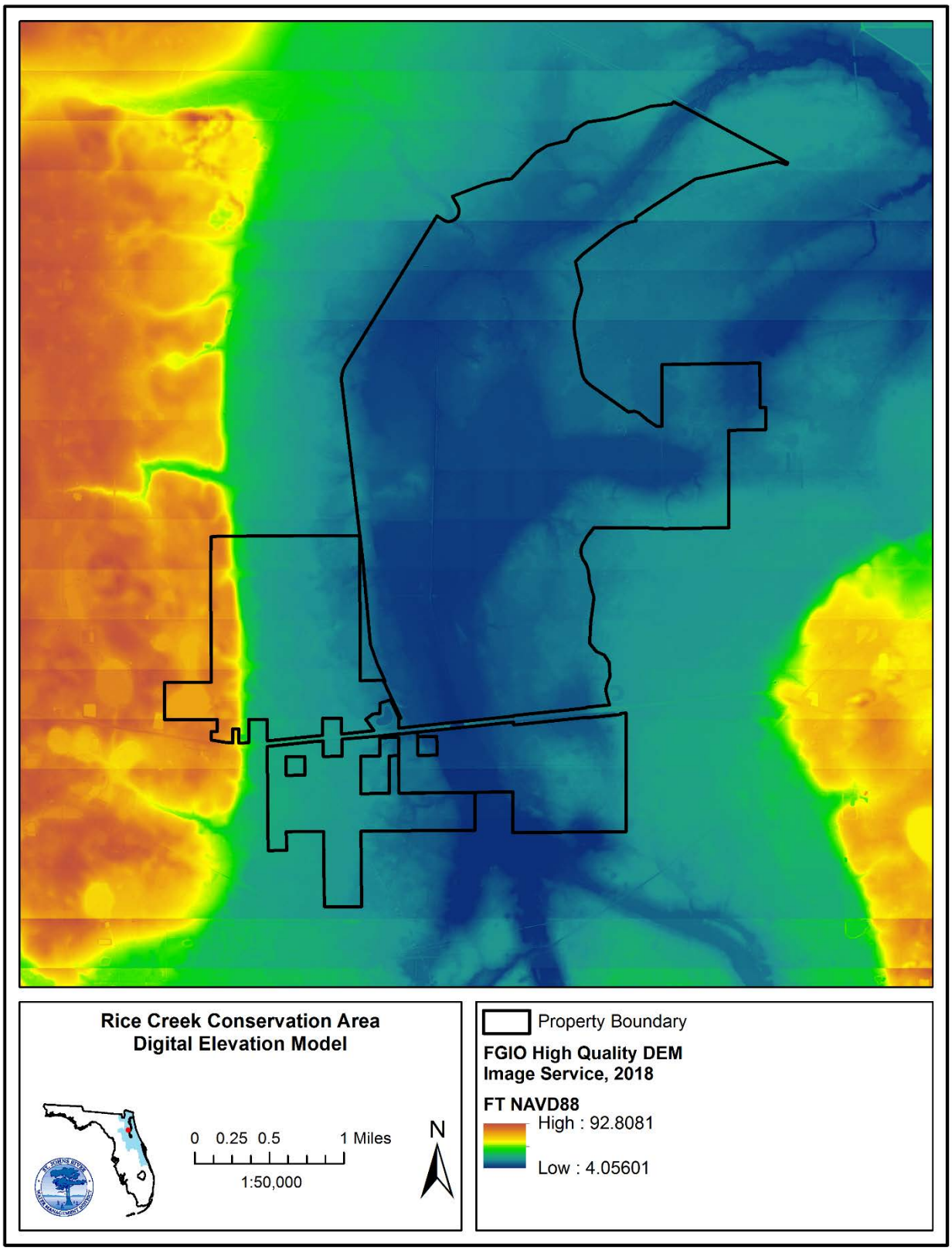

Figure 6: Topography Map

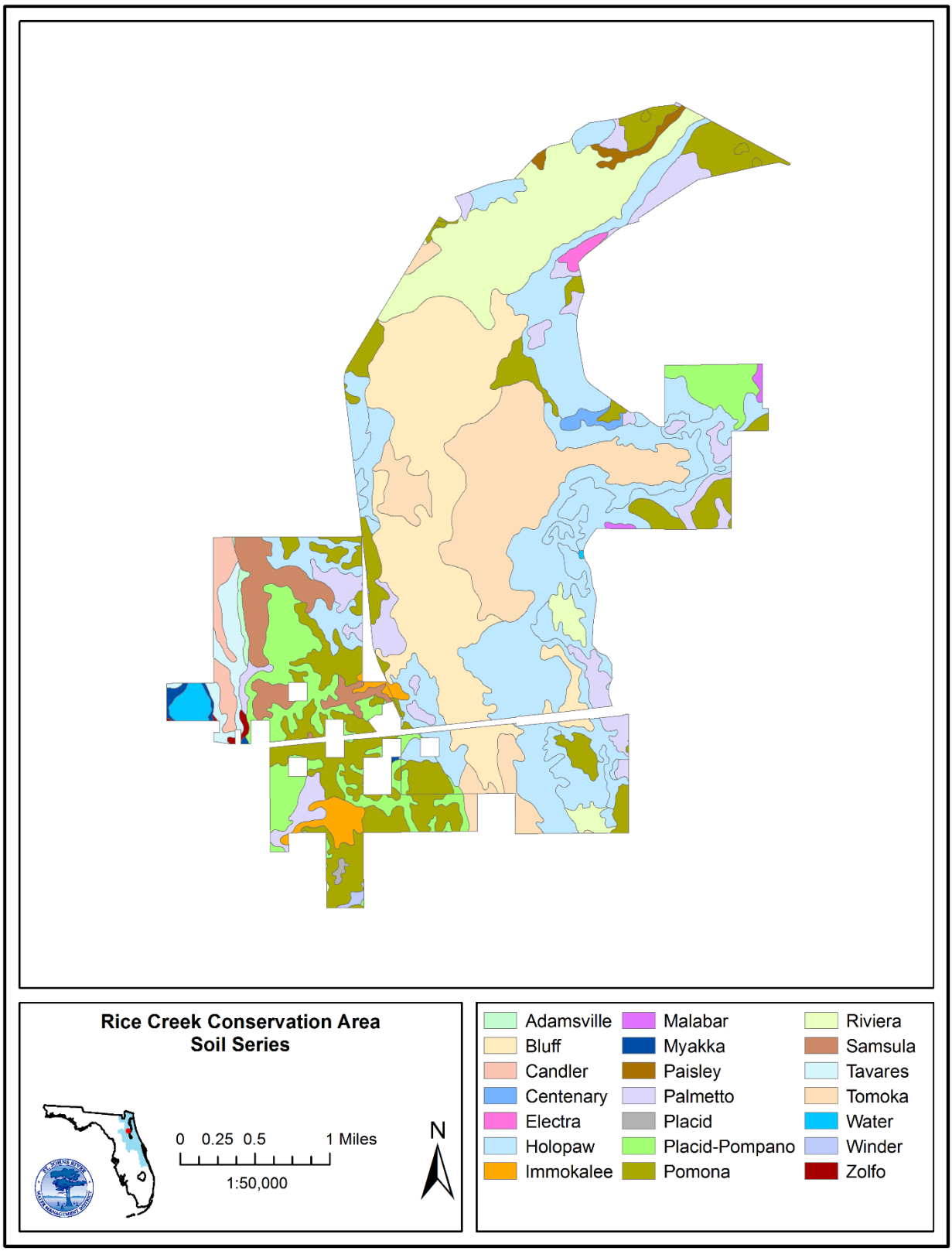

Figure 7: Soils Map

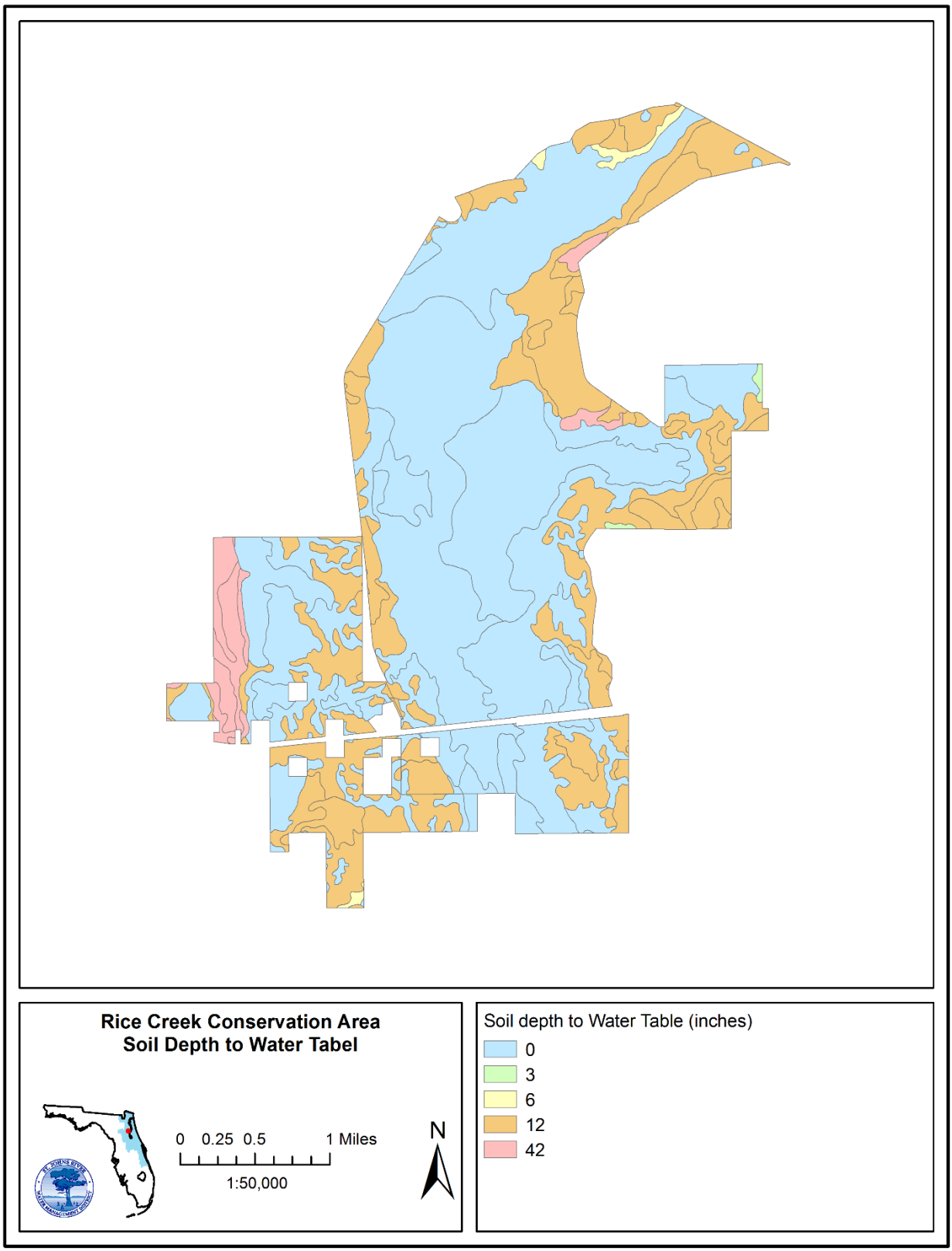

Figure 8: Soil Depth to Water Table Map

2.2 Natural Communities

The RCCA is host to a variety of natural and altered land cover. During 2023, under contract by the District, the Florida Natural Areas Inventory (FNAI) mapped both historic and current natural communities of the Property (Figure 9 and 10, Table 2). All land area reported in this section is based on GIS acres. Historically, the land of RCCA was dominated by a large and mostly contiguous bottomland forest, which is still largely intact. This forested wetland is associated with the headwaters of Rice Creek, the channel and floodplain for which forms at the north end of the Property. To the east, the primary expanse of bottomland gradually grades upward to a thin edge of associated hammock vegetation. Wet flatwoods and associated communities, including depression marshes, form the boundary along most of the east side of the Property. The west side of the Nine Mile Swamp tract contains more dramatic topography with sandhill habitat on the highest and driest western terminus of the Property. This sandhill slopes into a baygall system that in turn grades into a mosaic of wet flatwoods and bottomland forest. In total, uplands in the form of sandhill, wet and mesic flatwoods account for roughly 25% of the total area at RCCA.

Centuries of altered hydrology and fire regimes, forest management and agricultural practices at RCCA have shaped the natural communities on site. Rice Creek's expansive bottomland forest is bisected by an approximately three-mile-long canal that runs the length of this wetland, from the beginning of Rice Creek's natural channel in the north, south to SR 20. The history of this canal — including when, why and by whom it was constructed — is unknown to District staff. The feature was present in 1943, as shown in historic imagery from that year. It could have been dug to support timber operations and the transport of logs from the area. It might have been constructed in the 18th century as part of the indigo and rice plantation that was on site during that period. Regardless of the history behind this feature, the canal undoubtedly affects the hydrology and in turn the soils and vegetation within the bottomland forest.

More recent than construction of the Rice Creek canal, forest management operations have influenced the natural communities of RCCA. Prior to and throughout the 20th century, logging operations cleared the land throughout north-central Florida, including at Rice Creek. Much of the sandhill, wet flatwoods and fringe areas of the bottomland have been subject to silvicultural bedding and/or stand conversion to off-site species. These practices have affected the hydrology, fire behavior and vegetation composition and structure in the canopy, midstory and groundcover.

During natural community mapping, FNAI identified areas of historic bottomland forest, sandhill and flatwoods that are currently in a condition that is not representative of a fully functioning community — these are referred to as restoration natural communities. Restoration natural communities at RCCA have been significantly impacted by previous land use, primarily silvicultural practices. The ground within portions of historic bottomland forest and flatwoods has been bedded for timber production. Off-site pine species have been planted and vegetation has been managed to reduce competition with planted pine. The District has demonstrated the ability to restore similar habitats and intends to continue managing these stands for natural systems functioning. Restoration activities include selective thinning of trees and reintroduction of prescribed fire, when feasible the removal of silvicultural beds, restoration of groundcover and conversion of pine stands to site appropriate species.

Table 2 – Natural Communities and Altered Landcover Types Found at RCCA

Community Type	GIS Acres	Percentage
Bottomland Forest	4,325	69
Wet Flatwoods	1,183	19
Baygall	197	3
Sandhill	102	2
Floodplain Swamp	145	2
Mesic Flatwoods	145	2
Utility Corridor	92	1
Successional Hardwood Forest	42	1
Sandhill Upland Lake	38	1
Pasture - Semi-Improved	12	<1
Dome Swamp	6	<1
Borrow Area	4	<1
Depression Marsh	3	<1
Basin Marsh	3	<1
Clearing/Regeneration	1	<1
Canal/Ditch	<1	<1
Developed	<1	<1

Following are descriptions and general management objectives for the natural communities and altered landcover types (FNAI, 2010) found at RCCA.

a. Bottomland Forest (including Restoration)

Approximately 4,325 acres of bottomland forest are within RCCA. Of this area, 336 acres are identified as restoration bottomland forest.

Bottomland forest is a deciduous, or mixed deciduous/evergreen, closed-canopy forest on terraces and levees within riverine floodplains and in shallow depressions. Found in situations intermediate between swamps (which are flooded most of the time) and uplands, the canopy may be quite diverse with both deciduous and evergreen hydrophytic to mesophytic trees. Rice Creek Conservation Area has an extensive bottomland occupying a broad area between the sandhill upland to the west and pine flatwoods to the east. The bottomland forms the headwaters of Rice Creek, which drains northward off the Property. The entire wetland has a long history of disturbance. An old canal bisects the bottomland, running north/south through the center. There is also a historic levee constructed in the 18th century for a rice plantation. Many areas in the bottomland, particularly the drier portions, have been logged in the past. Loblolly pine plantations are common throughout the flatwoods inclusions and adjacent flatwoods and often extend into what was likely historic bottomland. These are partly identifiable through LiDAR digital elevation models where bedding can be perceived. There are also dense stands of loblolly pines with an understory of bottomland species. These may be planted but may also simply be regeneration of clearcut stands.

Good quality bottomland forests on Rice Creek Conservation Area have a closed canopy and subcanopy containing a mix of mostly facultative wetland species including swamp

laurel oak (*Quercus laurifolia*), swamp chestnut oak (*Quercus michauxii*), water oak (*Quercus nigra*), sweetgum (*Liquidambar styraciflua*), slash pine (*Pinus elliottii*), loblolly pine (*Pinus taeda*), red maple (*Acer rubrum*), sweetbay (*Magnolia virginiana*), live oak (*Quercus virginiana*), and bald cypress (*Taxodium distichum*). The understory is dominated by a diversity of small trees and tall shrubs. Species include Florida hobblebush (*Agarista populifolia*), American beautyberry (*Callicarpa americana*), water hickory (*Carya aquatica*), common buttonbush (*Cephalanthus occidentalis*), white fringe tree (*Chionanthus virginicus*), swamp dogwood (*Cornus foemina*), tuliptree (*Liriodendron tulipifera*), southern bayberry (*Morella cerifera*), red mulberry (*Morus rubra*), swamp bay (*Persea palustris*), needle palm (*Rhapidophyllum hystrix*), bluestem palmetto (*Sabal minor*), cabbage palm (*Sabal palmetto*), saw palmetto (*Serenoa repens*), southern arrowwood (*Viburnum dentatum*), highbush blueberry (*Vaccinium corymbosum*), and deerberry (*Vaccinium stamineum*). Herbs are sparse but may include longleaf woodoats (*Chasmanthium laxum* var. *sessiliflorum*), witchgrass (*Dichanthelium* sp.), cinnamon fern (*Osmunda cinnamomea*), resurrection fern (*Pleopeltis michauxiana*), millet beaksedge (*Rhynchospora miliacea*), Carolina wild petunia (*Ruellia caroliniensis*), lizard's tail (*Saururus cernuus*), netted chain fern (*Woodwardia areolata*), and Virginia chain fern (*Woodwardia virginica*). Epiphytes may be common with Bartram's air-plant (*Tillandsia bartramii*), ballmoss (*Tillandsia recurvata*), and resurrection fern (*Pleopeltis michauxiana*). This bottomland forest is very similar in some areas to a more evergreen, oak/palm hydric hammock type with larger, more frequent cabbage palms.

More disturbed areas may have a dense stand of loblolly pines with scattered oaks over an open understory with mostly tall shrubs and deep pine litter, or the canopy may be mostly young sweetgum. These stands tend to have a high cover of vines including yellow jessamine (*Gelsemium sempervirens*), Virginia creeper (*Parthenocissus quinquefolia*), cat greenbrier (*Smilax glauca*), eastern poison ivy (*Toxicodendron radicans*), and muscadine (*Vitis rotundifolia*). Where there are clearly planted pine stands in former bottomland forest, the current natural community is designated as “restoration bottomland forest.” A restoration natural community is defined as former altered landcover type or successional natural community (pine plantation, xeric hammock, etc.) where active restoration is ongoing to return the community to its historic state.

Particularly on the north end of the Property, there are some small, drier ecotones with mesic hammock vegetation dominated by live oaks. Resurrection fern and Bartram's air-plant cover the oak branches, and green fly orchid (*Epidendrum conopseum*) may also be an occasional epiphyte. Saw palmetto, while occasional in the bottomland, is a dominant understory plant in the drier mesic hammock edges. Trumpet creeper (*Campsis radicans*) is an occasional vine, and partridgeberry (*Mitchella repens*) is present in the sparse herb cover. There are signs of seepage from the adjacent restoration flatwoods area with the presence of Florida hobblebush (*Agarista populifolia*) and azalea (*Rhododendron* sp.).

Rice Creek Conservation Area is mostly free of non-native invasive plants, but disturbances in the bottomland forest are possible introduction paths for Japanese climbing fern (*Lygodium japonicum*), which was observed near an entry gate as well as on a trail through the bottomland.

b. Wet Flatwoods (including Restoration)

There are approximately 1,183 acres of wet flatwoods within RCCA. Of this area, 1,163 acres are identified as restoration wet flatwoods.

Wet flatwoods are open pine-dominated communities with a short understory of hydrophytic herbs and shrubs, or they may have a thick shrubby understory and very sparse groundcover, depending on landscape and soils. On Rice Creek Conservation Area, mesic and wet flatwoods once occupied large areas flanking the Rice Creek floodplain on the north part of the Property, as well as on slightly elevated areas in the large bottomland forest complex. Almost the entire conservation area has a history of silviculture, and the existing pine canopy is mostly planted, regenerating from planted, or remnants from prior logging of the site. The history of silviculture and fire exclusion in pine flatwoods on the Property has greatly altered the groundcover. Bedding and soil compaction make the determination of historic wet versus mesic flatwoods difficult. Repeated logging of the bottomland forest/flatwoods complex followed by site prep and planting of off-site pines and hydrology alteration has also blurred the line between hardwood forests and historic flatwoods. Surveyor records from 1833 describe most of the bottomland forest area as being “swamp timber” with “bay, pine, gum, bay bushes and briers.” However, one small area of pine and saw palmetto is mentioned where there is currently a narrow ridge of mesic flatwoods vegetation. The extent of wet flatwoods on the Nine Mile tract is estimated from 1943 aerial photographs. Strong seepage from the sandhill ridge to the west likely contributed to a complex of baygall and more open wet flatwoods vegetation, with severe fires shifting community lines occasionally.

Currently, the historic flatwoods areas are highly impacted by past silviculture. Stands range from densely planted pine stands to former pine plantations in active restoration, to more or less natural flatwoods albeit also with planted pines and mostly excluded from fire. Since the goal of management is to return these stands to a more natural state, all of the historic wet flatwoods impacted by silviculture are classified as restoration, a designation for former altered landcover types or successional natural communities (pine plantation, xeric hammock, etc.) where active restoration is ongoing to return the community to its historic state.

Most restoration wet flatwoods have a very young to younger mature canopy of loblolly pine (*Pinus taeda*) and/or slash pine (*Pinus elliottii*). Many restoration areas are recently planted with longleaf pine (*Pinus palustris*). A few areas of wet flatwoods on the Property do not have any obvious signs of a planted pine stand (bedding and rows not evident). These do have a dense pine canopy with loblolly and slash pines present, and they are moderately to heavily encroached by hardwoods, particularly water oak (*Quercus nigra*) and sweetgum (*Liquidambar styraciflua*), in the subcanopy. These also may have a high cover, up to 25%, of tall shrubs of swamp bay (*Persea palustris*), water oak, cabbage palm (*Sabal palmetto*), and saw palmetto (*Serenoa repens*), as well as common vines of cat greenbrier (*Smilax glauca*) and yellow jessamine (*Gelsemium sempervirens*).

Areas in active restoration still have obvious bedding but are usually open and have signs of recent prescribed fire. Shrubs have been greatly reduced and include typical wet flatwoods species such as southern bayberry (*Morella cerifera*), red maple (*Acer rubrum*), roundpod St. John's wort (*Hypericum cistifolium*), gallberry (*Ilex glabra*), and highbush blueberry (*Vaccinium corymbosum*). Herbs are typical of wet flatwoods, but are mostly composed of weedy, disturbance tolerant plants. Species include blue maidencane (*Amphicarpum muehlenbergianum*), purple bluestem (*Andropogon glomeratus* var. *glaucopsis*), spadeleaf (*Centella asiatica*), cypress witchgrass (*Dichanthelium ensifolium*), Carolina redroot (*Lachnanthes caroliana*), southern club-moss (*Lycopodiella appressa*), orange milkwort (*Polygala lutea*), meadowbeauty (*Rhexia* sp.), bunched beaksedge (*Rhynchospora cephalantha*), fascicled beaksedge (*Rhynchospora fascicularis*), sphagnum moss (*Sphagnum* sp.), Virginia chain fern (*Woodwardia virginica*), and coastalplain yellow-eyed grass (*Xyris ambigua*).

Management activities should include growing season fires every 2-4 years, pine thinning in dense stands, and continued reintroduction of longleaf pine.

c. Baygall

There are approximately 197 acres of baygall within RCCA. Baygall is an evergreen, forested wetland characterized by a bay tree-dominated canopy typically found at the base of sandy slopes where water seepage maintains a saturated peat substrate. It may form an ecotone between uplands and swamps, or it may develop as a bay swamp in isolated basins or broad areas of seepage. A ridge of sandy uplands (the southern end of the “Penney Farms Upland”) runs along the far western side of the Property and slopes downward, forming a broad area of forested wetlands (the “Rice Creek Swamp”). Where the slope is fairly steep, the constant groundwater seepage supports a large area of baygall vegetation.

The baygall on Rice Creek Conservation Area has an open to closed canopy of large slash pine (*Pinus elliottii*) and/or loblolly pine (*Pinus taeda*), with loblolly bay (*Gordonia lasianthus*) common to abundant in the canopy and subcanopy layers. The open canopy areas of baygall are impenetrable, viny thickets of laurel greenbrier (*Smilax laurifolia*) and muscadine (*Vitis rotundifolia*). In areas with more canopy cover, the understory is dominated by woody species such as red chokeberry (*Aronia arbutifolia*), yellow jessamine (*Gelsemium sempervirens*), Virginia willow (*Itea virginica*), sweetbay (*Magnolia virginiana*), poison sumac (*Toxicodendron vernix*), and highbush blueberry (*Vaccinium corymbosum*). Herbs are limited to scattered shade tolerant ferns such as cinnamon fern (*Osmunda cinnamomea*), and there is a thick layer of duff covering the ground. Pines are a natural part of the canopy structure of baygall communities, but past silvicultural activities have likely increased their frequency. Some parts of the currently mapped baygall on Rice Creek Conservation Area may be planted pine stands, but this is difficult to distinguish from pine regeneration using aerial photography or even ground-truthing in many cases.

On historic aerial photography, the baygall is distinguished from the adjacent bottomland mostly by the lack of large trees. The signature is not very homogeneous, however, and

areas of wet pine flatwoods may have once been interspersed through the baygall where the slope flattens out. Silviculture and hydrology alteration on the site further complicates the picture. However, the boundary between the baygall and the xeric uplands to the west is a clear, sharp line on 1943 and 1953 aerial photographs.

Baygalls should burn infrequently, perhaps only a few times each century in the deepest areas. Although the saturated soils and humid conditions within baygalls typically inhibit fire, droughts may create conditions that allow them to burn catastrophically. These fires not only destroy the canopy, but also may ignite the deep peat layers that can smolder for weeks, or even months. If it can be done safely, prescribed fires in adjacent uplands should be allowed to burn into baygall edges to maintain grassy ecotones and to kill bay shrubs encroaching into the uplands. Plowed firebreaks and ditches should be restored, and hydrology should be returned to its natural state where possible.

d. Sandhill (including Restoration)

There are approximately 102 acres of sandhill within RCCA. Of this area, 77 acres are identified as restoration sandhill.

Sandhills are open pinelands of widely spaced longleaf pine (*Pinus palustris*) with a sparse subcanopy of deciduous oaks, in particular turkey oak (*Quercus laevis*), and a diverse, usually dense groundcover of wiregrass (*Aristida stricta*) and other grasses and herbs. Soils are deep, well-drained sands. The far western side of Rice Creek Conservation Area runs along the eastern edge of a xeric sandhill ridge (the southern end of the “Penney Farms Upland”). Only a small piece of this sandhill remains somewhat natural. The remaining area is either planted with dense pines or has succeeded to an oak-dominated hardwood forest.

The remaining sandhill is in fair condition with a very open canopy of longleaf pine (*Pinus palustris*), with a subcanopy of turkey oak (*Quercus laevis*) and sand post oak (*Quercus margarettae*). Shrubs form about 16-25% cover, composed of woolly pawpaw (*Asimina incana*), common persimmon (*Diospyros virginiana*), bluejack oak (*Quercus incana*), winged sumac (*Rhus copallinum*), sand blackberry (*Rubus cuneifolius*), saw palmetto (*Serenoa repens*), deerberry (*Vaccinium stamineum*), and shiny blueberry (*Vaccinium myrsinites*). Herb cover is around 10% with wiregrass (*Aristida stricta*) present, along with green silkyscale (*Anthaenantia villosa*), silver croton (*Croton argyranthemus*), witchgrass (*Dichanthelium* sp.), dogtongue wild buckwheat (*Eriogonum tomentosum*), fragrant eryngo (*Eryngium aromaticum*), coastalplain palafox (*Palafoxia integrifolia*), thin paspalum (*Paspalum setaceum*), narrowleaf silkgrass (*Pityopsis graminifolia*), blackroot (*Pterocaulon pycnostachyum*), Chapman's goldenrod (*Solidago odora* var. *chapmanii*), Florida hoary-pea (*Tephrosia florida*), wavyleaf noseburn (*Tragia urens*), and tall ironweed (*Vernonia angustifolia*). There is also a small population of the state listed endangered sandhill spiny-pod (*Matelea pubiflora*). Vines are common and include yellow jessamine (*Gelsemium sempervirens*), Virginia creeper (*Parthenocissus quinquefolia*), earleaf greenbrier (*Smilax auriculata*), and muscadine (*Vitis rotundifolia*).

Since the goal of management is to return the planted pine stands to a more natural state, all the historic sandhill impacted by silviculture is classified as restoration, a designation for former altered landcover types or successional natural communities (pine plantation, xeric hammock, etc.) where active restoration is ongoing to return the community to its historic state. These areas have a dense stand of planted pines, mostly sand pine (*Pinus clausa*), but there is also an area of densely planted longleaf pine. However, the groundcover often retains a good diversity of remnant native sandhill species, including the state listed endangered giant orchid (*Pteroglossaspis ecristata*).

The open, grassy structure of sandhills is maintained with fires every 1-3 years, mostly during the growing season. Fire exclusion throughout much of the area of historic sandhill and conversion to pine plantation have greatly altered the structure of this community, but the area has a good amount of remnant understory vegetation to help restoration.

e. Floodplain Swamp

There are approximately 197 acres of floodplain swamp within RCCA. Floodplain swamps occur on flooded soils along stream and river channels and in low spots and oxbows within river floodplains. Dominant trees are usually buttressed hydrophytic trees such as cypress and tupelo; the understory and ground cover are generally very sparse. Canopy coverage is usually high but can be sparse as the community grades into open water or marsh areas. Shrub and herbaceous layers are often sparse and concentrated in open areas of the community and on included hummocks and stumps.

At Rice Creek Conservation Area, the natural channel of Rice Creek begins in the north part of the conservation area and exits the Property northwestward, eventually joining Etonia Creek before draining into the St. Johns River. Along the creek, the canopy is dominated by a closed canopy of swamp tupelo (*Nyssa biflora*) and large bald cypress (*Taxodium distichum*). The subcanopy and tall shrub layers also contain these species, as well as red maple (*Acer rubrum*), American hornbeam (*Carpinus caroliniana*), green ash (*Fraxinus pennsylvanica*), sweetgum (*Liquidambar styraciflua*), and cabbage palm (*Sabal palmetto*). The understory is very open with scattered patches of herbs including sedge (*Carex* sp.). Bartram's air-plant (*Tillandsia bartramii*) is an occasional epiphyte in the tall canopy.

f. Mesic Flatwoods (including Restoration)

There are approximately 145 acres of mesic flatwoods within RCCA. Of this area, 111 acres are identified as restoration mesic flatwoods.

Mesic flatwoods are open canopy upland communities of uneven aged pines with a low, diverse understory of herbs and shrubs maintained by frequent fires. On Rice Creek Conservation Area, mesic and wet flatwoods once occupied large areas flanking the Rice Creek floodplain on the north part of the Property, as well as smaller rises in the large bottomland forest complex. Almost the entire conservation area has a history of silviculture, and the existing pine canopy is mostly planted, regenerating from planted, or remnants from prior logging of the site. The history of silviculture and fire exclusion in

pine flatwoods on the Property has greatly altered the groundcover. Bedding and soil compaction make the determination of historic wet versus mesic flatwoods difficult. Repeated logging of the bottomland forest along with planting pine stands and hydrology alteration has also blurred the line between hardwood forests and historic flatwoods. Surveyor records from 1833 describe most of the bottomland forest area as being “swamp timber” with “bay, pine, gum, bay bushes and briers.” However, one small area of pine and saw palmetto is mentioned where there is currently a narrow ridge of flatwoods vegetation.

Currently, the historic flatwoods areas are highly impacted by past silviculture. Stands range from densely planted pine stands, to cleared stands in active restoration, to more or less natural flatwoods albeit also with planted pines and mostly excluded from fire. Since the goal of management is to return these stands to a more natural state, all of the historic mesic flatwoods impacted by silviculture are classified as restoration, a designation for former altered landcover types or successional natural communities (pine plantation, xeric hammock, etc.) where active restoration is ongoing to return the community to its historic state.

Most restoration mesic flatwoods have a very young to younger mature canopy of loblolly pine (Pinus taeda) and/or slash pine (*Pinus elliottii*). Several large restoration areas are recently planted with longleaf pine (*Pinus palustris*). Flatwoods surrounded by bottomland forest are often heavily encroached with hardwoods, particularly water oak (*Quercus nigra*). These also may have a high cover, up to 25%, of tall shrubs of rusty staggerbush (*Lyonia ferruginea*), southern bayberry (*Morella cerifera*), water oak, and sweetgum (*Liquidambar styraciflua*), as well as abundant vines of cat greenbrier (*Smilax glauca*), earleaf greenbrier (*Smilax auriculata*), yellow jessamine (*Gelsemium sempervirens*), and muscadine (*Vitis rotundifolia*).

In general, mesic flatwoods and restoration mesic flatwoods have a diversity of short shrubs that includes saw palmetto (*Serenoa repens*), but also many dwarf shrubs such as blue huckleberry (*Gaylussacia frondosa* var. *tomentosa*), Atlantic St. John's wort (*Hypericum tenuifolium*), fourpetal St. John's wort (*Hypericum tetrapetalum*), hairy wicky (*Kalmia hirsuta*), dwarf live oak (*Quercus minima*), runner oak (*Quercus pumila*), and shiny blueberry (*Vaccinium myrsinites*). Other common shrubs are gallberry (*Ilex glabra*), rusty staggerbush (*Lyonia ferruginea*), coastalplain staggerbush (*Lyonia fruticosa*), and deerberry (*Vaccinium stamineum*). Historically, the herb layer would have been dominated by wiregrass (*Aristida stricta*), but this species is currently uncommon on the Property. However, herbaceous species indicative of drier flatwoods are often still present, particularly bracken fern (*Pteridium aquilinum*). Other indicators that are less frequent include pinebarren frostweed (*Crocanthemum corymbosum*), Florida pineland spurge (*Euphorbia inundata* var. *inundata*), Piedmont pinweed (*Lechea torreyi*), narrowleaf silkgrass (*Pityopsis graminifolia*), and blackroot (*Pterocaulon pycnostachyum*). However, in many pine plantations and restoration areas, disturbance tolerant species such as purple bluestem (*Andropogon glomeratus* var. *glaucopsis*), Elliott's milkpea (*Galactia elliottii*), and nutrush (*Scleria* sp.) tend to dominate the disturbed understory of many former pine plantations.

Management activities in natural and restoration mesic flatwoods should include growing season fires and continued pine thinning in dense stands, as well as continued reintroduction of longleaf pine and wiregrass.

g. Sandhill Upland Lake

There are approximately 38 acres of sandhill upland lake within RCCA. Sandhill upland lakes are shallow, rounded solution depressions occurring in sandy upland communities. They are generally permanent water bodies, although water levels may fluctuate substantially, sometimes becoming completely dry during extreme droughts. They are typically lentic water bodies without significant surface inflows or outflows. Instead, water may be largely derived from lateral groundwater seepage through the surrounding well-drained uplands and/or from artesian sources via connections with the underlying limestone aquifer.

The former sandhill on the west side of Rice Creek Conservation Area has a single large sandhill upland lake. The lake is shallow with significant organic buildup, currently similar to a deep basin marsh dominated by floating aquatic plants, mostly white waterlily (*Nymphaea odorata*) and watershield (*Brasenia schreberi*) mixed with sparse maidencane (*Panicum hemitomon*). Common buttonbush (*Cephalanthus occidentalis*) and peelbark St. John's wort (*Hypericum fasciculatum*) are common around the marsh edge along with a diversity of herbs including spadeleaf (*Centella asiatica*), spikerush (*Eleocharis* sp.), flattened pipewort (*Eriocaulon compressum*), dogfennel (*Eupatorium capillifolium*), Carolina redroot (*Lachnanthes caroliana*), grassy arrowhead (*Sagittaria graminea*), and yellow-eyed grass (*Xyris* sp.).

h. Dome Swamp

There are approximately 6 acres of dome swamp within RCCA. Dome swamp is an isolated, forested, depression wetland occurring within a fire-maintained community such as mesic flatwoods. These swamps are usually small with a characteristic dome shape created by smaller trees that grow in the shallow outer edge, while taller trees grow in the deeper, more frequently inundated interior where there is often more organic accumulation. Dome swamps are usually dominated by pond cypress (*Taxodium ascendens*) and/or swamp tupelo (*Nyssa biflora*). On the north side of Rice Creek Conservation Area, the natural floodplain is narrower, flanked by areas of former wet and mesic flatwoods that were converted to planted pine stands in the 20th century. The former flatwoods area on the east side of the floodplain has at least five dome swamp depressions.

The dome swamps on Rice Creek Conservation Area are a mix of different canopy types. At least one is a cypress dome dominated by young pond cypress (*Taxodium ascendens*). Others have swamp tupelo (*Nyssa biflora*) under an overstory of slash pine (*Pinus elliottii*). And at least one may contain ogeechee tupelo (*Nyssa ogeche*). These swamps also have scattered tall shrubs of southern bayberry (*Morella cerifera*) and highbush blueberry (*Vaccinium corymbosum*), and a sparse to dense herbaceous layer of bluestem

(*Andropogon* sp.), Carolina redroot (*Lachnanthes caroliana*), maidencane (*Panicum hemitomon*), and/or Virginia chain fern (*Woodwardia virginica*).

Fire is essential to the maintenance of dome swamps; without fire, hardwoods will invade the otherwise open understory. Fires in the surrounding flatwoods should be encouraged to burn through the dome swamps periodically and, where possible, hydrology restoration may improve natural wetland functions. As flatwoods restoration progresses and fire continues to be introduced in the surrounding landscape, these dome swamps should regain more of their natural function.

i. Depression Marsh

There are approximately 3 acres of depression marsh within RCCA. Depression marshes are shallow, typically rounded, herb-dominated, seasonally inundated depressions embedded in pyrogenic communities such as pine flatwoods. These marshes may be dry for part of the year and frequently burn with the surrounding landscape, which limits organic accumulation, at least in the shallow edges. Frequently there are concentric zones of vegetation that respond to the hydroperiod and edaphic conditions within each zone. On the north side of Rice Creek Conservation Area, the natural floodplain is narrower, flanked by areas of former wet and mesic flatwoods that were converted to planted pine stands in the 20th century. These former flatwoods areas have at least five herbaceous depressions scattered throughout.

Depression marshes on the Property have a fairly high organic accumulation and little zonation, possibly due to long term fire exclusion in the surrounding communities. Sphagnum moss (*Sphagnum* sp.) is present in many of these. Dominant herbs are maidencane (*Panicum hemitomon*) and Virginia chain fern (*Woodwardia virginica*), with several other species commonly found, including blue maidencane (*Amphicarpum muehlenbergianum*), purple bluestem (*Andropogon glomeratus* var. *glaucopsis*), sawgrass (*Cladium jamaicense*), spikerush (*Eleocharis* sp.), dogfennel (*Eupatorium capillifolium*), Carolina redroot (*Lachnanthes caroliana*), rosy camphorweed (*Pluchea baccharis*), sand cordgrass (*Spartina bakeri*), and fascicled beaksedge (*Rhynchospora fascicularis*). Scattered small trees of swamp tupelo (*Nyssa biflora*), red maple (*Acer rubrum*), slash pine (*Pinus elliottii*), and water oak (*Quercus nigra*), as well as tall shrubs of common buttonbush (*Cephalanthus occidentalis*) and southern bayberry (*Morella cerifera*) are common around depression marsh edges.

Depression marshes require frequent fires to maintain a high herbaceous species component and reduce woody encroachment. The natural fire return interval for depression marshes is every 1-8 years, primarily during the growing season (April-June) when water levels are low and fuels in surrounding uplands are dry. Prescribed burns should be implemented more often for depression marshes encroached by woody species to reduce their abundance.

j. Basin Marsh

There are approximately 3 acres of basin marsh within RCCA. Basin marshes are depressional, non-forested wetlands. They are typically large and/or embedded in non-

pyrogenic communities and thus are not significantly influenced by frequent fires in the surrounding landscape. This community type is dominated by herbs or occasionally shrubs that can withstand inundation for most or all of the year. On Rice Creek Conservation Area, a few small basin marshes are found included within the large bottomland forest/baygall/flatwoods complex in an area where groundwater seepage is likely keeping the soils constantly wet. Other smaller depressions in the same area may have once been more marsh-like, but these are now mostly indistinguishable from the surrounding baygall/pine plantation. Unlike depression marshes with concentric zones of vegetation that frequently dry out, at least on the sandy, shallow edges, these basin marshes likely remain wet most of the year. As a result, soils are mucky and there is significant cover of sphagnum moss.

The open part of the basin marsh can be a thick stand of maidencane (*Panicum hemitomon*), but with many areas dominated by other species, including Carolina redroot (*Lachnanthes caroliana*), chalky bluestem (*Andropogon virginicus* var. *glaucus*), cinnamon fern (*Osmunda cinnamomea*), lizard's tail (*Saururus cernuus*), Virginia chain fern (*Woodwardia virginica*), and beaksedge (*Rhynchospora* sp.). Sphagnum moss (*Sphagnum* sp.) is common to abundant throughout the herb-dominated areas. There are dense patches of fetterbush (*Lyonia lucida*) with laurel greenbrier (*Smilax laurifolia*) and scattered trees of red maple (*Acer rubrum*), dahoon (*Ilex cassine*), loblolly bay (*Gordonia lasianthus*), swamp tupelo (*Nyssa biflora*), and loblolly pine (*Pinus taeda*).

Although not considered a pyrogenic community, occasional fires can be beneficial for restoring an herb-dominated vegetation structure. Removing feral hogs (*Sus scrofa*) is desirable in areas where these animals are impacting basin marshes and other wetlands.

k. Borrow Area

Three small pits are mapped as borrow areas on Rice Creek Conservation Area, possibly created for road fill. These appear to hold water and have wetland vegetation.

l. Canal/Ditch

Only one ditch is delineated on the current natural community map, but many narrow ditches are present throughout the Property, associated with the network of elevated roads. Also, there is an old canal running north/south through the center of the bottomland forest that creates additional drainage off the site.

m. Clearing/Regeneration

Recent or historic clearings that have significantly altered the groundcover and/or overstory of the original natural community (old homesites, etc.), clearings of unknown origins.

There are several open clearings or possibly old pine plantation clearcuts present on the property.

n. Developed

A small residence with lawn was located on the Nine Mile Swamp tract fronting SR 20. The home structure was removed from the Property prior to District assuming management of the area.

o. Semi-improved Pasture

Semi-improved pastures are dominated by a mix of planted non-native or domesticated native forage species and native groundcover, due to an incomplete conversion to pasture, not regeneration. Semi-improved pastures have been cleared of a significant percentage of their native vegetation and planted in non-native or domesticated native forage species, but still retain scattered patches of native vegetation with natural species composition and structure (most often small areas of mesic flatwoods) among the pastured areas. The planted areas are usually dominated by bahiagrass (*Paspalum notatum*) and can resemble improved pastures. Seeding of bahiagrass can also occur within areas of native groundcover. This category should apply regardless of recent pasture maintenance.

One 11.5-acre area of semi-improved pasture is located on the Nine Mile Swamp tract, adjacent to SR 20. The north side of this pasture is an open community with bahiagrass (*Paspalum notatum*) mixed with herbs typical of sandhill, such as Atlantic pigeon-wing (*Clitoria mariana*), needleleaf witchgrass (*Dichanthelium aciculare*), yankeeweed (*Eupatorium compositifolium*), milkpea (*Galactia* sp.), dollarleaf (*Rhynchosia reniformis*), queen's delight (*Stillingia sylvatica*), scurf hoary-pea (*Tephrosia chrysophylla*), and Florida hoary-pea (*Tephrosia florida*). The area also has scattered but also containing scattered trees and shrubs of sand live oak (*Quercus geminata*), sand post oak (*Quercus margarettae*), woolly pawpaw (*Asimina incana*), common persimmon (*Diospyros virginiana*), gopher apple (*Geobalanus oblongifolius*), pricklypear (*Opuntia humifusa*), sand blackberry (*Rubus cuneifolius*), and flatwoods plum (*Prunus umbellata*). Gopher tortoise burrows were seen in the area, as well as a juvenile tortoise foraging in the pasture.

p. Successional Hardwood Forest

Successional hardwood forest are closed-canopied forest dominated by fast growing hardwoods such as laurel oak (*Quercus hemisphaerica*), water oak (*Quercus nigra*), and/or sweetgum (*Liquidambar styraciflua*), often with remnant pines. These forests are either invaded natural habitat (i.e., mesic flatwoods, sandhill, upland pine, upland mixed woodland) due to lengthy fire-suppression or old fields that have succeeded to forest. The subcanopy and shrub layers of these forests are often dense and dominated by smaller individuals of the canopy species. Successional hardwood forests can contain remnant species of the former natural community. Restoration of these forests includes mechanical tree removal and reintroduction of fire. Where characteristic herbaceous species (e.g., wiregrass) have been lost, reintroduction via seed or plants may be necessary to restore natural species composition and community function.

The former sandhill on the west side of Rice Creek Conservation Area is now a mix of mostly pine plantation and successional hardwood forest. The canopy in these areas is a dense growth of younger oaks, mostly laurel oak. Shrubs and small trees, many typical of sandhill, form most of the understory. Species include woolly pawpaw (*Asimina incana*),

wild olive (*Cartrema americanum*), common persimmon (*Diospyros virginiana*), blue huckleberry (*Gaylussacia frondosa* var. *tomentosa*), yellow jessamine (*Gelsemium sempervirens*), gallberry (*Ilex glabra*), rusty staggerbush (*Lyonia ferruginea*), pricklypear (*Opuntia humifusa*), longleaf pine (*Pinus palustris*), sand live oak (*Quercus geminata*), turkey oak (*Quercus laevis*), sand post oak (*Quercus margarettae*), water oak (*Quercus nigra*), cabbage palm (*Sabal palmetto*), saw palmetto (*Serenoa repens*), earleaf greenbrier (*Smilax auriculata*), sarsaparilla vine (*Smilax pumila*), shiny blueberry (*Vaccinium myrsinites*), and muscadine (*Vitis rotundifolia*). Herbs are limited by the dense canopy, but can include bracken fern (*Pteridium aquilinum*), vanillaleaf (*Carphephorus odoratissimus*), witchgrass (*Dichanthelium* sp.), Elliott's milkpea (*Galactia elliottii*), shortleaf gayfeather (*Liatris tenuifolia*), nutrush (*Scleria* sp.), and fruticose lichens such as *Cladonia* sp.

q. Utility Corridor

A large power line corridor bisects Rice Creek Conservation Area, extending the length of the west side of the Property from north to south. The corridor is maintained by mowing. Where it crosses an area of historic sandhill, the vegetation is mostly bahiagrass (*Paspalum notatum*), but the frequent mowing is also beneficial for some native species that exploit the open habitat. Species include jointvetch (*Aeschynomene* sp.), Florida Indian-plantain (*Arnoglossum floridanum*), woolly pawpaw (*Asimina incana*), coastalplain honeycomb-head (*Balduina angustifolia*), Florida greeneyes (*Berlandiera subacaulis*), Florida scrub roseling (*Callisia ornata*), Atlantic pigeon-wing (*Clitoria mariana*), rabbitbells (*Crotalaria rotundifolia*), Michaux's croton (*Croton michauxii*), poor joe (*Diodia teres*), dogfennel (*Eupatorium capillifolium*), gopher apple (*Geobalanus oblongifolius*), pricklypear (*Opuntia humifusa*), narrowleaf silkgrass (*Pityopsis graminifolia*), sweet everlasting (*Pseudognaphalium obtusifolium*), bracken fern (*Pteridium aquilinum*), sand live oak (*Quercus geminata*), winged sumac (*Rhus copallinum*), snoutbean (*Rhynchosia* sp.), sand blackberry (*Rubus cuneifolius*), coastalplain dawnflower (*Stylisma patens*), sidebeak pencil flower (*Stylosanthes biflora*), hoary-pea (*Tephrosia* sp.), and Adam's needle (*Yucca filamentosa*).

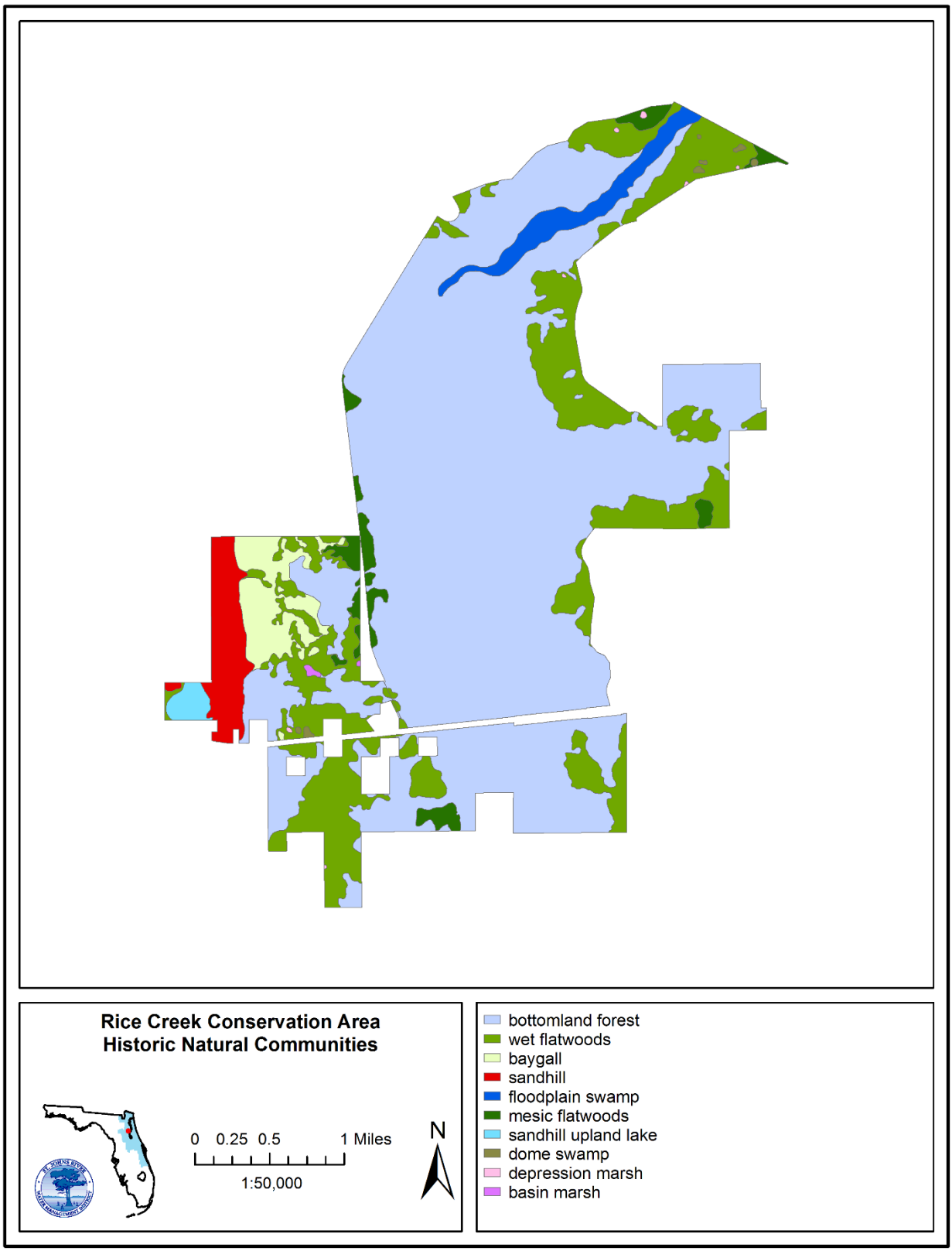

Figure 9: Historic Natural Communities Map

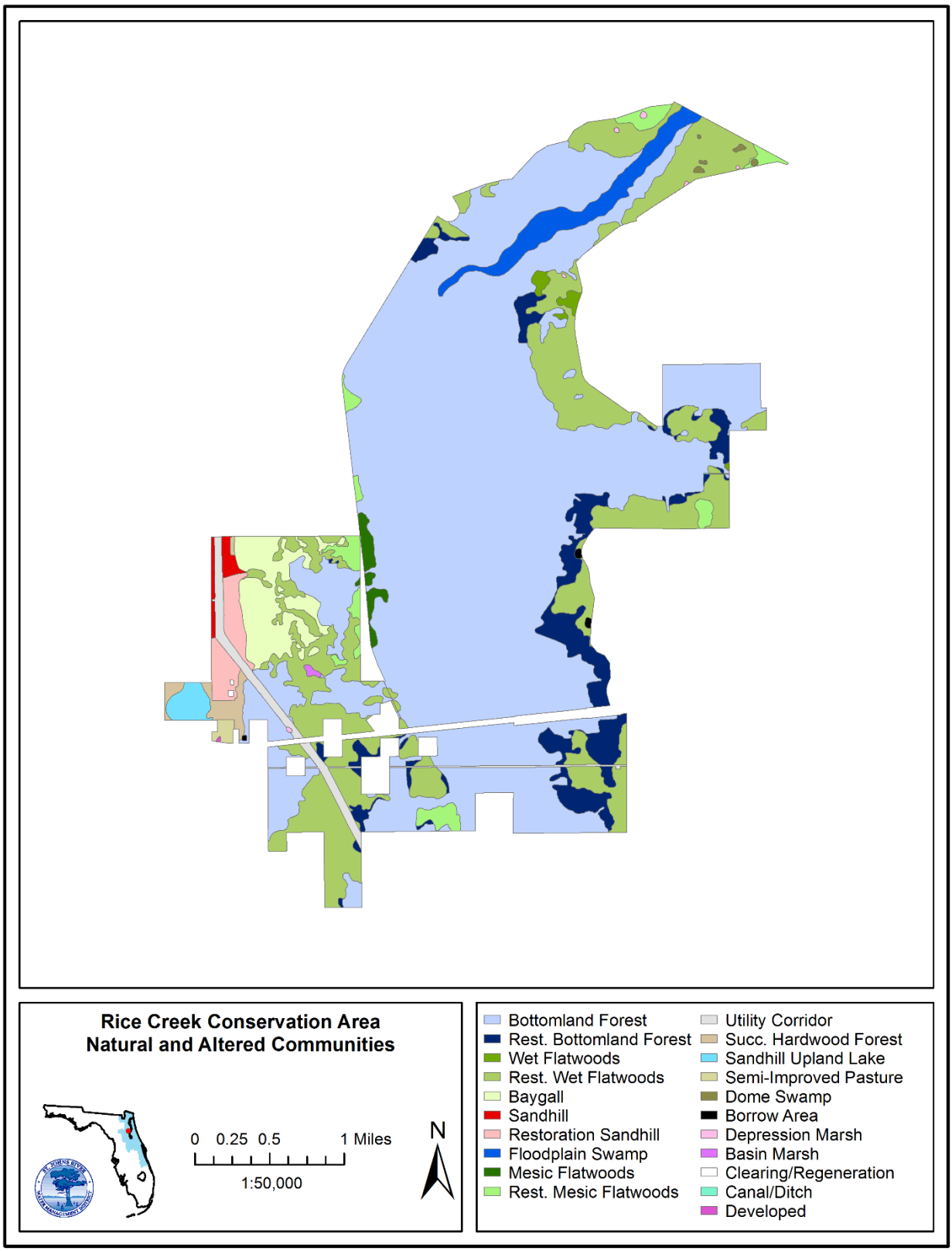

Figure 10: Current Natural and Altered Communities Map

2.3 Plant and Animal Species

The RCCA provides habitat for a variety of plant and animal species. District staff maintain a database of species observations from the Property that are documented by District staff, contractors, volunteers, researchers, recreationists, and others. Some of the more notable plant species documented within the conservation area include white fringetree or old man's beard (*Chionanthus pygmaeus*), mountain azalea (*Rhododendron canescens*), needle palm (*Rhapidophyllum hystrix*), swamp chestnut oak (*Quercus michauxii*), and tulip poplar (*Liriodendron tulipifera*). A comprehensive species list is in Appendix F. District staff has included verified observations documented through citizen science crowdsource providers eBird and iNaturalist in the Property species list.

Numerous animal species rely on the various habitats within RCCA. The Florida black bear (*Ursus americanus floridanus*), which was listed by the FWC as a Threatened species until 2012 when it was considered recovered, is documented within the RCCA. The Conservation Area lies within a critical movement corridor for the Ocala/St. Johns subpopulation of the black bear and links the Ocala National Forest north through Putnam County. The Property contains an optimal range of desirable habitat and seasonal food sources for bears, as well as cover for denning and protection from humans.

As is common throughout Florida, a variety — totaling 43 species — of non-native plants can be found along roads, ditches and otherwise disturbed areas throughout the Property (Table 3). A majority of non-native plants on the Property are ruderal species with little impact on intact natural communities. The District relies on the Florida Invasive Species Council (FISC) for the categorization of invasive plant species. Of the non-native plants on the Property, 15 are designated as FISC category I or II invasives. Additionally, considerable acreage of the Conservation Area was converted to pine plantation historically. This conversion of flatwoods and bottomland forest included planting of off-site pine species, including loblolly (*Pinus taeda*) and sand (*Pinus clausa*) pine.

Table 3: Non-native Invasive Plant Species at RCCA

Scientific Name	**Common Name**	**FISC Category**
Alternanthera philoxeroides	alligatorweed	II
Ardisia crenata	coral ardisia	I
Cinnamomum camphora	camphortree	I
Hydrilla verticillata	hydrilla	I
Imperata cylindrica	cogongrass	I
Lantana strigocamara	lantana	I
Ludwigia peruviana	primrose-willow	I
Lygodium japonicum	Japanese climbing fern	I
Panicum repens	torpedograss	I
Pteris vittata	ladder brake	II
Ricinus communis	castorbean	II
Solanum viarum	tropical soda apple	I
Triadica sebifera	Chinese tallowtree	I
Urena lobata	Caesarweed	I
Urochloa mutica	paragrass	I

Non-native animal species documented at RCCA include Cuban brown anoles (*Anolis sagrei*), brown hoplo (*Hoplosternum littorale*) and wild hog (*Sus scrofa*). The District will continue to document any occurrences of invasive and non-native species found on the Property.

2.4 Listed Species

To date, 15 state or federally listed species have been documented at the Conservation Area (Table 4). Most of the listed species recorded on the site are plant species. State listed plant species are associated with the full range of habitats at RCCA from floodplain to sandhill (FDACS, https://www.fdacs.gov/Consumer-Resources/Protect-Our-Environment/Botany/Florida-s-Endangered-Plants). In addition to the various plants, listed species on the Property include gopher tortoise (*Gopherus polyphemus*), Florida sandhill crane (*Antigone canadensis pratensis*) and wood stork (*Mycteria americana*). Numerous species that are tracked by FNAI are documented to occur at RCCA. Although many of these species are not listed at the state or federal level, these species are generally as rare as—sometimes rarer than—listed species. Species tracked by FNAI, including their rarity ranking, are identified in Appendix F.

Table 4: Listed Species Known to Occur at RCCA

Scientific Name	Common Name	Status
Ctenium floridanum	Florida toothachegrass	SE
Antigone canadensis pratensis	Florida sandhill crane	ST
Egretta caerulea	little blue heron	ST
Mycteria americana	wood stork	FT
Gopherus polyphemus	gopher tortoise	ST
Carex chapmannii	Chapman's sedge	ST
Hartwrightia floridana	hartwrightia	ST
Lobelia cardinalis	cardinalflower	ST
Matelea pubiflora	sandhill spiny-pod	SE
Nemastylis floridana	celestial lily	SE
Osmunda cinnamomea	cinnamon fern	CE
Parnassia grandifolia	large-leaved grass-of-parnassus	SE
Platanthera nivea	snowy orchid	ST
Pteroglossaspis ecristata	giant orchid	ST
Pycnanthemum floridanum	Florida mountain-mint	ST
Rhapidophyllum hystrix	needle palm	CE
Rhododendron canescens	mountain azalea	CE
Sideroxylon lycioides	buckthorn	SE

Acronym	Status	Acronym	Status
CE	State Commercially Exploited	SE	State Endangered
FT	Federally Threatened	ST	State Threatened

At its November 2016 Commission meeting, the FWC approved Florida's Imperiled Species Management Plan (http://myfwc.com/wildlifehabitats/imperiled/plan/), which included changes to the listing status for many wildlife species. Subsequent rule changes (68A-27.003 and 68A-27.005, F.A.C.) have taken place since the Imperiled Species Management Plan was approved and those changes have been incorporated into this Management Plan. All federally listed species that occur in Florida are included in Florida's Endangered and Threatened Species list (https://myfwc.com/media/1945/threatened-endangered-species.pdf) as federally designated Endangered or federally-designated Threatened. Species that are not federally listed, but which have been identified by the FWC as being at some level of risk of extinction, are listed as state-designated Threatened. Additionally, the FWC no longer maintains a separate Species of Special Concern category. This category was reviewed as part of Florida's Imperiled Species Management Plan, with all the species previously contained within the category either being removed from Florida's Endangered and Threatened Species list due to conservation success, or having their status changed to state-designated Threatened.

2.5 Forest Resources

Section 253.036, Florida Statutes, requires the lead agency of state lands to prepare a forest resource analysis, "…which shall contain a component or section…which assesses the feasibility of managing timber resources on the parcel for resource conservation and revenue generation purposes through a stewardship ethic that embraces sustainable forest management practices if the lead management agency determines that the timber resource management is not in conflict with the primary management objectives of the parcel." All forest resource work on the Property is restorative in nature and is designed to aid in the promotion of species diversity and overall natural community health and vigor. The District applies all revenue generated through these forest management activities toward the District's land management budget to offset management costs for the Property.

Forest management activities anticipated during the scope of this plan include forest inventory evaluations, reforestation, and pine thinning within the forested upland natural communities on site — wet flatwoods, sandhill, mesic flatwoods. Additionally, stand conversion to site-appropriate canopy species will be considered as a component of restoration natural community management, when feasible. Additionally, silvicultural bed removal has been practiced at RCCA in the past and will continue to be considered within restoration natural communities. No harvesting is authorized in the forested wetlands except where, through previous land uses, wetlands have been converted to pine plantation, and restoration to the historic land cover will be considered were feasible.

Forest management projects may include various vegetation management techniques including mechanical treatments such as roller chopping and/or mowing, disc harrowing, herbicide applications, and prescribed fire. These techniques may be used singularly or in

combination as site conditions warrant. The District will abide by Florida Silviculture Best Management Practices, Florida Forestry Wildlife Best Management Practices for State Imperiled Species, and FWC Gopher Tortoise Management Plan and target the achievement of appropriate overstory species in proper stand densities as described in the District Forest Management Plan (Appendix G). In addition to planned forest management activities, the District will remove trees as needed in the case of insect infestations, disease, and damage from severe weather, wildfire, or other occurrences that could jeopardize the health of natural communities.

2.6 Native Landscapes

The primary native landscapes at the Conservation Area include bottomland forest, wet flatwoods, baygall, sandhill, floodplain swamp and mesic flatwoods. Native landscapes are described in more detail in the Natural Communities section (Section 2.2).

2.7 Water Resources

This section describes the surface and groundwater resources of RCCA.

a. Surface Water Features

The Rice Creek Conservation Area is largely covered by the Rice Creek Swamp, a hardwood bottomland forest that is the headwater of Rice Creek and Little Rice Creek. A small portion of Rice Creek and Rice Creek Swamp extend south of SR 20. The streams of Oldtown Branch, Palmetto Branch, and Hickory Branch flow into the parcel's western border delivering runoff from adjacent parcels (Figure 11).

Water flows northward through the Conservation Area via a small number of historic canals and natural stream beds. A single canal flows directly northward through most of the parcel, then to the northeast where it joins with Oldtown Branch and Palmetto Branch before exiting the parcel at SR 100 in a more natural flow path. A historic levee abuts this canal between where it joins Oldtown and Palmetto branches, creating an additional canal and a partially isolated, rectangular area of swamp between them, though there are many areas where water is exchanged over the levee. A portion of Palmetto Branch is directed parallel to the northeastern path of Rice Creek via canal before the two join just before exiting the parcel. During the dry season it is possible for the canal and stream beds to run dry.

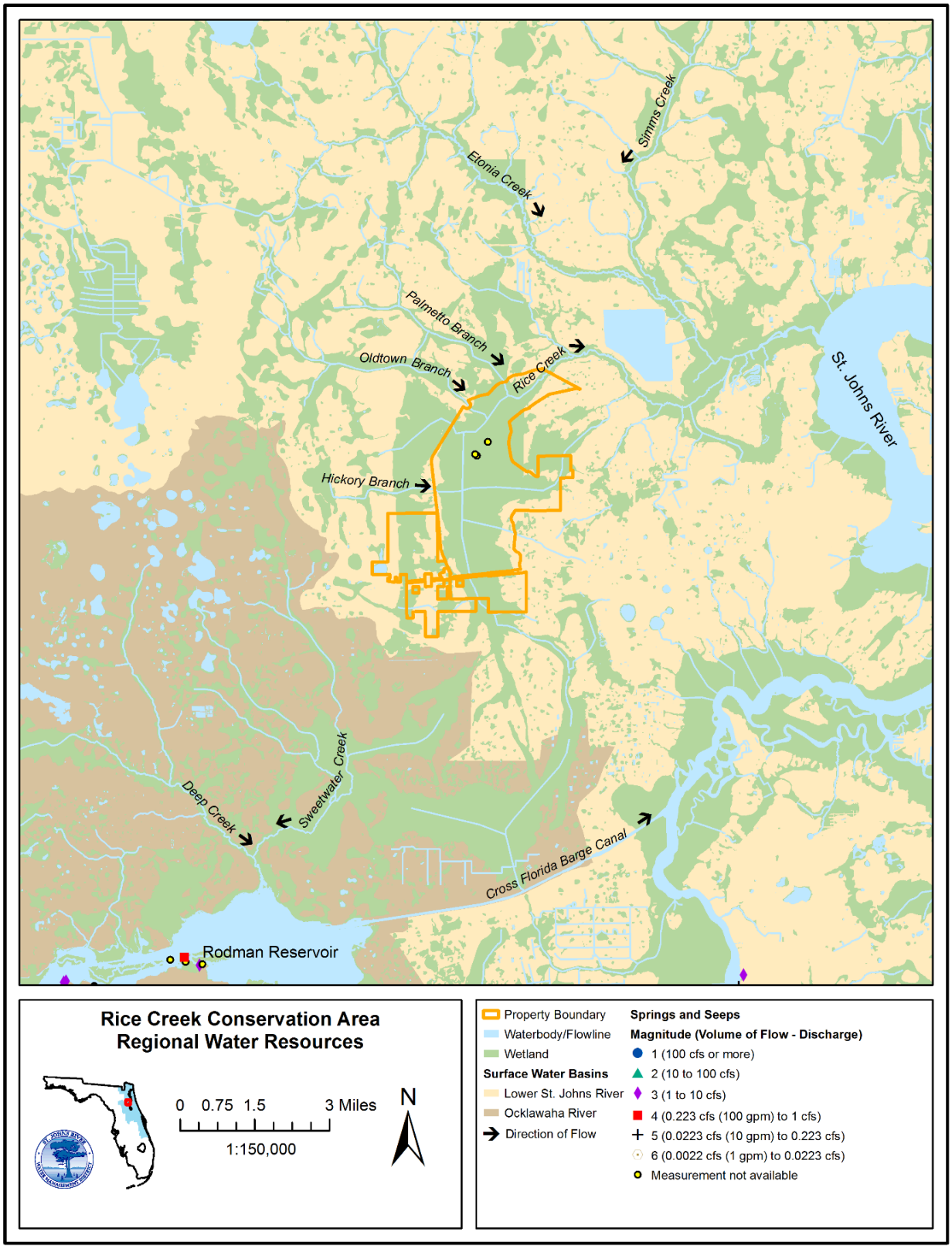

Figure 11: Water Resources Map

Rice Creek and Little Rice Creek flow northeast from the Conservation Area for approximately two miles before merging. The creek continues east for three more miles and subsequently combines with Etonia Creek – Rice Creek's largest tributary with a comparatively large watershed -- then ultimately discharges into the St. Johns River. Due to the shallow slope and lacustrine characteristics of the St. Johns River, tidal forcing can reverse the flow of Rice Creek, resulting in the exposure of Rice Creek Swamp to downstream conditions.

Three springs have been identified by the District in the north-central portion of the RCCA. These are Indigo Spring, sourced to the Upper Floridian Aquifer, and two unnamed, unsourced springs nearby to the southwest.

In 2011, a restoration plan was developed for the previous private landowners of the Nine Mile Swamp tract. The plans intended to remove fill material, fences, and culverts in addition to regrading multiple areas to restore the natural flow of the wetland.

b. Surface Water Designations and Planning

The Rice Creek Conservation Area does not include any Outstanding Florida Water Bodies and is not located within an Aquatic Preserve or an Area of Critical State Concern (Chapter 380.05, Florida Statute).

The RCCA is entirely within the Etonia Creek planning unit. Rice Creek is not currently listed as a 303(d) impaired waterbody, though it is a part of the Lower St. Johns River (LSJR) mainstem Total Maximum Daily Load (TMDL) and Basin Management Action Plan (BMAP). Simms Creek, a tributary of Etonia Creek and Rice Creek, is impaired for lead (2014) and fecal coliform (2019). Due to inputs downstream of the RCCA, Rice Creek has been identified as a significant source of nutrients and pollution to the LSJR. Rice Creek Swamp and the RCCA serve as largely pristine headwaters for the creek.

c. Water Quality Status and Monitoring

The District has two monthly monitoring stations in Rice Creek, RCBDN and LSJ918 (Figure 12). RCBDN is located near the eastern outflow into the St. Johns River mainstem, downstream of where Rice Creek converges with Simms and Etonia creeks. LSJ918 is at the northern edge of the Rice Creek Conservation Area, upstream of these convergences and the former wastewater discharge site for Georgia-Pacific paper mill. A bimonthly station, SIM, is also located to the north in Simms Creek, a tributary of Rice Creek downstream of the RCCA.

Of these sites, RCBDN and SIM were assessed in the District's 2022 Status and Trends Report, which is a 15-year assessment that uses data from January 1, 2007, to December 31, 2021. Water quality is an indication of the condition of a water body, and this report presents the status of several important parameters over a 15-year period. Trends show whether the five-year median value of the water quality parameter is increasing or decreasing over time (District, 2022 Status and Trends Report). LSJ918 is not included in the Status and Trends Report so the statistical methods of the report were repeated independently for analysis of this site. Water chemistry data are typically collected monthly. Field data including water

temperature, pH, specific conductivity, and dissolved oxygen (DO) are collected, as well as grab samples analyzed for nutrients, minerals, and metals. Water chemistry parameters discussed in this section include three productivity related parameters, including Total Phosphorus (phosphorus), Total Nitrogen (nitrogen), and Chlorophyll-a (Chl-a), as well as DO, and Total Suspended Solids (TSS), a measure of water clarity. These parameters are discussed in relative terms for the past 15-year period as described in the 2022 Status and Trends Report and listed in Table 5.

RCBDN
Phosphorus is in the mid-range and has declined at a rate of 2.9% each year over the past 15 years. Nitrogen is in the mid-range and has declined at a rate of 2.4% each year. Chl-a is in the mid-range and is declining at a rate of 4.8% each year. DO is in the low-range and has declined at a rate of 1.5% each year. TSS is in the mid-range and has decreased at more than at a rate of 4.5% each year.

LSJ918
Phosphorus is in the low-range and has remained stable over the past 15 years. Nitrogen is in the low-range and has remained stable. Chl-a is in the low range and has increased at a rate of 0.3% each year. DO is in the mid-range and has remained stable. TSS is in the mid-range and has decreased at a rate of 3.6% each year.

SIM
Phosphorus is in the low-range and has increased at a rate of 1.5% each year over the past 15 years. Nitrogen is in the low-range and has increased at a rate of 2.6% each year. Chl-a is in the low-range and has remained stable. DO is in the mid-range and has remained stable. TSS is in the low-range and has remained stable.

Hydrologic and Groundwater Monitoring
The District does not maintain any hydrologic or groundwater monitoring stations in the RCAA or Rice Creek.

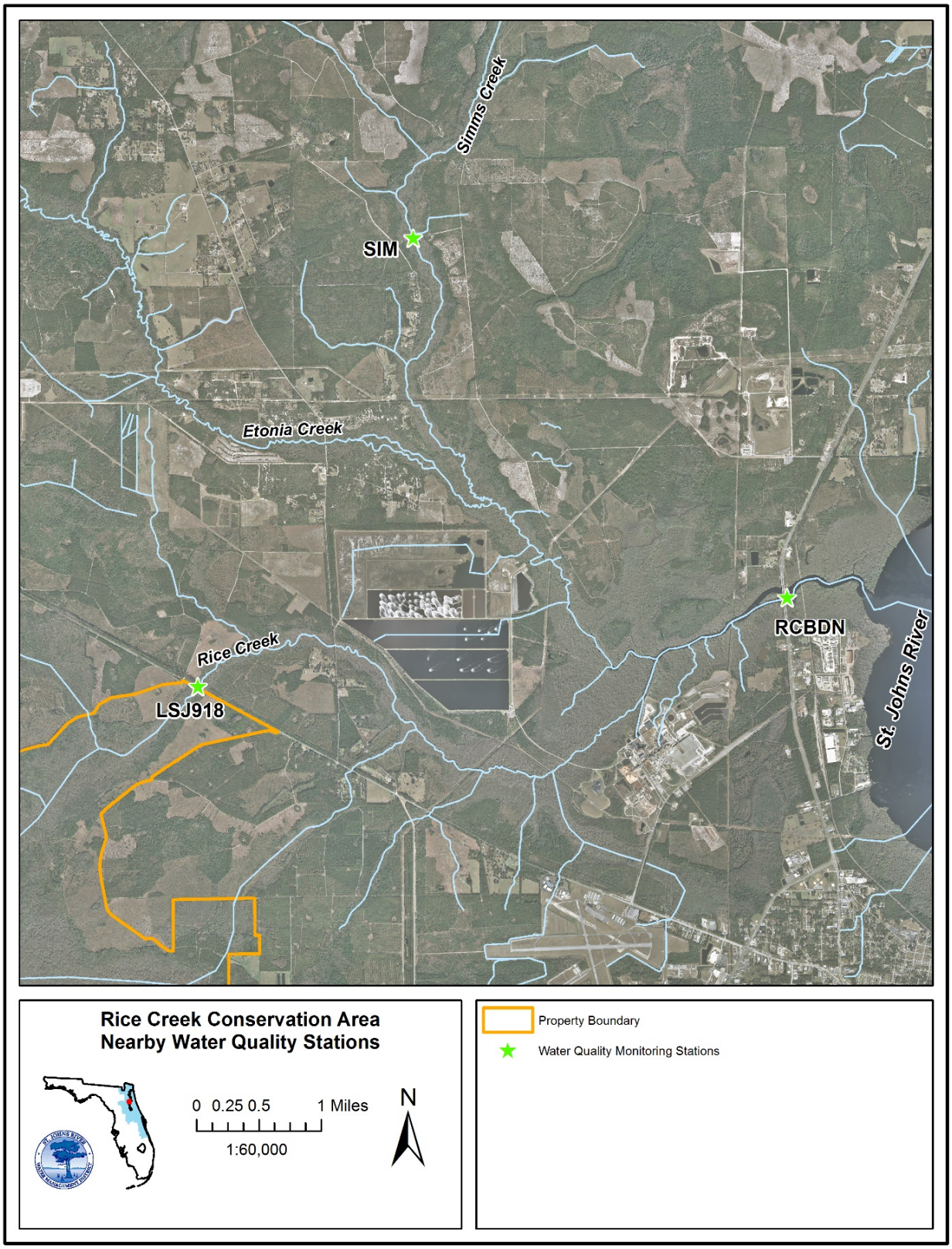

Figure 12: Water Quality Stations Map

Table 5: Water quality trends occurring near RCCA
Arrow color indicates whether median values are low, medium, or high relative to each other and not a specific water quality standard. Light blue = low-range value, dark blue = mid-range value (no sites were within the high range). Arrow direction shows the trend for each parameter as decreasing (⬇), increasing (⬆), or stable (➡).

Station	TP (mg L^{-1})	TN (mg L^{-1})	Chl-a (μg L^{-1})	DO	TSS (mg L^{-1})
RCBDN	.853 ⬇	1.096 ⬇	3.107 ⬇	5.06 ⬇	3.2 ⬇
LSJ918	0.060 ➡	0.795 ➡	< 1.00 ⬆	6.40 ➡	4.0 ⬇
SIM	.313 ⬆	0.563 ⬆	< 1.00 ➡	6.43 ➡	< 2.0 ➡

2.8 Beaches and Dunes

There are no beaches or dunes within the Property.

2.9 Cultural Resources

The Bartram expedition paddled up Rice Creek in 1766. From their journal entries, historians approximate that they would have nearly reached the land that is now RCCA. Although Rice Creek has almost certainly been host to some level of human occupation for hundreds, if not thousands, of years, there is currently only one documented Florida Master Site File (FMSF) resource located on RCCA. The site currently documented within the FMSF is the remains of an 18th-century rice and indigo plantation. The District will consult with the Florida Department of State, Division of Historical Resources (DHR)before taking actions that may adversely affect archeological or historical resources.

The District will conduct land management activities in a manner that will provide protection for cultural resource sites and serve to reduce the potential for adverse impacts. To meet this end, District staff have been collaborating with archaeological professionals from the Florida Public Archaeology Network (FPAN) to assess known and record previously undocumented sites. If District staff discovers any additional sites, staff will document and report those sites to the DHR. Additionally, detrimental activities discovered on these sites will also be reported to the DHR and appropriate law enforcement agencies. The locations of the cultural resource sites are not identified on public maps.

2.10 Scenic Resources

Scenic resources at Rice Creek Conservation Area are subtle but unique and worthy of mention. The historic rice and indigo impoundment levee offers a rare opportunity to immerse oneself in an expansive forested wetland without getting wet feet. The Rice

Creek bottomland wetland is host to several large bald cypress trees. A remnant stand of intact sandhill on the Nine Mile Swamp tract exhibits rare native beauty.

3. Uses of the Property

3.1 Previous Use and Development

The Conservation Area has undoubtedly been used by human populations since pre-European colonization. However, little of the exact historic land uses are on record. No known prehistoric cultural resource sites are present on the Property. Signs of potential agricultural production dating back to the 18th century is present, although this use is poorly documented. A large ditch/canal was excavated through the length of the Rice Creek bottomland forest sometime prior to the acquisition of aerial imagery in the 1940s. Immediately prior to District acquisition, much of the upland and wetland edges of the Property were managed for silvicultural timber production.

3.2 Purpose for Acquisition

The parcels of Rice Creek Conservation Area were acquired to contribute to the protection of the Florida Forever Etoniah/Cross Florida Greenway Project, water quality and quantity within the Rice Creek watershed and, by extension, protection of the St. Johns River. Land was also acquired to expand a wildlife corridor that was purchased as mitigation for the FDOT widening of SR 20. All District land at RCCA is designated as acquired for conservation purposes pursuant to Section 373.089, F.S.

3.3 Single or Multiple-Use Management

The potential of the Property to accommodate multiple uses was analyzed in accordance with Subsection 253.034(5) F.S. The Conservation Area is managed under the multiple-use concept. Timber harvesting as part of the Property's natural community management and restoration activities can be done in a manner that does not interfere with the primary purpose of natural resource conservation and resource-based outdoor recreation. Extraction of mineral resources is incompatible with conservation land uses.

All of the current uses and activities within the Property are in accordance with the purposes of acquisition, the District's mission, and the Conceptual State Lands Management Plan. During the planning process for this plan, it was determined that no additional uses and activities would be considered at this time.

3.4 Surplus Acreage

Pursuant to Section 373.089, Florida Statutes, the District may surplus land no longer needed for the purpose for which it was acquired. Some examples of when the District may surplus land include, but are not limited to:

- Property purchased as part of a larger acquisition and surplus portion is not needed for District purposes but was required to complete the larger acquisition.
- Original project for which the property was purchased was ultimately not built.

- Property is part of a broader patchwork of conservation ownership managed by another agency or local government, and the surplus is to transfer the ownership to the entity managing the adjacent property. The conservation purposes are maintained.
- Actions by adjacent owners that lower the property's conservation values or increase management costs.

As with all decisions associated with land ownership, any surplus of District property requires the approval of the District's Governing Board. If the property in question was originally purchased for conservation purposes, the Governing Board shall determine that the land is no longer needed for conservation purposes and may then dispose of the land by two-thirds vote (Art. X, §18, Fla. Const. and § 373.089, F.S.).

There are no surplus lands identified, nor has any surplus action taken place, on land owned by the Board of Trustees.

4. Management Activities and Intent

The following section describes how the District has managed and plans to continue managing the diverse natural and cultural resources at the Conservation Area. The general goals guiding management of the Property include:

- Maintain water quality, natural hydrological regimes, and flood protection by preserving important ecosystems, especially floodplain wetland areas.
- Restore, maintain, and protect native natural communities and diversity.
- Maintain and protect cultural resources.
- Provide opportunities for resource-based recreation where compatible with the above listed goals.

4.1 Land Management Review (Management Review Team)

The District has conducted two RCCA Management Review Team (MRT) meetings since the 2009 land management plan — one in December 2014 and one in March 2021. The consensus for both MRTs was that the Conservation Area is being managed for the purposes for which it was acquired, it is being managed in accordance with its approved management plan, and the current management plan provides sufficient protection to the Property's natural and cultural resources. Moving forward, the goal is to conduct MRT meetings for RCCA every five years.

4.2 Habitat Restoration and Improvement

The acquisition of the Plum Creek-Rice Creek parcel was accomplished in part using FDOT funds, which partially fulfilled FDOT mitigation requirements for roadway improvement projects. The remaining mitigation involved the enhancement of onsite wetlands. In 2006, the District's Division of Environmental Resource Management conducted restoration activities within an approximately 60-acre portion of what is currently delineated as bottomland forest. The scope of this project included selective mowing/mulching of sapling loblolly pine that was aerially seeded into the site in 1998, selecting for site appropriate hardwoods. The project also included the mulching of

various weedy shrubs and vines and was conducted in strips throughout the project area. The project totaled approximately eight acres of mowed vegetation within the project area.

The District continues to conduct habitat restoration and improvement actions at the Conservation Area. The primary focus in recent years has been improvement of vegetative composition and structure within historic pine flatwoods natural communities. The goal of habitat management is to restore and maintain the historic wet and mesic flatwoods in a condition that provides appropriate ecosystem service functions. Habitat restoration projects have included the leveling and removal of silvicultural beds, conversion of loblolly and slash stands to longleaf pine, and application of prescribed fire.

4.3 Prescribed Fire and Fire Management

Fire is a vital factor in managing the character and composition of vegetation in many of the natural communities in Florida. The District's primary use of fire is to mimic natural fire regimes to encourage the native pyric natural communities and dependent wildlife. Additionally, the application of fire aids in the reduction of fuels and minimizes the potential for catastrophic and damaging wildfires. The upland natural communities within the Property were historically fire-adapted, making prescribed fire an important tool for use in the restoration and maintenance of natural communities within the Conservation Area. The regular application of fire within prescribed intervals keeps successional woody vegetation in check thus increasing water availability as shrubs have higher evapotranspiration rates than herbaceous communities.

Since 2009, District staff have conducted nine prescribed fires totaling 739 acres within the Conservation Area. Figure 13 depicts the fire management units (FMU), and Table 6 illustrates the prescribed fire history at the Property since 2009.

Approximately 1,436 acres of historically fire-maintained natural communities are located within the Conservation Area. This accounts for about 23% of the Property land area. Prescribed fire operations at the Conservation Area have been focused on flatwoods that are undergoing active restoration. Without intermediary restoration actions — especially ground leveling — applying fire to much of the historic flatwoods at the Property is challenging due to the presence of silvicultural beds and high tree density. Additionally, applying prescribed fire to much of the Property, especially at the Nine Mile Swamp tract, is complicated by the mixture of pyric and non-pyric systems onsite.

Historically, most fires occurring on the Property were ignited by lightning during the growing season. The District intends to utilize growing season fires when possible, understanding that constraints in some areas such as organic soils and proximity to smoke sensitive areas may require the use of dormant season burning. While prescribed fire is the preferred tool for restoration and maintenance within the Property, it may be necessary to implement alternative methods. The District utilizes vegetation management

techniques, such as mowing and roller chopping in combination with fire, as part of an integrated approach to create and maintain desired conditions.

A system of condition class measures was originally developed by The Nature Conservancy and the U.S. Forest Service in 2003 as an effort to assess ecosystem health. It was designed as a Fire Regime Condition Class (FRCC), and it is based on a relative measure describing the degree of departure from the historical natural fire regime of a given system. This departure results in changes to one (or more) of the following ecological components: species composition, structural stages, stand age, canopy closure, or mosaic pattern. The District adapted the system in 2008 to measure ecosystem health and therefore land management effectiveness.

Annually, each FMU is assigned a condition class score based upon the most recent disturbance and the fire frequency recommended for that natural community by FNAI. If FNAI recommends a fire return interval of three to five years, a natural community that has benefited from disturbance in the past five years is in condition class 1. For natural communities such as sandhill and flatwoods that require frequent fire, burning only often enough to meet condition class 1 is a minimum benchmark for adequate management; optimal management of these communities requires most fires to be at the shorter end of FNAI's recommended fire return interval. If it has been more than five years but less than 10 years, or two cycles, the zone is in condition class 2. If it has been more than two times the fire return interval, but can still be recovered by fire, it would fall into condition class 3. If the natural community has gone without disturbance so long that fire alone can no longer restore the area, it is in condition class 4. District staff will make annual condition class assessments and incorporate them into annual burn planning and work planning processes. In 2023, the condition class distribution of the Conservation Area’s habitats was 17% condition class 1; 11% condition class 2; 71% condition class 3, and 0% condition class 4 (Figure 14). The percent acres in condition class 3 increased greatly in 2023 due to addition of the Nine Mile Swamp Tract — which has not received any resource management in many years — to the Property.

All implementation of prescribed fire within the Property will be conducted in accordance with the District’s Fire Management Plan, the Conservation Area Fire Management Plan (Appendix H), and the annual burn plan for Rice Creek Conservation Area.

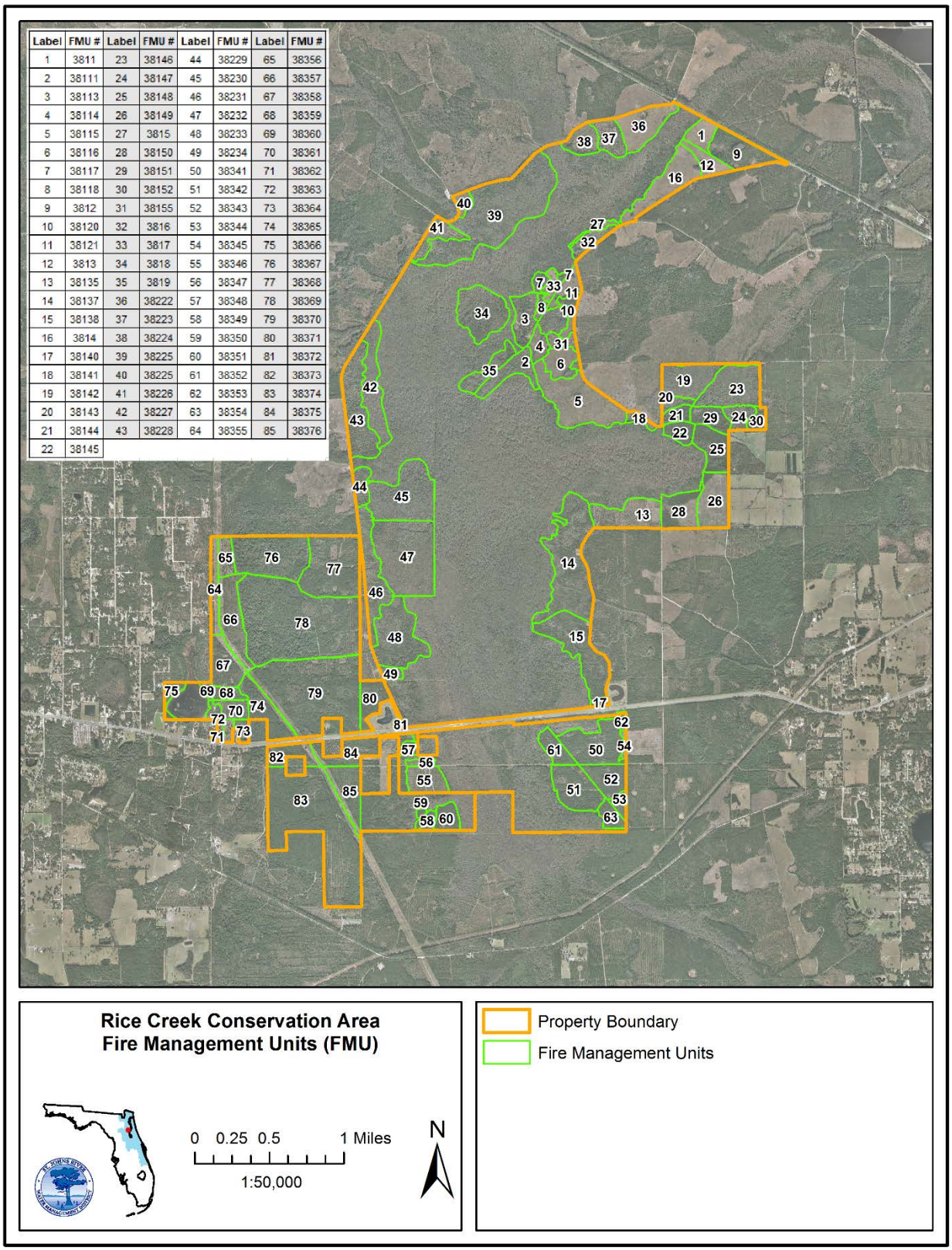

Figure 13: Fire Management Units Map

Table 6: Prescribed Fire History Since October 2009

FMU #	Acreage	Burn Dates
3811	19	January 2018
3812	46	January 2016, January 2018
3813	20	January 2018, February 2023
3814	57	May 2015, January 2018, February 2023
3816	17	November 2011
38113	31	November 2011
38114	14	November 2011
38120	23	December 2013
38148	36	October 2011
38223	26	October 2009
38225	181	February 2021
38226	24	February 2021
61018	65	November 2011

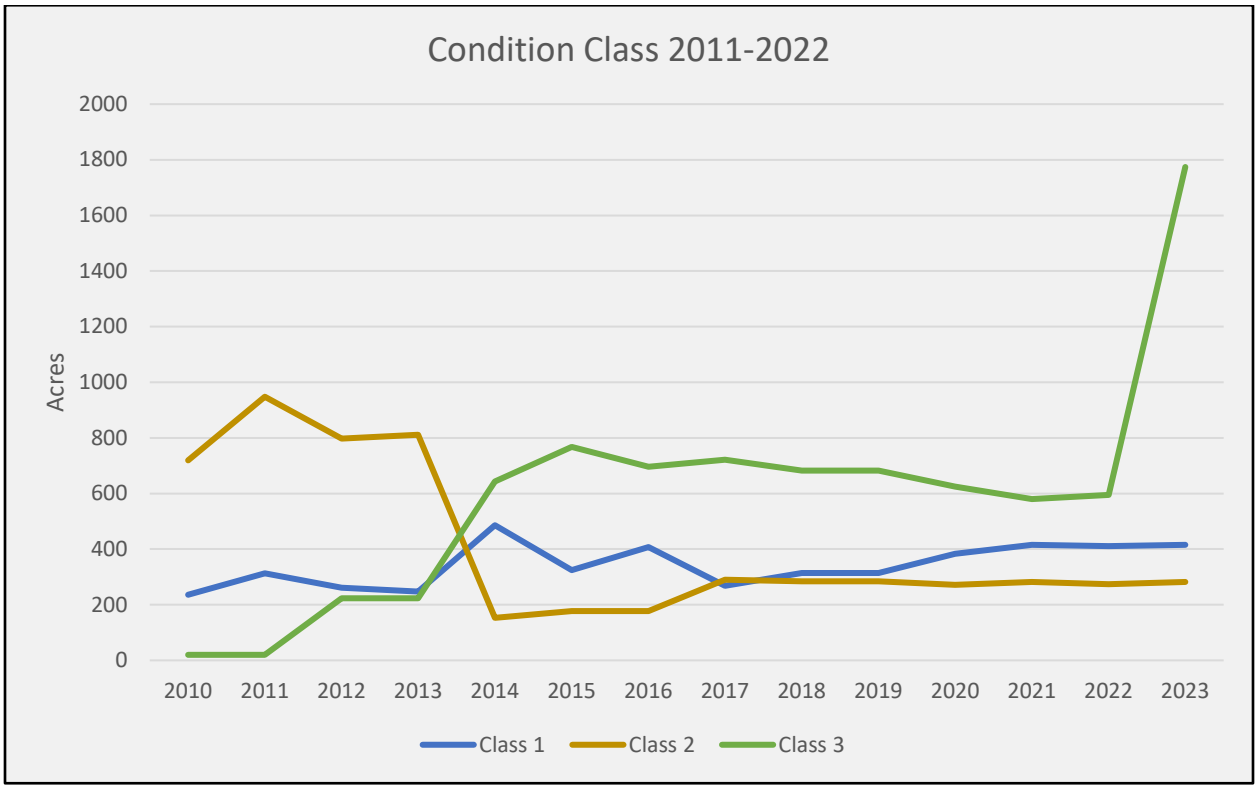

Figure 14: Condition Classes from 2010 to 2023

4.4 Listed Species

To date, 15 listed species have been recorded at Rice Creek Conservation Area. Most of the listed species recorded on the site are plant species. These plant species are associated with the full range of habitats at the site. A brief discussion follows for the notable listed species documented on the Property. Table 4 contains a record of listed species documented within the Conservation Area. The District will continue to collaborate with FWC, USFWS and other relevant organizations to monitor listed species populations and adapt management to best meet listed species needs. When conducting activities that may impact listed species the District will utilize all relevant management guidelines including, but not limited to, the FDAC's Forestry Wildlife Best Management Practices for State Imperiled Species; FWC's Species Action Plans (https://myfwc.com/wildlifehabitats/wildlife/species-action-plans/) and Gopher Tortoise Management Plan.

Gopher Tortoise

The gopher tortoise (*Gopherus polyphemus*), a State Threatened species, occurs within Rice Creek Conservation Area. This species is typically found in dry upland habitats, such as sandhill, scrub, and pine flatwoods. Gopher tortoises excavate deep burrows and are considered a keystone species because their burrows provide refuge for more than 300 animal species. Management activities within the pine flatwood communities of the Property will focus on restoring species composition that will benefit the gopher tortoise.

Rice Creek Conservation Area is not suitable as a gopher tortoise recipient site. While not in conflict with the conservation management purpose of the Property, the Conservation Area's poorly drained soils and restoration natural community site conditions do not provide adequate habitat following FWC's Gopher Tortoise Permitting Guidelines (FWC 2023).

Wood Stork

The wood stork (*Mycteria americana*) is a State and Federally Threatened species that has been documented on the Property. This large wading bird forages in the wetlands found on the Property. The conservation of these wetlands through acquisition, hydrologic restoration efforts, and water quality improvement provide opportunities for the wood stork to continue to recover.

4.5 Exotic and Invasive Species Management and Control

Several non-native invasive plants occur within the Conservation Area including Japanese climbing fern (*Lygodium japonicum*), camphor (*Cinnamomum camphora*), cogon grass (*Imperata cylindrica*), and Chinaberry (*Melia azedarach*). Invasive species control is necessary to inhibit the continued proliferation of non-native plants and integral in the maintenance and restoration of natural communities. While it is unlikely that the District will entirely eradicate invasive plants within the Conservation Area, achieving maintenance control of such species is targeted within the scope of this plan. The property is regularly monitored and treated as necessary. All known invasive plant populations are tracked within the District's invasive plant management database.

District staff survey, map, and monitor non-native invasive plant populations at RCCA. The District implements two types of vegetation management programs, recurring and restoration. Recurring activities are those implemented to maintain hydrologic conveyance through waterways and structures or levees where an accumulation of vegetation would harm the District's ability to carry out a core mission. Restoration management is associated with limited activities aimed at converting one plant community to another and then ultimately maintaining the new community with fire.

The District utilizes a GIS database to track and monitor invasive plant occurrences. A list of FISC category I and II plants known to occur at RCCA is shown in Table 3. A comprehensive species list of all known non-native plants and animals is in Appendix F. A variety of integrated pest management techniques, including chemical, mechanical, and cultural, are employed in management of invasive plants. The District's Invasive Plant Management Program staff have developed and implemented a treatment schedule for all documented occurrences. All known occurrences of FISC Category I and II invasive plants at the Property will continue to be monitored and treated as necessary.

Feral hogs (*Sus scrofa*) and their ground-disturbing activity continue to pose a threat to the natural and cultural resources of the Conservation Area. The District has maintained and plans to continue a Special Use Agreement for control of feral hogs on the Property.

4.6 Public Access and Recreational Opportunities

Rice Creek Conservation Area is managed under a low-intensity, multiple-use concept that includes providing areas for resource-based public outdoor recreation compatible with the protection of the area's natural resources. The recreation activities offered on the Property include hiking, bicycling, wildlife viewing, equestrian activities, hunting, and primitive camping.

A public parking area is available immediately south of SR 100. Additionally, west of the Rice Creek bridge on the north side of SR 100, a public parking area provides non-motorized access to the Conservation Area via a connection to the Palatka-to-Lake Butler State Trail and Florida Trail.

Two privately owned roads — one along the eastern, the other along the western boundary — provide access to the Property through two separate agreements. The western boundary road may be utilized by District staff and approved contractors to provide access to the Conservation Area for management purposes. This road is not available for public access. The eastern boundary road is accessible from SR 100 for both management purposes and non-motorized public recreational access.

Several interior roads intersect the privately owned and maintained boundary roads. These interior roads generally terminate in the Rice Creek Swamp and do not provide contiguous access across the Property. District-managed interior roads will be regularly inspected and receive maintenance and repair as necessary and may be subject to closure during these times. Figure 15 depicts the location of the parking area, gates, and roads on the Property.

Currently, with the exception of the Nine Mile Swamp tract, the entire Conservation Area is open to the public for recreational purposes. A 6-mile marked loop trail system is established on the Conservation Area and incorporates portions of the Florida Trail system. The Florida Trail system extends approximately 6.2 miles through the Conservation Area. The District, in cooperation with the Florida Trail Association (FTA), constructed several footbridges, a spur boardwalk trail and viewing platform. The boardwalk trail extends from the main levee trail approximately 180 feet to the viewing platform, which overlooks the Rice Creek swamp and one of the old growth cypress trees known to occur within the conservation area. The FTA also constructed a small camp shelter, known locally as the "Rice Creek Hilton," on the Florida Trail. The District maintains rules that apply to camping (https://www.sjrwmd.com/static/permitting/40C-9.pdf), Rule 40C-9.300, F.A.C. Under the terms outlined in a Certification Agreement (Appendix I), the FTA is responsible for maintaining footbridges, boardwalks, FTA trails and camp shelter in cooperation with the District.

The remainder of trails not maintained by the FTA are maintained through a trail maintenance contract. The contract provides for semi-monthly maintenance that includes mowing and maintenance of overhanging vegetation on established trails, and annual kiosk cleaning and re-marking of existing trail-blazes to delineate the designated trail route.

The District's RCCA recreation map (Figure 16) is updated as needed. This map is georeferenced. Access to the RCCA recreation map is available through the District's website. The map will be updated to included Nine Mile Swamp upon opening the tract to public recreation.

A conceptual plan for public access and recreation on the Nine Mile Swamp tract has been developed. This plan includes a public parking area on SR 20 and 3 miles of hiking trails that highlight the intact sandhill natural community on site, Figure 17. Public recreational access to the Nine Mile Swamp tract will be implemented within the term of this plan.

Portions of the Conservation Area south of SR 20 are incorporated into the Caravelle Ranch Wildlife Management Area (CRWMA), Figure 18. The District may consider expanding hunting opportunities to include additional portions of the RCCA in cooperation with FWC.

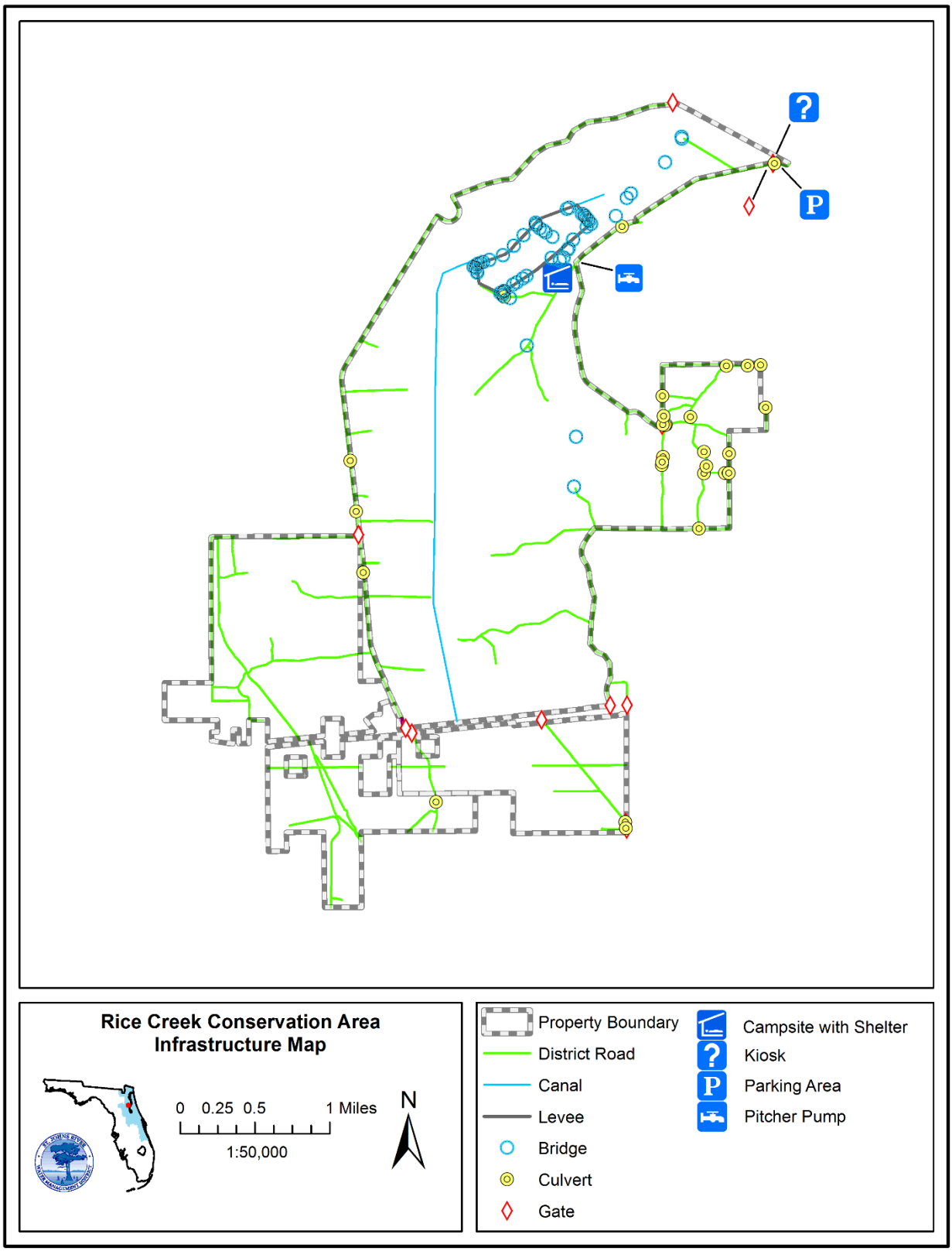

Figure 15: Infrastructure Map

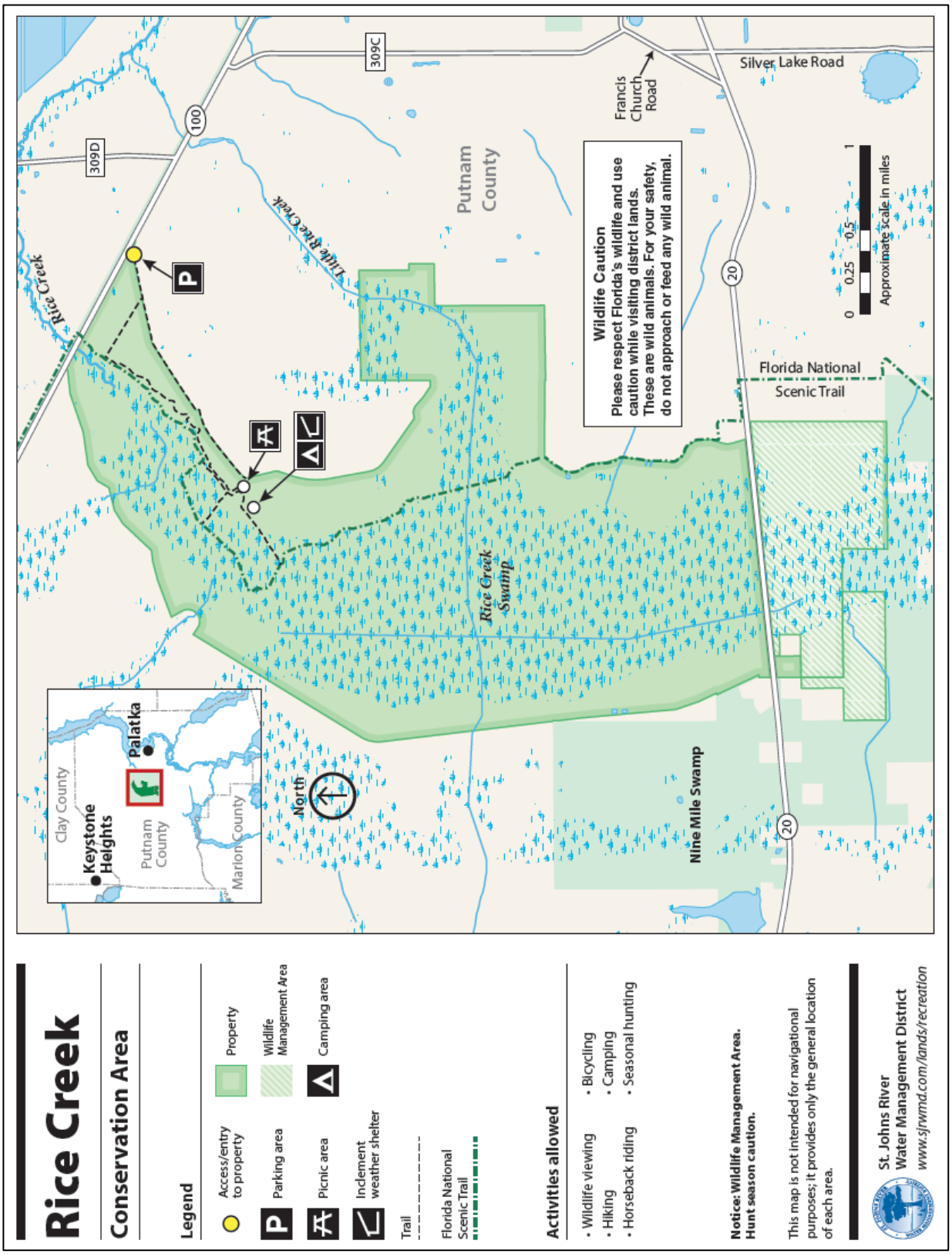

Figure 16: Recreation Map

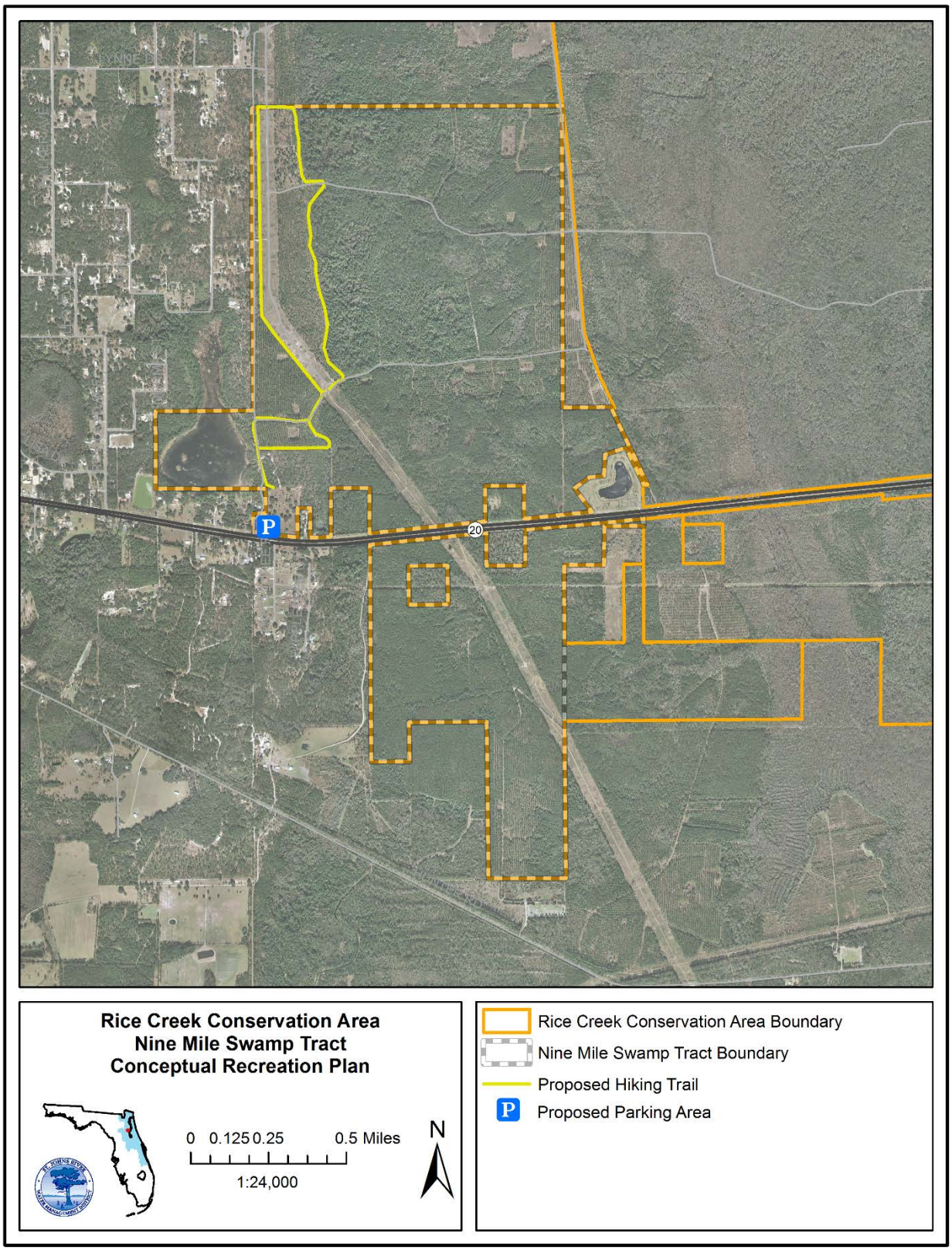

Figure 17: Nine Mile Swamp Tract Conceptual Recreation Plan Map

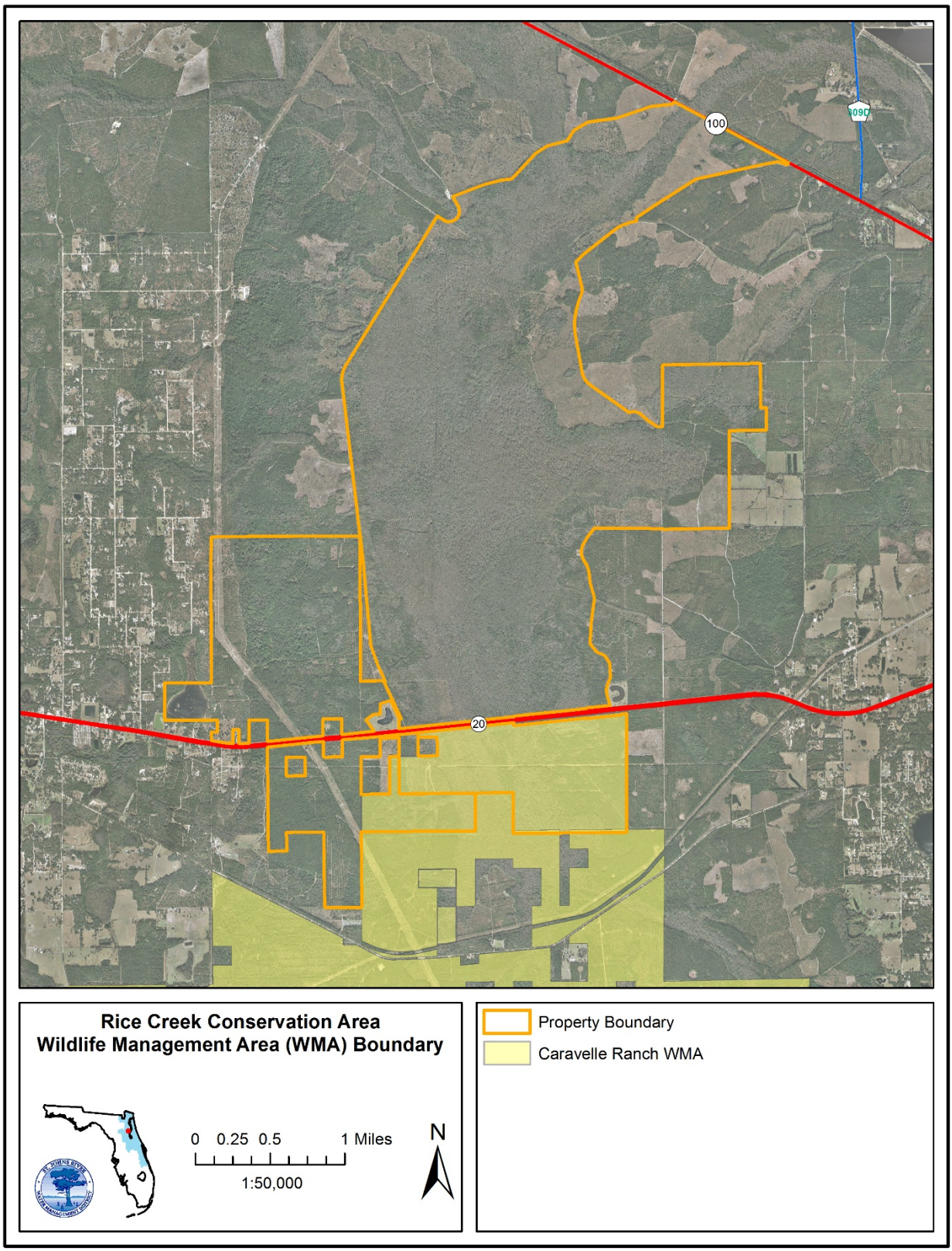

Figure 18: Caravelle Ranch WMA Boundary Map

4.7 Hydrological Preservation and Restoration

While most wetlands protection was accomplished through acquisition, portions of the wetlands and surface waters within the RCCA are disturbed. Hydrologic disturbances within the Conservation Area include roads, tram roads, ditches, culverts, and silvicultural beds.

Roads and associated ditches exist on all parcels within the RCCA, providing access for both management and recreation. The District continues to make improvements to roads within the Property, helping to reduce the potential for associated drainage and erosion.

A canal is located in the central portion of the Property and extends north/south for approximately three miles north of SR 20. The canal was most likely installed between 1916 and 1944. This construction date is based on the canals absence from the 1916 U.S. Geological Survey (USGS) map and their presence on the 1944 USGS map. Interestingly, it also appears that much of the road network on the Property was constructed during this period — suggesting that logging of the Rice Creek Swamp occurred between 1916 and 1944. Similarly, there are remnant levee and ditch systems associated with indigo and rice plantations of the late 1700s. These disturbances appear to have little effect on swamp function. The Rice Creek Swamp has been colonized by site-appropriate species. It is assumed that any restoration attempts would prove to be more detrimental than the existing disturbances.

A conceptual restoration plan for the Nine Mile Swamp tract was conducted prior to the District acquiring management responsibility (Appendix J). The District is not obligated to implement any of the measures outlined in this restoration plan. The District will assess the feasibility and potential benefits of projects identified in the Nine Mile Swamp restoration plan. Projects to restore the hydrology of the Nine Mile Swamp tract will be implemented as appropriate.

Most of the upland acreage within the Conservation Area is former commercial silviculture sites and, as such, some of the acreage was bedded prior to planting. Bedding is a method of site preparation that includes a series of linear mounds and alternating trenches. Primary objectives of bedding are to elevate seedling root systems out of the water into mounds where the concentrated nutrients are readily available. Bedding is also used to reduce competition for newly planted trees. The trenches associated with bedding have the potential to channel water and are detrimental to the sheetflow of water across the Property. As resources allow, silvicultural bed removal and subsequent natural community restoration may be pursued.

4.8 Forest Resource Management

Section 253.036, Florida Statutes, requires the lead agency of state lands to prepare a forest resource analysis, "…which shall contain a component or section…which assesses the feasibility of managing timber resources on the parcel for resource conservation and revenue generation purposes through a stewardship ethic that embraces sustainable forest management practices if the lead management agency determines that the timber resource management is not in conflict with the primary management objectives of the parcel."

The management objectives of this Property will require pine harvesting. Primary objectives of harvesting on the RCCA are restorative in nature and are to improve species diversity and the overall natural community health and vigor. All revenue generated through forest management is applied toward the District's Bureau of Land Resources budget to offset management costs for the Property.

Prior to public acquisition, all parcels within the Conservation Area were utilized to some extent as commercial silviculture operations. Most of the uplands were bedded and planted in either slash or loblolly pine. Additionally, some areas have been seeded with loblolly and longleaf pine. Within the Nine Mile Swamp tract, portions of the sandhill natural community have been planted with sand pine (*Pinus clausa*). As a result of these and other silvicultural management activities, much of the upland — and to a lesser degree portions of the bottomland — forest lacks characteristic natural community attributes. Hence the characterization of restoration natural communities on the Property. As forest resource management is pursued on the Property, efforts will be made to enhance and restore natural community attributes within these stands.

The initial acquisition (Plum Creek-Rice Creek) of the Conservation Area was purchased subject to a timber reservation. The previous landowner reserved the right to manage and harvest timber from 1,049 acres, accounting for a majority of the upland portions of the original acquisition. The final reservation ended on December 31, 2016. All forest stands have been transferred to the District for management.

The acreage subject to the timber reservations and subsequently clearcut by Plum Creek Timber Company, provided District staff the opportunity to conduct restoration activities — silvicultural bed removal and species transition from slash pine and/or loblolly pine to longleaf pine. District staff will continue to evaluate the potential of areas to be reestablished in longleaf pine and associated flatwoods vegetation. Figure 19 depicts the extent of planted and seeded pine by species across the Conservation Area. Some loblolly pine will be left in areas historically dominated by a hardwood/pine mix, primarily the bottomland forest.

The RCCA is partitioned into forest management compartments and each compartment is further divided into stands. Figure 20 illustrates the compartments and stands within the Conservation Area. Management decisions are made on the stand level. Silvicultural management is an intrinsic component of the overall management of the upland portions of RCCA; therefore, an annual timber inventory is conducted on a small percentage of the Property. Stand-level values derived from the inventory include number of trees per acre, the basal area, and volume of trees by product type and species. After each inventory cycle growth and yield projections are calculated on all active plots. The inventory data output is then incorporated into the District's forest management database. Harvest operations and reforestation events that may occur over time are also recorded in the database. This information is used to help land management staff forecast forest management needs and make forest management decisions.

Forest management activities anticipated during the scope of this plan include forest inventory evaluations, reforestation, and timber harvest operations. Reforestation projects may be preceded by various site preparation techniques including mechanical treatments such as disc harrowing to remove silvicultural bedding, roller chopping and mowing, herbicide applications, and prescribed fire. These techniques may be used singularly or in combination as site conditions warrant. In addition, the District uses regeneration methods such as shelterwood cuts, seed tree cuts, and clearcuts.

Through periodic thinning of pine stands, the District will remove the poorest trees to reduce crown density and allow the better trees to develop full, vigorous crowns. Thinning will also allow more sunlight to reach the forest floor and improve conditions for groundcover. Finally, periodic thinning will provide some protection against wildfires and pine beetle outbreaks. Currently, five planned pine thinning harvests and one clearcut harvest are scheduled to occur within the Conservation Area between 2024–2034 (Figure 21). The clearcut operation is within a stand of sand pine planted within historic longleaf pine sandhill. Longleaf pine planting and sandhill enhancement/restoration will be conducted following sand pine clearcut. Forest management operations are conducted adaptively. Planned harvests and subsequent activities are subject to change based on newly discovered research/methods, information gathered from the site, site condition dynamics and opportunities to leverage improved natural community focused forest management.

The District will abide by Florida Silviculture Best Management Practices (https://ccmedia.fdacs.gov/content/download/25527/file/silvicultural_bmp_manual.pdf), Florida Forestry Wildlife Best Management Practices for State Imperiled Species (https://ccmedia.fdacs.gov/content/download/40469/file/Florida_Forestry_Wildlife_Best_Management_Practices_For_State_Imperiled_Species_Manual.pdf) and will target the achievement of appropriate overstory species in proper stand densities as described in the District Forest Management Plan (Appendix G). In addition to planned forest management activities, the District will harvest trees as needed in the case of insect infestations, disease, and damage from severe weather, wildfire, or other occurrences that could jeopardize the health of natural communities.

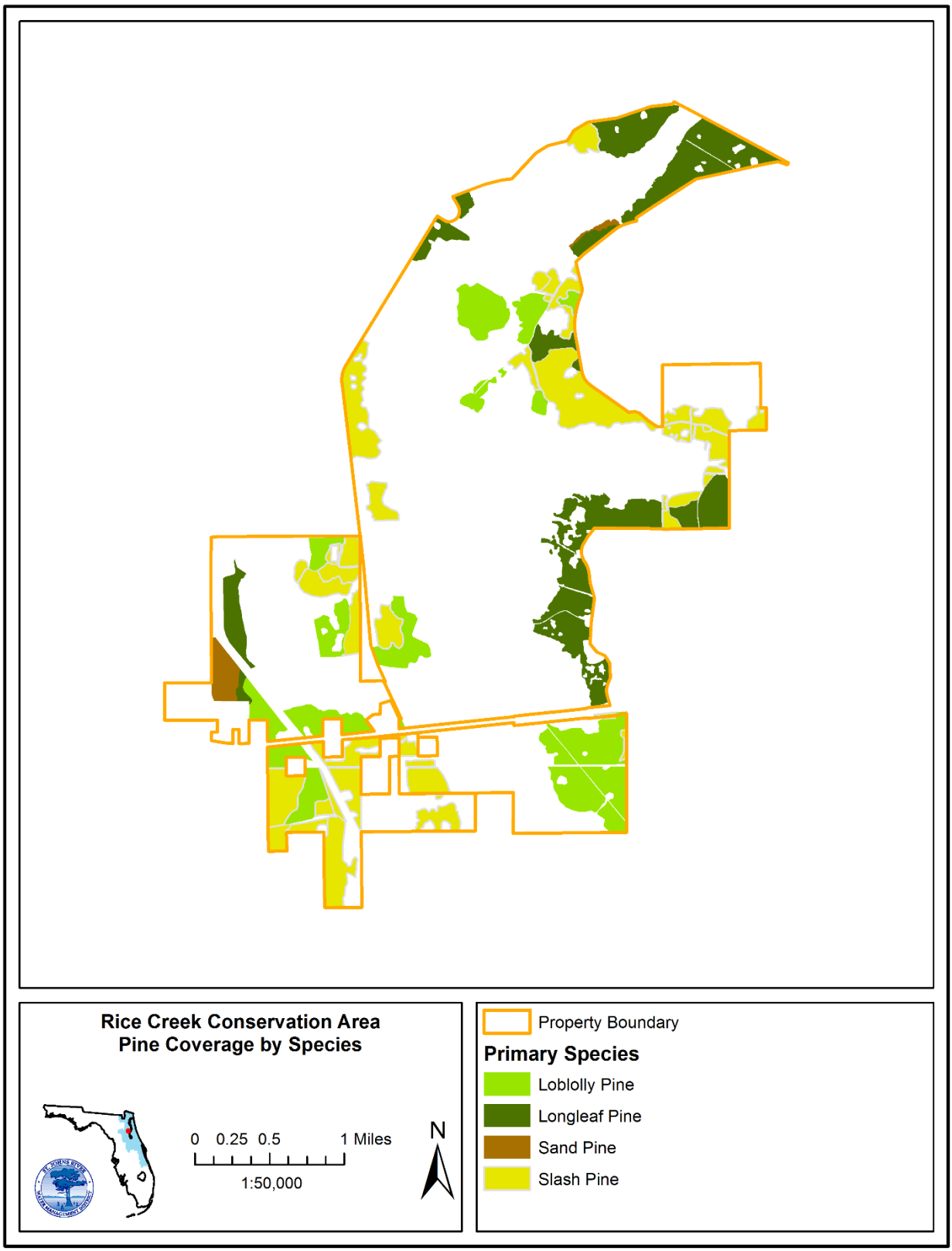

Figure 19: Pine Species Map

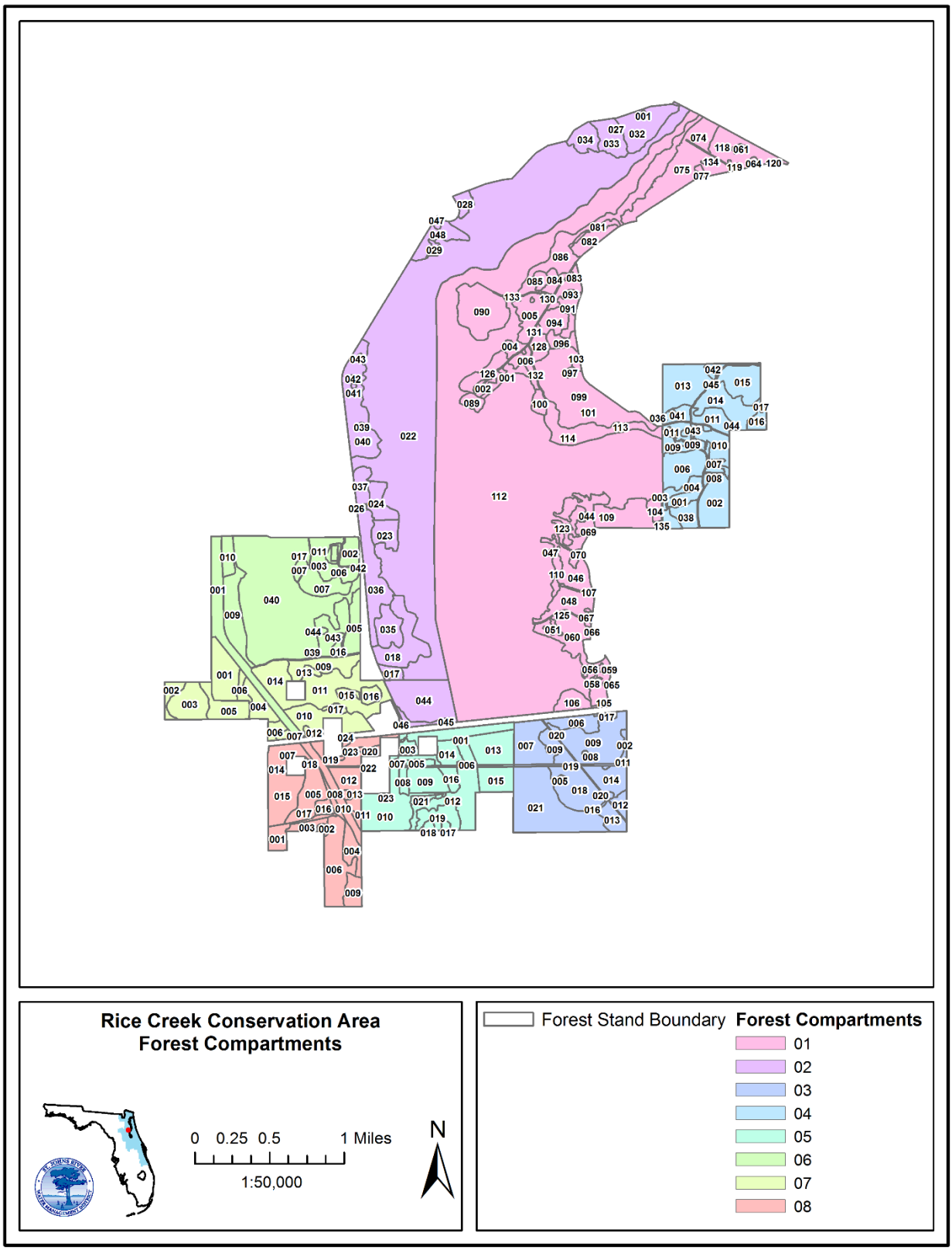

Figure 20: Forest Compartment and Stand Map

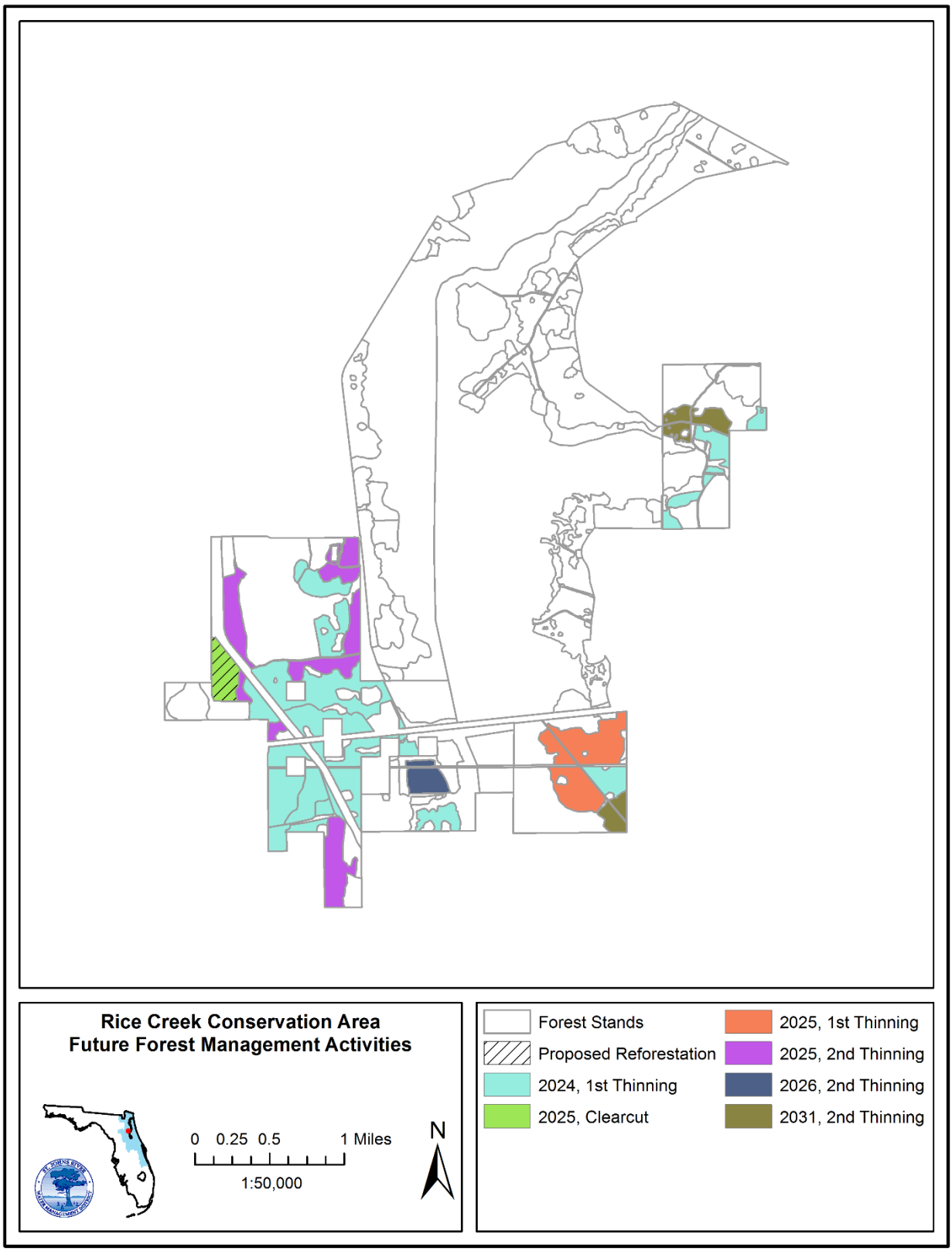

Figure 21: Future Forest Management Activities Map

4.9 Cultural Resources

There is one documented cultural site on the Property according to the DHR Florida Master Site Files. The District will conduct land management activities in a manner that will provide protection to this site and serve to reduce the potential for adverse impacts. If District staff discover any additional sites, staff will document and report those sites to the DHR. Additionally, detrimental activities discovered on this site will be reported to the DHR and appropriate law enforcement agencies. The District will follow the management procedures outlined in "Management Procedures of Archaeological and Historical Sites and Properties on State-owned or Controlled Lands" (Appendix K). The DHR will be contacted regarding any significant ground-disturbing activity or any new sites.

4.10 Capital Facilities and Infrastructure

The infrastructure present on the Property currently includes one parking area, 11 gates, 7 miles of boundary fencing, 29 culverts, 6.2 miles of trails, 26.6 miles of roads and 1.2 miles of fire lines (Figure 15). Significant recreation facilities and infrastructure are present at RCCA, including a non-paved parking area/trailhead, an informational kiosk, picnic area with table, pitcher pump, numerous footbridges, and a walk-in campsite. Infrastructure in place at the campsite includes a fire ring, picnic table and a screened-in two-story shelter known locally as the "Rice Creek Hilton." All facilities on the Conservation Area are property of the District. Through an agreement, the FTA is responsible for maintenance/repair of all recreational infrastructure associated with the Florida Trail, primarily footbridges and the campsite (Appendix I).

The Conservation Area is home to 55 wooden footbridges. A vast majority of these structures are located on the historic levee loop through the Rice Creek Swamp. These footbridges range in size and complexity from a few 2-by-4-foot boards wide and a few feet long to a 0.4-mile-long boardwalk and two suspension bridges. Several of the footbridges are currently in need of maintenance/repair. The District will collaborate with the FTA to conduct a comprehensive assessment of recreational infrastructure during this planning period. Necessary repairs/maintenance will be conducted or infrastructure will be removed and trail rerouted accordingly. It is in the interest of both the District and the FTA to repair and maintain these structures, given the historic and scenic resources to which they provide access.

The Nine Mile Swamp tract currently has four gates, several miles of boundary fence, numerous culverts, one 30-foot-by-60-foot Quonset hut and miles of road. All infrastructure at the Nine Mile Tract will be incorporated into the District's database during the term of this management plan. A survey of the Nine Mile Swamp tract property boundary and boundary marking is recommended in order to accurately post the Property boundary and for firebreak installation/maintenance.

4.11 Optimal Boundary

If adjacent or nearby parcels become available that provide additional protection to Rice Creek or associated tributaries, support water resource projects, increase conservation value, improve manageability of Property boundary, and/or allow for restoration of impacted land, they will be evaluated for acquisition by District staff. To contribute to this effort, the District has developed an optimal boundary for RCCA (Figure 22).

The District's optimal boundary for RCCA includes more than 37,000 acres of undeveloped privately-owned land that would contribute to the above listed objectives for District land acquisition. All lands included within the optimal boundary are also included within Florida Forever project areas. Some of these lands are not directly adjacent to RCCA but provide protection to watersheds within adjoining basins and/or provide important connections between current conservation lands. The District will continue to cooperate with government and non-government partners in potential acquisitions, stewardship partnerships, and conservation management of lands in the vicinity of the RCCA.

4.12 Research Opportunities

The District has in place a Special Use Authorization (SUA) process (Rule 40C-9.360 F.A.C.) for research projects and other uses. The applicant must provide reasonable assurance that the proposed use is consistent with the Land Management Plan and will not harm the natural or cultural resources of the Property.

4.13 Soil Conservation

The RCCA provides tremendous water resource protection benefits. These include flood protection to the surrounding area and water quality protection for Rice Creek and the St. Johns River. The District will follow all soil erosion and forestry best management practices at the Conservation Area.

4.14 Cooperating Agencies

Section 373.1391, Florida Statutes, authorizes and encourages the District to enter into cooperative land management agreements with state agencies or local governments to provide for the coordinated and cost-effective management of lands to which the water management districts, the Board of Trustees, or local governments hold title. District Policy No. 820 promotes the District entering into agreements with other agencies and private parties for cooperation and coordination of management of the District's lands. In addition, the District is authorized to enter into cooperative agreements, cooperative management leases, leases, easements and SUAs to protect the District's water management interests and to enhance the management and public value of the land. Leases can be a useful tool to accomplish land management objectives and will be evaluated and implemented where appropriate. Common examples include cattle grazing

and apiaries, and the District remains open to considering other types of leases that help achieve management goals.

The District is the primary agency responsible for the Property's natural and cultural resource management. Various aspects of management are conducted through cooperative agreements with other governmental and non-governmental organizations. The southwestern-most portion of RCCA is titled to the Board of Trustees and managed by the District through a cooperative lease agreement (Lease No. 4873). A portion of the Property is included in the Caravelle Ranch WMA. Hunting, public access, and law enforcement within the WMA is managed by the FWC. The District maintains an SUA for feral hog removal on the Property. The District cooperatively manages public access to the eastern portion of the Property with the adjacent landowner through an access easement for RCCA. Florida National Scenic Trail and related infrastructure maintenance is conducted by the FTA through a certification agreement (Appendix I). The District cooperates with the DHR regarding the management of cultural resources.

4.15 Arthropod Control Plan

An Arthropod Control Plan has not been developed with the respective mosquito control district. The Putnam County Mosquito Control Department has been provided with a draft of this land management plan (Appendix L).

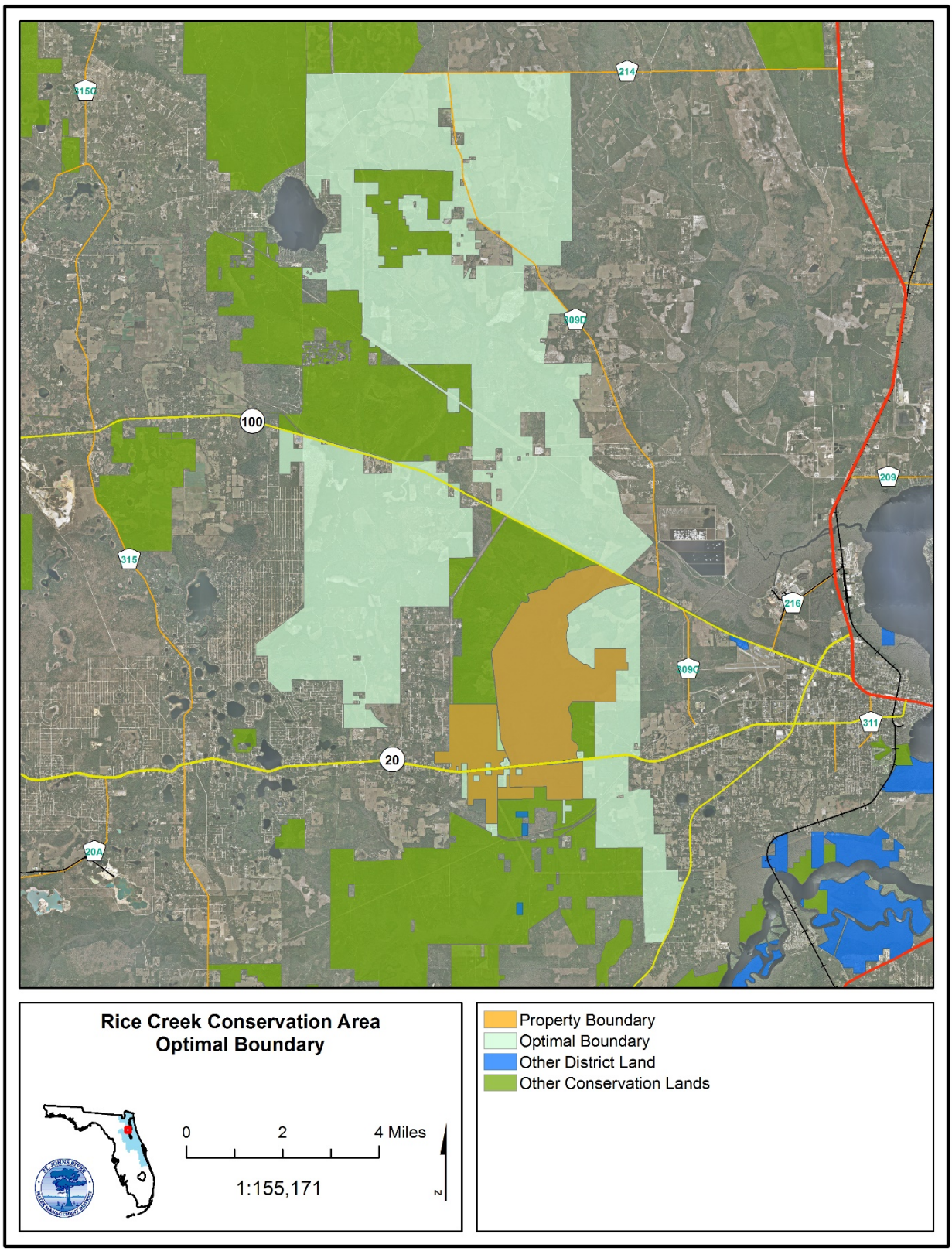

Figure 22: Optimal Boundary Map

5. Resource Management Goals and Objectives

The resource management goals and objectives described below are meant to be broad statements aimed at achieving desired future outcomes at RCCA. The stated time period for short-term (ST) objectives is less than 2 years and for long-term (LT) objectives is up to 10 years. Both short- and long-term goals are in this plan.

5.1 Habitat Restoration and Improvement

Goal: Maintain, improve, or restore natural communities

Long-term

A. Maintain fire-adapted natural communities with appropriate burn return interval.
B. Conduct habitat/natural community enhancement in restoration bottomland forest, as feasible.
C. Conduct habitat/natural community enhancement — including timber harvesting — in restoration flatwoods and sandhill, as feasible.

5.2 Listed Species Management

Goal: Maintain, improve, or restore listed species populations and habitats.

Long-term

A. Continue to make management decisions that support populations of listed species.
B. Monitor the presence of listed species and adjust management actions appropriately.
C. Conduct plant and wildlife surveys and update species lists.

5.3 Public Access and Recreational Opportunities

Goal: Provide, maintain, or enhance public access and recreational opportunities.

Short-term

A. Establish and maintain public access amenities at the Nine Mile Swamp tract.

Long-term

B. Continue to maintain public access and recreational opportunities.
C. Retain the ability to close roads as necessary for a variety of reasons including, but not limited to, hydrologic conditions.
D. Continue to cooperate with FTA for management of non-motorized access and maintenance of recreational infrastructure.
E. Continue to cooperate with FWC for management of WMA and to determine if additional areas of RCCA are suitable for hunting.

5.4 Hydrological Preservation and Restoration

Goal: Protect water quality and quantity, restore hydrology to the extent feasible, and maintain the restored condition.

Short-term

A. Assess feasibility/benefits and as appropriate implement hydrologic restoration/enhancement projects at Nine Mile Swamp.

Long-term

B. Inspect and maintain roads, bridges, culverts, low water crossings, water control structures, and trails for damage.
C. Conduct hydrologic enhancement through silvicultural bed removal within restoration bottomland forest, flatwoods, and any wetlands on Property, as feasible.
D. Continue hydrologic monitoring.

5.5 Exotic and Invasive Species Maintenance and Control

Goal: Manage invasive plants and animals at maintenance control levels.

Long-term

A. Monitor, document, and treat invasive plant species and prevent further infestations.
B. Maintain a database of non-native invasive plant species occurrences.
C. Eradicate, if possible, or manage non-native invasive species within maintenance control conditions.
D. Continue feral hog population control efforts.

5.6 Capital Facilities and Infrastructure

Goal: Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.

Short-term

A. Pursue public access- and recreation-related capital facilities and infrastructure improvements.
B. Collaborate with FTA to complete comprehensive survey of recreational infrastructure condition.
C. Coordinate with FTA to prioritize and complete repairs to footbridges.
D. Complete survey of Nine Mile Swamp tract and post boundary.
E. Map and incorporate Nine Mile Tract infrastructure into District's database.

Long-term

F. Maintain parking area, signs, gates, fences, trails, roads, kiosks, and other facilities/infrastructure.
G. Continue coordinating with Putnam County Sheriff's Office, FWC and other law enforcement as necessary.

5.7 Cultural Resources

Goal: Protect, preserve, and maintain the cultural resources of the Property.

Long-term

A. Continue to monitor, protect, and preserve the documented Master Site in accordance with DHR procedures.
B. Ensure all known sites are recorded in the Florida Department of State's Florida

Master Site file.

C. Identify and report undocumented sites to the Florida DHR.

5.8 Research Opportunities

Goal: Explore and pursue cooperative research opportunities.

Long-term

A. Continue to cooperate with researchers and universities as appropriate.
B. Continue to assess the need for and pursue research and environmental education partnership opportunities, as appropriate.

5.9 Outreach

Goal: Provide information to the public regarding management activities.

Long-term

A. Continue to work closely with constituents regarding education of management activities, particularly prescribed burning and other vegetation management.
B. Convene an MRT every five years to ensure land management plan is being followed.

6. Ten-year Implementation Schedule, Measures, and Cost Estimates

GOAL 6.1	Maintain, improve or restore natural communities	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Maintain fire-adapted natural communities with appropriate burn return interval.	Acres burned	LT	$9,050	$90,500
Objective B	Conduct habitat/natural community enhancement in restoration bottomland forest, as feasible.	Acres improved	LT	$8,000	$80,000
Objective C	Conduct habitat/natural community enhancement in restoration flatwoods and sandhill, as feasible.	Acres improved	LT	$19,800	$198,000
GOAL 6.2	Maintain, improve, or restore listed species populations and habitats.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Continue to make management decisions that support listed species populations	Acres of suitable habitat	LT	-	-
Objective B	Monitor the presence of listed species and adjust management actions appropriately.	Listed species monitoring conducted	LT	-	-
Objective C	Conduct plant and wildlife surveys and update species lists.	Species lists updated	LT	-	-
GOAL 6.3	Provide, maintain, or enhance public access and recreational opportunities.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Establish and maintain public access at the Nine Mile Swamp tract.	Public access established and maintained	ST		
Objective B	Continue to maintain public access and recreational opportunities.	Sites maintained	LT	-	-
Objective C	Retain the ability to close roads as necessary for a variety of reasons including, but not limited to, hydrologic conditions	Ability to close roads retained	LT	-	-
Objective D	Continue to cooperate with FTA for management of non-motorized access and maintenance of recreational infrastructure.	Recreational infrastructure maintained	LT		
Objective E	Continue to coordinate with FWC for management of WMA.	WMA cooperatively managed	LT	-	-
GOAL 6.4	Protect water quality and quantity, restore hydrology, and maintain the restored condition.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Assess feasibility/benefits and as appropriate implement hydrologic restoration/enhancement projects at Nine Mile Swamp.	Hydrologic restoration potential assessed	ST	-	-
Objective B	Inspect and maintain roads, bridges, culverts, low water crossings, water control structures and trails for damage.	Infrastructure inspected and maintained	LT	-	-
Objective C	Conduct hydrologic enhancement through silvicultural bed removal within restoration bottomland forest, flatwoods and any wetlands on Property – as feasible .	Acres of silvicultural bed removal	LT	-	-
Objective D	Continue hydrologic monitoring.	Hydrology monitored	LT	-	-
GOAL 6.5	Manage invasive plants and animals at maintenance control levels.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**

Objective A	Monitor, document and treat invasive plant species and prevent further infestations.	Invasive plants monitored, documented and treated	LT	$3,000	$30,000
Objective B	Maintain a database of non-native invasive plant species occurrences.	Database maintained	LT		
Objective C	Eradicate, if possible, or manage non-native invasive species within maintenance control conditions.	Invasive plants eradicated or within maintenance control	LT	-	-
Objective D	Continue feral hog population control efforts.	Feral hog population controlled	LT	-	-
GOAL 6.6	Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Pursue public access and recreation related capital facilities and infrastructure improvements.	Capital facilities and infrastructure improvements pursued	ST		
Objective B	Collaborate with FTA to complete comprehensive survey of recreational infrastructure condition.	Survey completed	ST		
Objective C	Coordinate with FTA to prioritize and complete repairs to footbridges.	Repairs to footbridges complete	ST		
Objective D	Complete survey of Nine Mile Swamp tract and post boundary.	Boundary posted based on survey	ST		
Objective E	Map and incorporate Nine Mile Tract infrastructure into District's database.	Infrastructure database updated	ST		
Objective F	Maintain parking area, signs, gates, fences, trails, roads, kiosks, and other facilities/infrastructure.	Infrastructure maintained	LT	$7,675	$76,750
Objective G	Continue coordinating with Putnam County Sheriff's Office, FWC and other law enforcement as necessary.	Secure property	LT		
GOAL 6.7	Protect, preserve, and maintain the cultural resources of the Property.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Continue to monitor, protect, and preserve the documented Master Site in accordance with DHR procedures.	Sites protected	LT	-	-
Objective B	Ensure all known sites are recorded in the Florida Department of State's DHR Master Site file.	All sites recorded	LT	-	-
Objective C	Identify and report undocumented sites to the Florida DHR.	Site protected	LT	-	-
GOAL 6.8	Explore and pursue cooperative research opportunities.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Continue to cooperate with researchers and universities as appropriate.	Issue appropriate authorization	LT	-	-
Objective B	Continue to assess the need for and pursue research and environmental education partnership opportunities, as appropriate.	Partnerships created	LT	-	-
GOAL 6.9	Provide information to the public regarding management activities.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Continue to work closely with constituents regarding education of management activities, particularly prescribed burning and other vegetation management.	Number of outreach programs completed	LT	-	-
Objective B	Convene an MRT every 5 years to ensure land management plan is being followed.	Number of MRT meetings completed	LT		
ESTIMATED COST TOTALS				$47,525	$475,250

7. Resource Management Challenges and Strategies

The greatest resource management challenge at RCCA is the restoration of natural communities that have been impacted by previous land uses. Previous landowner management for timber production has resulted in former mesic and wet flatwoods — and to a lesser extent bottomland forest — that are dominated by off-site pine species growing in silvicultural beds with little desirable native groundcover. Restoration strategies for stands in this condition require significant effort. Removing off-site pine and replanting with appropriate trees is a minor part of the restoration process. Many of the potential restoration sites on the Property require leveling of silvicultural beds to improve hydrologic conditions and enhance the ability to apply prescribed fire to uplands.

A secondary resource management challenge at RCCA is ensuring suitable recreation amenities. Specifically, many of the footbridges on site are reaching their useful end-of-life and require repair, replacement, and maintenance. Nearly all these structures are inaccessible by vehicle, creating a significant logistical challenge. The District will work with partners at the FTA to address this challenge. A comprehensive assessment of recreational infrastructure condition will be conducted. Based on information gathered from this survey a plan of action will be developed for management of recreational infrastructure.

8. Analysis/description of other managing agencies and private land managers, if any, which could facilitate the restoration or management of the land.

The FWC is responsible for the management and maintenance of the lands and any facilities supporting public recreational hunting and fishing within the WMA portion of RCCA. This includes the establishment and enforcement of rules and regulations as well as posting of boundary signs.

The District maintains a Certification Agreement (Appendix I) with the FTA that outlines the responsibilities of each party. This agreement assigns maintenance of trail infrastructure to the FTA. The FTA’s role in this relationship makes it possible for RCCA to host such unique and extraordinary recreational amenities.

The District maintains easements over the primary access roads on both the eastern and western Property boundary. Currently, the adjacent landowner to the west of RCCA holds a SUA for feral hog removal on the Property, which benefits the natural system management on site.

9. Management Accomplishments

The following section outlines progress and accomplishments, as related to land management strategies/tasks established in the 2009 RCCA Land Management Plan.

RESOURCE PROTECTION and MANAGEMENT

Water Resources

Task: Regularly inspect roads, ditches, turnouts, culverts, fire lines, and trails for erosion problems.

- Progress: 100%, ongoing: District staff, cooperators and contractors are on site regularly. Site conditions and any potential erosion problems are inspected opportunistically. When observed, problems are reported, and appropriate actions are taken.

Task: Locate and GPS all culvert locations and incorporate into conservation area database. Include type, length, and diameter of each culvert.

- Progress: 100%, 2010: Culvert locations — including type, length and diameter — were recorded in 2010.

Task: Where removal will not further affect desirable groundcover species, remove beds from harvest areas prior to reforestation.

- Progress: 100%, ongoing: The District has successfully leveled silvicultural beds from approximately 140 acres at RCCA. Future opportunities to remove silvicultural beds will be considered and pursued as appropriate.

Flora and Fauna

Task: Continue to conduct diversity surveys and develop species lists.

- Progress: 100%, ongoing: New species observations are recorded as reported. Additionally, District staff has incorporated verified citizen science data — accessed through digital applications including iNaturalist and eBird — into Property species list. District staff has worked with FWC staff to complete spotted turtle surveys on the property.

Task: Continue to monitor for the presence of listed species.

- Progress: 100%, ongoing: District staff documents and reports occurrences of listed species as encountered.

Task: Manipulate vegetation, if practical, in the areas immediately adjacent to the wildlife crossing structure.

- Progress: n/a: Manipulation of vegetation immediately adjacent to the wildlife crossing structure has been assessed and is not considered practical.

Task: Cooperate with the University of Central Florida (UCF) regarding the issuance of an SUA for the purposes of monitoring the wildlife crossing and bridge crossing.

- Progress: n/a: Researchers at UCF have not pursued an SUA for the purposes of monitoring the wildlife crossing and bridge crossing.

Forest Management

Task: Determine forest management needs for the newly acquired Medlock, Motes, and ITERA parcels.

- Progress: 100%, 2011: Forest inventories have been completed for stands in these parcels. Information from inventory has been used to update the District's forestry database. Forestry operations have been planned and conducted based on this information

Task: Refine data within existing forest management database.

- Progress: 100%, 2012: Forest management database is continually being refined and updated based on newly acquired information and completed actions

Task: Evaluate the potential for and conduct, if necessary, harvest activities in compartment 04 stands 002, 011, and 037.

- Progress: 100%, 2020: Timber harvest operations were conducted within stand 002 in 2015. Timber harvest operations were conducted within stands 011 and 037 in 2020.

Task: Evaluate the potential for and, conduct, if necessary, harvest activities in compartment 02 stand 032.

- Progress: 100%, 2013: Timber harvest operations were conducted within stand 032 in 2013.

Task: Evaluate the potential for and conduct, if necessary, harvest activities in compartment 01 stands 075, 078, and 081.

- Progress: 100%, 2013: Timber harvest operations were conducted within stands 075, 078, and 081 in 2013.

Task: Plant compartment 01 stands 096, 103, and 109 in longleaf pine at a rate of 605 stems per acre during the 2009/2010 work year.

- Progress: 100%, 2010: Compartment 01 stands 096, 103, and 109 planted in longleaf pine at a rate of 605 stems per acre in 2010.

Task: Plant compartment 02 stand 033 in longleaf pine at a rate of 605 stems per acre during the 2009/2010 work year.

- Progress: 100%, 2010: Compartment 02 stand 033 planted in longleaf pine at a rate of 605 stems per acre in 2010.

Task: Coordinate forest management activities and landscape contouring as necessary to facilitate the success of the large mammal crossing structures on SR 20.

- Progress: n/a: Forest management activities and landscape contouring unnecessary to facilitate the success of the large mammal crossing structures on SR 20.

Fire Management

Task: Implement prescribed burning as described in the District's Fire Management Plan.

- Progress: 100%, ongoing: Since October 2009, District land managers have conducted nine prescribed burns totaling 739 acres at RCCA.

Task: Develop annual burn plans.

- Progress: 100%, ongoing: Burn unit prioritization is developed annually utilizing FNAI return intervals and District Condition Class.

Task: Introduce growing season burns where possible.

- Progress: 100%, ongoing: Three growing season burns totaling 119 acres have been conducted on the Property since 2009.

Task: Introduce dormant season burns in select pine plantations and areas of high fuel loading and/or extended fire exclusion.

- Progress: 100%, ongoing: Dormant season burns conducted in select pine plantations and areas of high fuel loading and/or extended fire exclusion…

Task: Continue to populate the fire management database.

- Progress: 100%, ongoing: Fire management database is continually updated.

Exotic Species

Task: Continue to monitor for exotic species and implement appropriate action.

- Progress: 100%, ongoing: The District has conducted, at a minimum, annual invasive plant monitoring across RCCA. Detailed vegetation community map produced in 2023. In general, non-native invasive plant populations are lightly scattered – primary within disturbed areas – on the Property. Since 2009 the following species and acreages have been treated with herbicide on the Property: 2.3 acres of Japanese climbing fern (*Lygodium japonicum*), 0.8 acre of cogongrass (*Imperata cylindrica*) and 0.02 acre of Chinese tallow (*Sapium sebiferum*). Feral hog control at RCCA is conducted by the adjacent landowner through a SUA.

Cultural Resources

Task: Identify and report sites to the DHR.

- Progress: 100%, ongoing: One new site at the Property has been submitted to the DHR for addition to the Florida Master Site File.

Task: Investigate the history of the indigo and rice plantations and consider for inclusion as a Florida Master Site, if appropriate.

- Progress: 100%, 2022: District staff has collaborated with archaeologists with the Florida Public Archaeology Network to research and document the history behind the Rice Creek indigo and rice plantations. Very little information is available regarding the history of these operations. The primary levee network has been mapped and submitted to the DHR for inclusion within the Florida Master Site File.

LAND USE MANAGEMENT

Access

Task: Maintain parking area, signs, gates, trails, and roads.

- Progress: 100%, ongoing: Access-related infrastructure is assessed and maintained as regular part of management.

Recreation

Task: Continue trail maintenance contract.

- Progress: 100%, ongoing: Trail system is maintained quarterly and as needed by contractor.

Task: Continue coordination with FTA regarding maintenance of footbridges, the boardwalk, FTA trails, and camp shelter.

- Progress: 100%, ongoing: District staff communicates regularly with FTA regarding maintenance of footbridges, the boardwalk, FTA trails, and camp shelter. The District has provided building materials to FTA for repair of recreational structures.

Task: Continue maintenance of kiosks and informative panels.

- Progress: 100%, ongoing: Kiosk and informative panels are assessed and maintained as regular part of management.

Task: Include any recreation improvements on the District's website and in the next edition of the District's Recreation Guide to District Lands.

- Progress: 100%, ongoing: The District's Recreation Guide to District Lands has migrated from print to the District's website. The District's website is frequently updated with any information needed by public recreational users.

Environmental Education

Task: Continue to offer environmental education opportunities.

- Progress: 100%, ongoing: District staff is available and responsive to any group interested in receiving environmental education programing. District lands are frequently used by school groups and others as locations for learning opportunities.

Security

Task: Maintain signage, fencing, gates, and locks.

- Progress: 100%, ongoing: Signage, fencing, gates, and locks are assessed and maintained as regular part of management.

Task: Evaluate the need for new fencing.

- Progress: 100%, ongoing: Evaluation of the need for new fencing is conducted as regular part of management.

Task: Continue coordination with private security firm, FWC local law enforcement, and security resident.

- Progress: 100%, ongoing: The District has discontinued its private security firm contract. Coordination FWC local law enforcement is conducted as regular part of management.

ADMINISTRATION

Acquisition

Task: Evaluate adjacent properties for potential acquisition.

- Progress: 100%, ongoing: Evaluation of adjacent properties for potential acquisition is conducted as regular part of management.

Cooperative Agreements

Task: Finalize Lease Management Agreement with OGT.

- Progress: 100%, 2011: Lease agreement (LA# 2008-025) assigning management of four parcels to OGT was completed on February 28, 2011.

10. Compliance with Federal, State, and Local Government Requirements

Management of the Property under the multiple-use concept complies with the State Lands Management Plan. Putnam County Mosquito Control has been notified of this management plan (Appendix L). This plan conforms with the Putnam County Comprehensive Plan (Appendix M). As part of the ARC review process, comments and suggested revisions from FNAI (Appendix N)

and FWC (Appendix O) were received. These suggested revisions were considered and incorporated into the management plan, as appropriate.

11. Revenue and Expenses

In an average year, the projected expenses are approximately $59,025 and the revenue generated by this Property is approximately $55,000. Table 7 summarizes the expenses and revenue over the next 10 years incurred by the District.

Table 7: Projected Expenses and Revenue at RCCA 2024-2034

PROJECTED EXPENSES

Activity	Unit	Total Expense Over 10 Years
Habitat Improvement	250 acres	$250,000
Invasive Plant Management	40 acres	$30,000
Prescribed Fire	4,790 acres	$86,000
Road Maintenance	25 miles	$50,000
Mowing (roads, trails, and parking area)	85 acres	$12,750
Fence Maintenance	14 miles	$14,000
Fireline Maintenance	1.2 miles	$4,500
Timber Management (inventory and marking)	6 inventories, 3 markings	$28,000
Staff time	4,000 hours	$115,000
Total		**$590,250**

PROJECTED REVENUE

Activity	Unit	Total Revenue Over 10 Years
Timber Harvest	1,000 acres	$550,000
Apiary Lease	5 apiary sites	$3,500
Total		**$553,500**

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12. References

Florida Department of Agriculture and Consumer Services (FDACS), 2008, Silviculture Best Management Practices. https://ccmedia.fdacs.gov/content/download/25527/file/silvicultural_bmp_manual.pdf

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Florida Department of Environmental Protection (FDEP), 2008, Basin Management Action Plan for the Implementation of Total Maximum Daily Loads for Nutrients Adopted by the Florida Department of Environmental Protection for the Lower St. Johns River Basin Main Stem. https://publicfiles.dep.state.fl.us/DEAR/DEARweb/BMAP/Lower%20St.%20Johns%20River%20LSJR%20Mainstem/adopted-lsjr-bmap.pdf

Florida Fish and Wildlife Conservation Commission (FWC), 2020, Gopher Tortoise Management Plan. https://myfwc.com/media/1819/gt-management-plan.pdf

Florida Fish and Wildlife Conservation Commission (FWC), 2023, Gopher Tortoise Permitting Guidelines. https://myfwc.com/media/11854/gt-permitting-guidelines.pdf

Florida Fish and Wildlife Conservation Commission (FWC), 2024, Species Action Plans. https://myfwc.com/wildlifehabitats/wildlife/species-action-plans/

Florida Natural Areas Inventory. (2010). *Guide to the Natural Communities of Florida.* Tallahassee, FL.

Williams, C.P., T.M. Scott, and S.B. Upchurch. 2022. Florida Geomorphology Atlas. Special Publication No. 59. Florida Geological Survey, Florida Department of Environmental Protection, Tallahassee, FL. https://publicfiles.dep.state.fl.us/FGS/Geological_Investigations/Geomorphology/SpecialPublication59/FloridaGeomorphologyAtlas_SP59.pdf#page=179

APPENDIX A – BOARD OF TRUSTEES LEASE

This Instrument was prepared by:
Amy Smith
Bureau of Public Land Administration
Division of State Lands
Department of Environmental Protection, MS 130
3900 Commonwealth Boulevard,
Tallahassee, Florida 32399-3000
Action No. 47447

SAL2
[+/- 1,239.27 acres]

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

LEASE AGREEMENT

Lease Number 4873

This lease is made and entered into this _____ day of _____, 20____, between the **BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA**, hereinafter referred to as "LESSOR", and the **ST. JOHNS RIVER WATER MANAGEMENT DISTRICT,** hereinafter referred to as "LESSEE".

WITNESSETH:

WHEREAS, the **BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA** holds title to certain lands and property being utilized by the State of Florida for public purposes, and

WHEREAS, the **BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA** is authorized in Section 253.03, Florida Statutes, to enter into leases for the use, benefit and possession of public lands by state agencies that may properly use and possess them for the benefit of the people of the State of Florida.

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements hereinafter contained, LESSOR leases the below described premises to LESSEE subject to the following terms and conditions:

1. **DELEGATIONS OF AUTHORITY**: LESSOR'S responsibilities and obligations herein shall be exercised by the Division of State Lands, State of Florida Department of Environmental Protection.

2. **DESCRIPTION OF PREMISES**: The property subject to this lease is situated in the County of **Putnam**, State of Florida and is more particularly described in Exhibit "A" attached hereto and hereinafter called the "leased premises".

3. **TERM**: The term of this lease shall be for a period of **50** years commencing on _____ and ending on _____, unless sooner terminated pursuant to the provisions of this lease.

4. **PURPOSE**: LESSEE shall manage the leased premises only for the conservation and protection of natural and historical resources and resource based public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 259.032(9), Florida Statutes, along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph 7 of this lease.

5. **QUIET ENJOYMENT AND RIGHT OF USE**: LESSEE shall have the right of ingress and egress to, from and upon the leased premises for all purposes necessary to the full quiet enjoyment by said LESSEE of the rights conveyed herein.

6. **UNAUTHORIZED USE**: LESSEE shall, through its agents and employees, prevent the unauthorized use of the leased premises or any use thereof not in conformance with this lease.

7. **MANAGEMENT PLAN**: LESSEE shall prepare and submit a Management Plan for the leased premises in accordance with Section 253.034, Florida Statutes, within twelve months of the effective date of this lease. The Management Plan shall be submitted for approval to the State of Florida Department of Environmental Protection, Division of State Lands, Office of Environmental Services, Mail Station 140, 3800 Commonwealth Boulevard, Tallahassee, Florida 32399-3000. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. The Management Plan shall emphasize the original management concept as approved by LESSOR at the time of acquisition, which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

8. **RIGHT OF INSPECTION**: LESSOR or its duly authorized agents shall have the right at any and all times to inspect the leased premises and the works and operations thereon of LESSEE, in any matter pertaining to this lease.

9. **INSURANCE REQUIREMENTS**: LESSEE shall procure and maintain fire and extended risk insurance coverage, in accordance with Chapter 284, F.S., for any buildings and improvements located on the leased premises by preparing and delivering to the Division of Risk Management, State of Florida Department of Insurance, a completed Florida Fire Insurance

Trust Fund Coverage Request Form and a copy of this lease immediately upon erection of any structures as allowed by paragraph 4 of this lease. A copy of said form and immediate notification in writing of any erection or removal of structures or other improvements on the leased premises and any changes affecting the value of the improvements shall be submitted to the following: Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, Mail Station 130, 3800 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

10. **LIABILITY**: LESSEE shall assist in the investigation of injury or damage claims either for or against LESSOR or the State of Florida pertaining to LESSEE'S respective areas of responsibility under this easement or arising out of LESSEE'S respective management programs or activities and shall contact LESSOR regarding the legal action deemed appropriate to remedy such damage or claims. LESSEE is responsible for all personal injury and property damage attributable to the negligent acts or omissions of LESSEE, and its officers, employees, and agents. Nothing herein shall be construed as an indemnity or a waiver of sovereign immunity enjoyed by any party hereto, as provided in Section 768.28, Florida Statutes, as amended from time to time, or any other law providing limitations on claims.

11. **ARCHAEOLOGICAL AND HISTORIC SITES**: Execution of this lease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the State of Florida Department of State, Division of Historical Resources. The Management Plan prepared pursuant to Section 253.034, Florida Statutes, shall be reviewed by the Division of Historical Resources to ensure that adequate measures have been planned to locate, identify, protect and preserve the archaeological and historic sites and properties on the leased premises.

12. **EASEMENTS**: All easements of any nature including, but not limited to, utility easements are required to be granted by LESSOR. LESSEE is not authorized to grant any easements of any nature and any easement granted by LESSEE shall be void and without legal effect.

13. **SUBLEASES**: This lease is for the purposes specified herein and subleases of any nature are prohibited, without the prior written approval of LESSOR. Any sublease not approved in writing by LESSOR shall be void and without legal effect.

14. **SURRENDER OF PREMISES:** Upon termination or expiration of this lease LESSEE shall surrender the leased premises to LESSOR. In the event no further use of the leased premises or any part thereof is needed, written notification shall be made to the Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental

Protection, Mail Station 130, 3800 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, at least six months prior to the release of all or any part of the leased premises. Notification shall include a legal description, this lease number and an explanation of the release. The release shall only be valid if approved by LESSOR through execution of a release of lease instrument with the same formality as this lease. Upon release of all or any part of the leased premises or upon expiration or termination of this lease, all permanent improvements, including both physical structures and modifications to the leased premises, shall become the property of LESSOR, unless LESSOR gives written notice to LESSEE to remove any or all such improvements at the expense of LESSEE. The decision to retain any improvements upon termination of this lease shall be at LESSOR'S sole discretion. Prior to surrender of all or any part of the leased premises, a representative of the Division of State Lands shall perform an on-site inspection and the keys to any buildings on the leased premises shall be turned over to the Division. If the leased premises and improvements located thereon do not meet all conditions set forth in paragraphs 17 and 20 herein, LESSEE shall pay all costs necessary to meet the prescribed conditions.

15. BEST MANAGEMENT PRACTICES: LESSEE shall implement applicable Best Management Practices for all activities conducted under this lease in compliance with paragraph 18-2.018(2)(h), Florida Administrative Code, which have been selected, developed, or approved by LESSOR, LESSEE or other land managing agencies for the protection and enhancement of the leased premises.

16. PUBLIC LANDS ARTHROPOD CONTROL PLAN: LESSEE shall identify and subsequently designate to the respective arthropod control district or districts within one year of the effective date of this lease all of the environmentally sensitive and biologically highly productive lands contained within the leased premises, in accordance with Section 388.4111, Florida Statutes and Chapter 5E-13, Florida Administrative Code, for the purpose of obtaining a public lands arthropod control plan for such lands.

17. UTILITY FEES: LESSEE shall be responsible for the payment of all charges for the furnishing of gas, electricity, water and other public utilities to the leased premises and for having all utilities turned off when the leased premises are surrendered.

18. ASSIGNMENT: This lease shall not be assigned in whole or in part without the prior written consent of LESSOR. Any assignment made either in whole or in part without the prior written consent of LESSOR shall be void and without legal effect.

19. **PLACEMENT AND REMOVAL OF IMPROVEMENTS**: All buildings, structures, improvements, and signs shall be constructed at the expense of LESSEE in accordance with plans prepared by professional designers and shall require the prior written approval of LESSOR as to purpose location, and design. Further, no trees, other than non-native species, shall be removed or major land alterations done without the prior written approval of LESSOR. Removable equipment placed on the leased premises by LESSEE which do not become a permanent part of the leased premises will remain the property of LESSEE and may be removed by LESSEE upon termination of this lease.

20. **MAINTENANCE OF IMPROVEMENTS**: LESSEE shall maintain the real property contained within the leased premises and any improvements located thereon, in a state of good condition, working order and repair including, but not limited to, removing all trash or litter, maintaining all planned improvements as set forth in the approved Management Plan, meeting all building and safety codes. LESSEE shall maintain any and all existing roads, canal, ditches, culverts, risers and the like in as good condition as the same may be on the effective date of this lease.

21. **ENTIRE UNDERSTANDING:** This lease sets forth the entire understanding between the parties and shall only be amended with the prior written approval of LESSOR.

22. **BREACH OF COVENANTS, TERMS, OR CONDITIONS:** Should LESSEE breach any of the covenants, terms, or conditions of this lease, LESSOR shall give written notice to LESSEE to remedy such breach within sixty days of such notice. In the event LESSEE fails to remedy the breach to the satisfaction of LESSOR within sixty days of receipt of written notice, LESSOR may either terminate this lease and recover from LESSEE all damages LESSOR may incur by reason of the breach including, but not limited to, the cost of recovering the leased premises or maintain this lease in full force and effect and exercise all rights and remedies herein conferred upon LESSOR.

23. **NO WAIVER OF BREACH:** The failure of LESSOR to insist in any one or more instances upon strict performance of any one or more of the covenants, terms and conditions of this lease shall not be construed as a waiver of such covenants, terms and conditions, but the same shall continue in full force and effect, and no waiver of LESSOR of any one of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by LESSOR.

24. **PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES:** Fee title to the leased premises is held by LESSOR. LESSEE shall not do or permit anything which purports to create a lien or encumbrance of any nature against the real property contained in the leased premises including, but not limited to, mortgages or construction liens against the leased premises or against any interest of LESSOR therein.

25. **CONDITIONS AND COVENANTS**: All of the provisions of this lease shall be deemed covenants running with the land included in the leased premises and construed to be "conditions" as well as "covenants" as though the words specifically expressing or imparting covenants and conditions were used in each separate provision.

26. **NOTICES**: All notices given under this lease shall be in writing and shall be served by certified mail including, but not limited to, notice of any violation served pursuant to Section 253.04, Florida Statutes, to the last address of the party to whom notice is to be given, as designated by such party in writing. LESSOR and LESSEE hereby designate their address as follows:

LESSOR: State of Florida Department of
Environmental Protection
Division of State Lands
Bureau of Public Land Administration, MS 130
3800 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

LESSEE: St. Johns Water Management District
Real Estate Services Program
4049 Reid Street
Palatka, FL 32177
Email: RealEstateServices@sjrwmd.com

27. **DAMAGE TO THE PREMISES:** (a) LESSEE shall not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises or adjacent properties, any act which may result in damage or depreciation of value to the leased premises or adjacent properties, or any part thereof. (b) LESSEE shall not generate, store, produce, place, treat, release or discharge any contaminants, pollutants or pollution, including, but not limited to, hazardous or toxic substances, chemicals or other agents on, into, or from the leased premises or any adjacent lands or waters in any manner not permitted by law. For the purposes of this lease, "hazardous substances" shall mean and include those elements or compounds defined in 42 USC Section 9601 or which are contained in the list of hazardous substances adopted by the United States Environmental Protection Agency (EPA) and the list of toxic pollutants designated by the United States Congress or the EPA or defined by any other federal, state or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic or dangerous waste, substance, material, pollutant or contaminant. "Pollutants" and "pollution" shall mean those products or substances defined in Chapters 376 and 403, Florida Statutes, and the rules promulgated thereunder, all as amended or updated from time to time. In the event of LESSEE'S failure to comply with this paragraph, LESSEE shall, at its sole cost and expense, promptly commence and diligently pursue any legally required closure, investigation, assessment, cleanup, decontamination, remediation, restoration and monitoring of (1) the leased premises, and

(2) all off-site ground and surface waters and lands affected by LESSEE'S such failure to comply, as may be necessary to bring the leased premises and affected off-site waters and lands into full compliance with all applicable federal, state or local statutes, laws, ordinances, codes, rules, regulations, orders and decrees, and to restore the damaged property to the condition existing immediately prior to the occurrence which caused the damage. LESSEE'S obligations set forth in this paragraph shall survive the termination or expiration of this lease. Nothing herein shall relieve LESSEE of any responsibility or liability prescribed by law for fines, penalties and damages levied by governmental agencies, and the cost of cleaning up any contamination caused directly or indirectly by LESSEE'S activities or facilities. Upon discovery of a release of a hazardous substance or pollutant, or any other violation of local, state or federal law, ordinance, code, rule, regulation, order or decree relating to the generation, storage, production, placement, treatment, release or discharge of any contaminant, LESSEE shall report such violation to all applicable governmental agencies having jurisdiction, and to LESSOR, all within the reporting periods of the applicable governmental agencies.

28. **PAYMENT OF TAXES AND ASSESSMENTS**: LESSEE shall assume full responsibility for and shall pay all liabilities that accrue to the leased premises or to the improvements thereon, including any and all drainage and special assessments or taxes of every kind and all mechanic's or materialman's liens which may be hereafter lawfully assessed and levied against the leased premises.

29. **RIGHT OF AUDIT**: LESSEE shall make available to LESSOR all financial and other records relating to this lease and LESSOR shall have the right to audit such records at any reasonable time. This right shall be continuous until this lease expires or is terminated. This lease may be terminated by LESSOR should LESSEE fail to allow public access to all documents, papers, letters or other materials made or received in conjunction with this lease, pursuant to Chapter 119, Florida Statutes.

30. **NON-DISCRIMINATION**: LESSEE shall not discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the leased premises or upon lands adjacent to and used as an adjunct of the leased premises.

31. **COMPLIANCE WITH LAWS**: LESSEE agrees that this lease is contingent upon and subject to LESSEE obtaining all applicable permits and complying with all applicable permits, regulations, ordinances, rules, and laws of the State of Florida or the United States or of any political subdivision or agency of either.

32. **TIME:** Time is expressly declared to be of the essence of this lease.

33. **GOVERNING LAW:** This lease shall be governed by and interpreted according to the laws of the State of Florida.

34. **SECTION CAPTIONS**: Articles, subsections and other captions contained in this lease are for reference purposes only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this lease or any provisions thereof.

35. **ADMINISTRATIVE FEE**: LESSEE shall pay LESSOR an annual administrative fee of $300 pursuant to subsection 18-2.020(8), Florida Administrative Code. The initial annual administrative fee shall be payable within thirty days from the date of execution of this lease agreement and shall be prorated based on the number of months or fraction thereof remaining in the fiscal year of execution. For purposes of this lease agreement, the fiscal year shall be the period extending from July l to June 30. Each annual payment thereafter shall be due and payable on July l of each subsequent year.

36. **RIGHT OF TERMINATION**: Anything contained in this lease to the contrary notwithstanding, LESSOR shall have the right and option to terminate this lease, at will, for any reason whatsoever, by giving the LESSEE written notice of such election to terminate at least six (6) months prior to the effective date of such termination. LESSEE shall continue to honor its obligations under the lease until the effective date of the termination, including LESSEE's obligations concerning surrender of the leased premises.

37. **ELECTRONIC SIGNATURES:** This lease may be executed by electronic signature, which shall be considered as an original signature for all purposes and shall have the same force and effect as an original signature. Without limitation, "electronic signature" shall include faxed versions of an original signature or electronically scanned and transmitted versions (e.g., via pdf) of an original signature.

[*Remainder of page intentionally left blank; Signature page follows*]

IN WITNESS WHEREOF, the parties have caused this Lease to be executed on the day and year first above written.

"LESSOR"

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

(SEAL)

BY: _____
Brad Richardson, Chief, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida.

Approved subject to proper execution:

BY: _____ 06-19-2023
DEP Attorney Date

"LESSEE"

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, a public body existing under Chapter 373, Florida Statutes

(SEAL)

BY: _____
Michael A. Register, P.E.
Executive Director

ATTEST:

BY: _____
Erin Preston, Esq.
General Counsel

For use and reliance only by
St. Johns River Water Management District,
Legal Form and Content Approved:

BY: _____ Date: _____
Karen Ferguson, Esq.
Office of General Counsel

EXHIBIT "A"

That part of Section 10, Township 10 South, Range 25 East described as:

All of Section 10, Township 10 South, Range 25 East.

That part of Section 14, Township 10 South, Range 25 East described as:

That part of the North ½ of the Northwest ¼ of said Section 14, lying west of Motes Island Road, Less and Except:

Those lands described in Order of Taking recorded in Official Record Book 919, Page 260 of the Public Records of Putnam County, Florida.

AND the Southwest ¼ of the Northwest ¼ of said Section 14, Less and Except U.S. Highway Number 20 right of way and further Less and Except:

Those lands described in Order of Taking recorded in Official Record Book 919, Page 260 of the Public Records of Putnam County, Florida, and those lands conveyed in Official Record Book 1293, Page 903 of the Public Records of Putnam County, Florida.

That part of Section 15, Township 10 South, Range 25 East described as:

The North ½ of the Northwest ¼ of Section 15, EXCEPT the South 660.04 feet of the West 1320 feet thereof described in Official Record Book 658, Page 1109 of the Public Records of Putnam County, Florida.

AND the East ½ of the Southeast ¼ of the Northwest ¼ of said Section 15, Less and Except U.S. Highway Number 20 right of way.

AND the East ½ of the Northeast ¼ of the Southwest ¼ of said Section 15.

AND the East ½ of the Southeast ¼ of the Southwest ¼ of said Section 15.

AND the Southwest ¼ of the Northeast ¼ of said Section 15, Less and Except U.S. Highway 20 right of way.

AND the East ½ of the Southeast ¼ of the Northeast ¼ of said Section 15, Less and Except U.S. Highway 20 right of way.

AND the Northeast ¼ of the Northeast ¼ of said Section 15.

AND the South ½ of the Northwest ¼ of the Northeast ¼ of said Section 15.

AND the Northeast ¼ of the Northwest ¼ of the Northeast ¼ of said Section 15.

AND the South ½ of the Southeast ¼ of said Section 15.

Nine Mile Swamp Park
Putnam County

BSM
BY SK
Date: 11.05.2019

AND the Northeast ¼ of the Southeast ¼ of said Section 15.

AND the South ½ of the Northwest ¼ of the Southeast ¼ of said Section 15.

AND the Northeast ¼ of the Northwest ¼ of the Southeast ¼ of said Section 15.

AND the Northwest ¼ of the Northwest ¼ of the Northeast ¼ of said Section 15.

AND that part of the Northwest ¼ of Section 15, Township 10 South, Range 25 East, Putnam County, Florida being described as follows:

Commence at the Northwest corner of said Section 15; thence South 00°39'01" East, along the West line of the Northwest ¼ of said Section 15, a distance of 661.81 feet to the Point of Beginning of the herein described parcel; thence North 88°45'19" East, parallel with the North line of lands described in Deed Book 112, Page 234 of the Public Records of Putnam County, Florida, a distance of 1320.00 feet; thence South 00°39'01" East, parallel with the said West line of the Northwest ¼ of Section 15, a distance of 660.04 feet to the said North line of lands described in Deed Book 112, Page 234; thence South 88°45'19" West, along said North line of lands described in Deed Book 112, Page 234, a distance of 1320.00 feet to the Northwest corner of said lands and the Northwest corner of the Southwest ¼ of the Northwest ¼ of said Section 15; thence North 00°39'01" West, along said West line of the Northwest ¼ of Section 15, a distance of 660.04 feet to the Point of Beginning.

AND that part of the Southwest ¼ of the Northwest ¼ of Section 15, Township 10 South, Range 25 East being more particularly described as follows:

Commence at the Northwest corner of said Section 15; thence South 00°02'56" West along the Westerly line of said Section 15, a distance of 1742.35 feet to the South line of those lands described and recorded in Official Records Book 458, Page 1348 of the Public Records of Putnam County, Florida and the Point of Beginning; thence continue South 00°02'56" West, along said Westerly line of said Section 15, also being the Westerly line of those lands described and recorded in Deed Book 112, Page 234 of said Public Records of Putnam County, Florida, a distance of 306.32 feet to the current Northerly right of way line of State Road No. 20; thence South 81°07'33" East along last said line, 174.93 feet to the point of curvature of a curve to the Southeast; thence Southeasterly, continuing also said Northerly right of way line, along and around the arc of said curve, concave Northerly, having a radius of 5696.00 feet, an arc distance of 596.21 feet, said arc being subtended by a chord bearing and distance of South 84°07'28" East, 595.94 feet; thence North 02°46'32" East, 486.01 feet; thence North 87°22'33" East, 212.95 feet; thence South 03°32'22" East, 502.76 feet to the aforesaid Northerly right of way line of State Road No. 20; thence Northeasterly along and around the arc of said curve, concave Northerly, having a radius of 5696.00 feet, an arc distance of 349.32 feet, said arc being subtended by a chord bearing and distance of North 89°03'18" East, 349.18 feet to the East line of the aforesaid lands described and recorded in Deed Book 112, Page 234; thence North 00°02'56" East, 827.93 feet to the North line of said lands described in Deed Book 112, Page 234; thence South 89°21'15" West, along last said line, 1110.15 feet to the Easterly line of those lands described and recorded in Official Records Book 342, Page 570; thence South 00°02'56" West along last said line and along Easterly line of aforesaid lands described and recorded in Official Records Book 458, Page 1348, a distance of 420.00 feet to the aforesaid South line of those lands described and recorded in Official Records Book 458, Page 1348; thence South 89°55'47" West, along last said line, 210.00 feet to the Point of Beginning.

Nine Mile Swamp Park
Putnam County

BSM
BY SK
Date: 11.05.2019

That part of Section 16, Township 10 South, Range 25 East described as:

The Northeast ¼ of the Northeast ¼ of said Section 16.

AND the East ½ of the East ½ of the Northwest ¼ of the Northeast ¼ of said Section 16.

That part of Section 22, Township 10 South, Range 25 East described as:

The Northeast ¼ of the Northeast ¼ of the Northwest ¼ of said Section 22.

AND the East ½ of the Northeast ¼ of said Section 22.

The foregoing property being also described as follows:

Parcel # 1 lying North of State Road 20:

Begin at a concrete monument marking the Northeast corner of Section 16, Township 10 South, Range 25 East, Putnam County, Florida and run South 89°42'58" West, along the North boundary of said Section 16, a distance of 1661.18 feet to a point; thence leaving said Section line, run South 00°08'01" East, a distance of 1318.77 feet to a point; thence North 89°49'11" East, a distance of 1657.47 feet to a point; thence South 89°58'33" East, a distance of 209.83 feet to a point; thence South 00°02'35" West, a distance of 420.13 feet to a point; thence North 89°57'51" West, a distance of 209.85 feet to a point; thence South 00°49'30" East, a distance of 304.81 feet to a point on the Northerly right of way line of State Road 20; thence South 81°54'07" East, along said right of way line, a distance of 174.93 feet to a point, said point being on a curve concave to the North, thence run in an Easterly direction along said right of way line and curve having a radius of 5696.00 feet, through a central angle of 05°57'02" for an arc distance of 591.57 feet (chord of said arc being South 83°39'09" East, a distance of 591.30 feet) to a point; thence leaving said right of way line, run North 02°43'50" East, a distance of 486.17 feet to a point; thence North 87°24'55" East, a distance of 213.36 feet to a point; thence South 03°32'47" West, a distance of 502.64 feet to a point on the Northerly right of way line of State Road 20, said pint being on a curve concave to the North; thence run in an Easterly direction along said right of way and curve having a radius of 5696.00 feet, through a central angle of 03°27'59" for an arc distance of 344.61 feet (chord of said arc being North 89°01'39" East, a distance of 344.57 feet) to a point; thence leaving said right of way line, run North 00°22'38" East, a distance of 827.40 feet to a point; thence North 89°56'30" East, a distance of 659.17 feet to a point; thence South 00°38'41" East, a distance of 767.15 feet to a point on the Northerly right of way line of State Road 20; thence North 84°01'04" East, along said right of way line, a distance of 1422.86 feet to a point, said point being on a curve concave to the North, thence run in an Easterly direction along said right of way line and curve having a radius of 23024.00 feet, through a central angle of 01°24'16" for an arc distance of 564.37 feet (chord of said arc being North 84°43'59" East, a distance of 564.37 feet) to a point; thence leaving said right of way line, run North 00°37'23 West, a distance of 573.17 feet to a point; thence North 89°43'06" East, a distance of 659.57 feet to a point; thence South 00°23'13" East, a distance of 530.24 feet to a point on the Northerly right of way line of State Road 20; thence North 84°54'54" East, along said right of way, a distance of 659.51 feet to a point; thence North 84°03'54" East, along said right of way, a distance of 491.76 feet to a point; thence leaving said right of way line, run North 36°28'39" West, a distance of 498.17 feet to a point; thence North 53°57'04" East, a distance of 312.29 feet to a point; thence North 83°34'35" East, a distance of 250.20

Nine Mile Swamp Park
Putnam County

BSM
BY SK
Date: 11.05.2019

feet to a point; thence North 02°04'11" East, a distance of 358.81 feet to a point; thence North 72°26'09" East, a distance of 377.51 feet to a point on the West boundary of Motes Island Road; thence North 23°37'55" West, along the West boundary of said road, a distance of 735.59 feet to a point on the North boundary of Section 14, Township and Range aforesaid; thence South 89°05'54" West, along the North boundary of said Section 14, a distance of 776.37 feet to the Southeast corner of Section 10, Township and Range aforesaid; thence North 00°20'04" West, along the East boundary of said Section 10, a distance of 5131.70 feet to the Northeast corner of said Section 10; thence South 89°46'33" West, along the North boundary of said Section 10, a distance of 5262.90 feet to the Northwest corner of said Section 10; thence South 00°01'45" West, along the West boundary of said Section 10, a distance of 2497.76 feet to a point; thence South 00°27'00" East, along the West boundary of said Section 10, a distance of 2639.07 feet to the Point of Beginning.

Parcel # 2 lying South of State Road 20:

Begin at an iron rod marking the Southeast corner of Section 15, Township 10 South, Range 25 East, Putnam County, Florida and run North 00°08'42" West, along the East boundary of said Section 15, a distance of 2645.53 feet to a point; thence North 89°18'17" East, a distance of 674.36 feet to a point; thence North 00°03'52" West, a distance of 711.52 feet to a point on the Southerly right of way line of State Road 20; thence South 84°00'52" West, along said Southerly right of way line of State Road 20, a distance of 1338.74 feet to a point; thence leaving said right of way line, run South 00°11'03" West, a distance of 583.20 feet to a point; thence South 89°43'11" West, a distance of 659.72 feet to a point; thence North 00°24'18" East, a distance of 551.24 feet to a point on the Southerly right of way line of said State Road 20, said point being on a curve concave to the North; thence run in a Westerly direction along said right of way line and curve having a radius of 22826.00 feet, through a central angle of 01°25'59" for an arc distance of 570.91 feet (chord of said arc being South 84°38'45" West, a distance of 570.86 feet) to a point; thence South 84°01'10" West, along said right of way line, a distance of 1423.15 feet to a point; thence leaving said right of way line, run South 00°18'52" East, a distance of 3008.43 feet to a point; thence South 00°28'35" East, a distance of 666.18 feet to a point; thence North 89°23'20" East, a distance of 656.56 feet to a point; thence North 01°12'52" West, a distance of 663.32 feet to a point; thence North 89°40'18" East, a distance of 1321.11 feet to a point; thence South 00°37'48" East, a distance of 2663.16 feet to a point; thence North 89°48'14" East, a distance of 1312.16 feet to a point; thence North 00°26'58" West, a distance of 2666.53 feet to the Point of Beginning.

Less and Except the Northwest ¼ of the Northwest ¼ of the Southeast ¼ of Section 15, Township 10 South, Range 25 East, Putnam County, Florida.

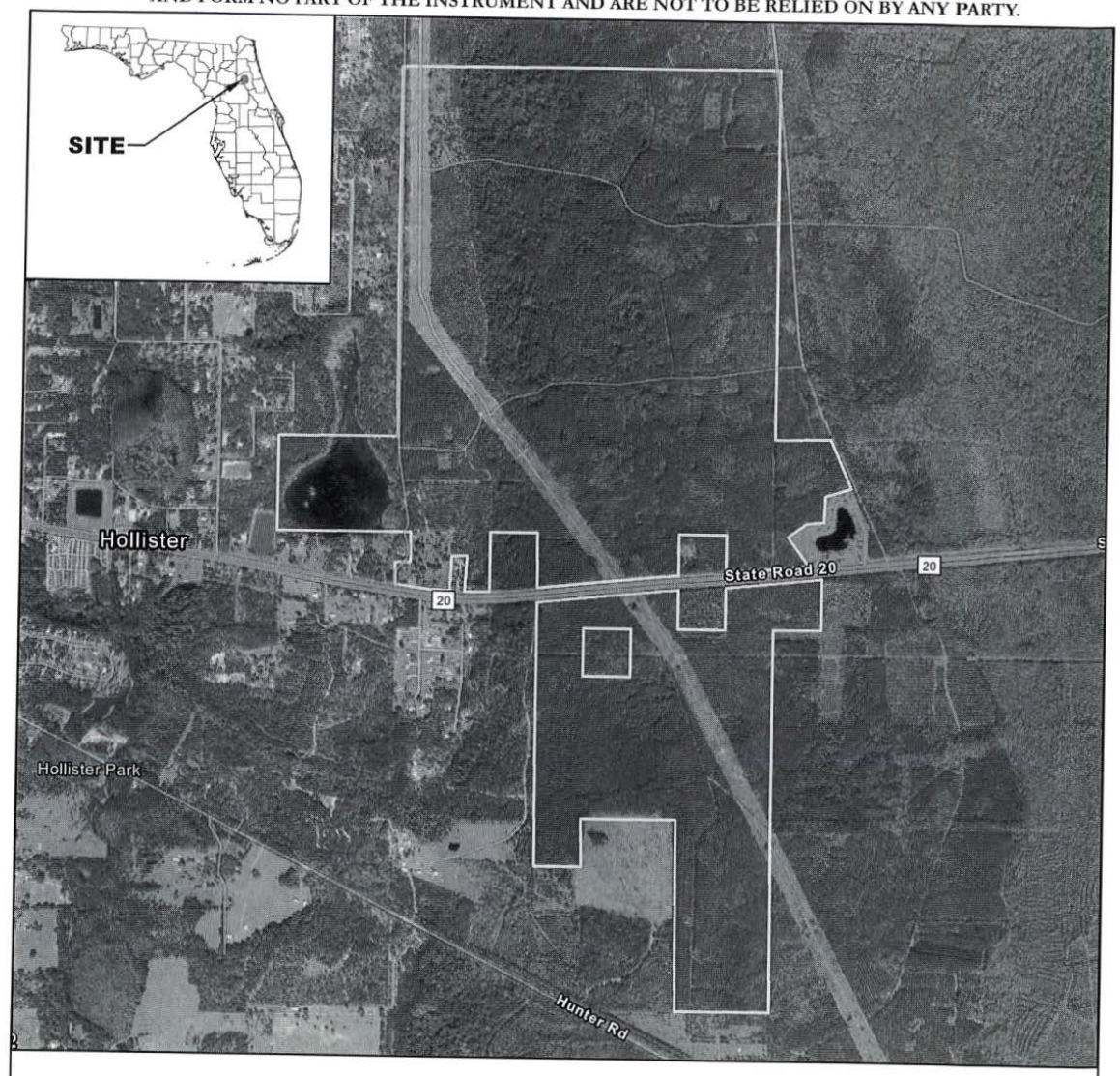
Legal description set forth in the deed recorded in Official Records Book 1706, Page 887, Public Records of Putnam County, Florida.

Nine Mile Swamp Park
Putnam County

BSM
BY SK
Date: 11.05.2019

Action No 47447 Lease 4873 page 13 of 13

THIS PAGE AND ANY FOLLOWING PAGES ARE ATTACHED ONLY FOR STATE OF FLORIDA TRACKING PURPOSES AND FORM NO PART OF THE INSTRUMENT AND ARE NOT TO BE RELIED ON BY ANY PARTY.



Lease 4873

Putnam County, Florida

File Location: \\FLDEP1\WS\Counties_GIS\Putnam\Lease_4873\Parcel
Date Saved: 6/2/2023 3:56 PM
Map Created By: T. Barnes

APPENDIX B –ENCUMBRANCES

Commonwealth
LAND TITLE INSURANCE COMPANY

Policy No.: 66825-1-29643-2023.8151209-229960451

ALTA OWNER'S POLICY OF TITLE INSURANCE
Issued by
COMMONWEALTH LAND TITLE INSURANCE COMPANY

This policy, when issued by the Company with a Policy Number and the Date of Policy, is valid even if this policy or any endorsement to this policy is issued electronically or lacks any signature.
Any notice of claim and any other notice or statement in writing required to be given to the Company under this policy must be given to the Company at the address shown in Condition 17.

COVERED RISKS

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B, AND THE CONDITIONS, COMMONWEALTH LAND TITLE INSURANCE COMPANY, a Florida corporation, (the "Company") insures as of the Date of Policy and, to the extent stated in Covered Risks 9 and 10, after the Date of Policy, against loss or damage, not exceeding the Amount of Insurance, sustained or incurred by the Insured by reason of:

1. The Title being vested other than as stated in Schedule A.
2. Any defect in or lien or encumbrance on the Title. Covered Risk 2 includes, but is not limited to, insurance against loss from:
   (a) a defect in the Title caused by:
      i. forgery, fraud, undue influence, duress, incompetency, incapacity, or impersonation;
      ii. the failure of a person or Entity to have authorized a transfer or conveyance;
      iii. a document affecting the Title not properly authorized, created, executed, witnessed, sealed, acknowledged, notarized (including by remote online notarization), or delivered;
      iv. a failure to perform those acts necessary to create a document by electronic means authorized by law;
      v. a document executed under a falsified, expired, or otherwise invalid power of attorney;
      vi. a document not properly filed, recorded, or indexed in the Public Records including the failure to have performed those acts by electronic means authorized by law;
      vii. a defective judicial or administrative proceeding; or
      viii. the repudiation of an electronic signature by a person that executed a document because the electronic signature on the document was not valid under applicable electronic transactions law.
   (b) the lien of real estate taxes or assessments imposed on the Title by a governmental authority due or payable, but unpaid.
   (c) the effect on the Title of an encumbrance, violation, variation, adverse circumstance, boundary line overlap, or encroachment (including an encroachment of an improvement across the boundary lines of the Land), but only if the encumbrance, violation, variation, adverse circumstance, boundary line overlap, or encroachment would have been disclosed by an accurate and complete land title survey of the Land.
3. Unmarketable Title.
4. No right of access to and from the Land.
5. A violation or enforcement of a law, ordinance, permit, or governmental regulation (including those relating to building and zoning) but only to the extent of the violation or enforcement described by the enforcing governmental authority in an Enforcement Notice that identifies a restriction, regulation, or prohibition relating to:
   (a) the occupancy, use, or enjoyment of the Land;
   (b) the character, dimensions, or location of an improvement on the Land;
   (c) the subdivision of the Land; or
   (d) environmental remediation or protection on the Land.
6. An enforcement of a governmental forfeiture, police, regulatory, or national security power, but only to the extent of the enforcement described by the enforcing governmental authority in an Enforcement Notice.
7. An exercise of the power of eminent domain, but only to the extent:
   (a) of the exercise described in an Enforcement Notice; or
   (b) the taking occurred and is binding on a purchaser for value without Knowledge.
8. An enforcement of a PACA-PSA Trust, but only to the extent of the enforcement described in an Enforcement Notice.
9. The Title being vested other than as stated in Schedule A, the Title being defective, or the effect of a court order providing an alternative remedy:
   (a) resulting from the avoidance, in whole or in part, of any transfer of all or any part of the Title to the Land or any interest in the Land occurring prior to the transaction vesting the Title because that prior transfer constituted a:
      i. fraudulent conveyance, fraudulent transfer, or preferential transfer under federal bankruptcy, state insolvency, or similar state or federal creditors' rights law; or
      ii. voidable transfer under the Uniform

Voidable Transactions Act; or

(b) because the instrument vesting the Title constitutes a preferential transfer under federal bankruptcy, state insolvency, or similar state or federal creditors' rights law by reason of the failure:
   i. to timely record the instrument vesting the Title in the Public Records after execution and delivery of the instrument to the Insured; or
   ii. of the recording of the instrument vesting the Title in the Public Records to impart notice of its existence to a purchaser for value or to a judgment or lien creditor.

10. Any defect in or lien or encumbrance on the Title or other matter included in Covered Risks 1 through 9 that has been created or attached or has been filed or recorded in the Public Records subsequent to the Date of Policy and prior to the recording of the deed or other instrument vesting the Title in the Public Records.

DEFENSE OF COVERED CLAIMS

The Company will also pay the costs, attorneys' fees, and expenses incurred in defense of any matter insured against by this policy, but only to the extent provided in the Conditions

COMMONWEALTH LAND TITLE INSURANCE COMPANY

Countersigned:

By:
Authorized Officer or Agent
Wendi McAleese
American Government Services Corporation
3812 West Linebaugh Ave
Tampa, FL 33618
Tel:813-933-3322
Fax:813-931-3362

By:
Michael J. Nolan
President

Attest:
Marjorie Nemzura
Secretary

EXCLUSIONS FROM COVERAGE

The following matters are excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
   i the occupancy, use, or enjoyment of the Land;
   ii the character, dimensions or location of any improvement on the Land;
   iii the subdivision of land; or
   iv environmental remediation or protection;
   (b) any governmental forfeiture, police, regulatory, or national security power.
   (c) the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.
   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at the Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
   (e) resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A, is a:
   (a) fraudulent conveyance or fraudulent transfer;
   (b) voidable transfer under the Uniform Voidable Transactions Act; or
   (c) preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
6. Any lien on the Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
7. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

CONDITIONS

1. DEFINITION OF TERMS

In this policy, the following terms have the meanings given to them below. Any defined term includes both the singular and the plural, as the context requires:

(a) "Affiliate": An Entity:
- i. that is wholly owned by the Insured;
- ii. that wholly owns the Insured; or
- iii. if that Entity and the Insured are both wholly owned by the same person or entity.

(b) "Amount of Insurance": The Amount of Insurance stated in Schedule A, as may be increased by Condition 8.d. or decreased by Condition 10 or 11; or increased or decreased by endorsements to this policy.

(c) "Date of Policy": The Date of Policy stated in Schedule A.

(d) "Discriminatory Covenant": Any covenant, condition, restriction, or limitation that is unenforceable under applicable law because it illegally discriminates against a class of individuals based on personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or other legally protected class.

(e) "Enforcement Notice": A document recorded in the Public Records that describes any part of the Land and:
- i. is issued by a governmental agency that identifies a violation or enforcement of a law, ordinance, permit, or governmental regulation;
- ii. is issued by a holder of the power of eminent domain or a governmental agency that identifies the exercise of a governmental power; or
- iii. asserts a right to enforce a PACA-PSA Trust.

(f) "Entity": A corporation, partnership, trust, limited liability company, or other entity authorized by law to own title to real property in the State where the Land is located.

(g) "Insured":
- i.
  - a. The Insured named in Item 1 of Schedule A;
  - b. the successor to the Title of an Insured by operation of law as distinguished from purchase, including heirs, devisees, survivors, personal representatives, or next of kin;
  - c. the successor to the Title of an Insured resulting from dissolution, merger, consolidation, distribution, or reorganization;
  - d. the successor to the Title of an Insured resulting from its conversion to another kind of Entity; or
  - e. the grantee of an Insured under a deed or other instrument transferring the Title, if the grantee is:
    - (1). an Affiliate;
    - (2). a trustee or beneficiary of a trust created by a written instrument established for estate planning purposes by an Insured;
    - (3). a spouse who receives the Title because of a dissolution of marriage;
    - (4). a transferee by a transfer effective on the death of an Insured as authorized by law; or
    - (5). another Insured named in Item 1 of Schedule A.
- ii. The Company reserves all rights and defenses as to any successor or grantee that the Company would have had against any predecessor Insured.

(h) "Insured Claimant": An Insured claiming loss or damage arising under this policy.

(i) "Knowledge" or "Known": Actual knowledge or actual notice, but not constructive notice imparted by the Public Records.

(j) "Land": The land described in Item 4 of Schedule A and improvements located on that land at the Date of Policy that by State law constitute real property. The term "Land" does not include any property beyond that described in Schedule A, nor any right, title, interest, estate, or easement in any abutting street, road, avenue, alley, lane, right-of-way, body of water, or waterway, but does not modify or limit the extent that a right of access to and from the Land is insured by this policy.

(k) "Mortgage": A mortgage, deed of trust, trust deed, security deed, or other real property security instrument, including one evidenced by electronic means authorized by law.

(l) "PACA-PSA Trust": A trust under the federal Perishable Agricultural Commodities Act or the federal Packers and Stockyards Act or a similar State or federal law.

(m) "Public Records": The recording or filing system established under State statutes in effect at the Date of Policy under which a document must be recorded or filed to impart constructive notice of matters relating to the Title to a purchaser for value without Knowledge. The term "Public Records" does not include any other recording or filing system, including any pertaining to environmental remediation or protection, planning, permitting, zoning, licensing, building, health, public safety, or national security matters.

(n) "State": The state or commonwealth of the United States within whose exterior boundaries the Land is located. The term "State" also includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and Guam.

(o) "Title": The estate or interest in the Land identified in Item 2 of Schedule A.

(p) "Unmarketable Title": The Title affected by an alleged or apparent matter that would permit a prospective purchaser or lessee of the Title or a lender on the Title to be released from the obligation to purchase, lease, or lend if there is a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF COVERAGE

This policy continues as of the Date of Policy in favor of an Insured, so long as the Insured:

(a) retains an estate or interest in the Land;

(b) owns an obligation secured by a purchase money Mortgage given by a purchaser from the Insured; or

(c) has liability for warranties given by the Insured in any transfer or conveyance of the Insured's Title.

Except as provided in Condition 2, this policy terminates and ceases to have any further force or effect after the Insured conveys the Title. This policy does not continue in force or effect in favor of any person or entity that is not the Insured and acquires the Title or an obligation secured by a purchase money Mortgage given to the Insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT

The Insured must notify the Company promptly in writing if the Insured has Knowledge of:

(a) any litigation or other matter for which the Company may be liable under this policy; or

(b) any rejection of the Title as Unmarketable Title.

If the Company is prejudiced by the failure of the Insured Claimant to provide prompt notice, the Company's liability to the Insured Claimant under this policy is reduced to the extent of the prejudice.

4. PROOF OF LOSS

The Company may, at its option, require as a condition of payment that the Insured Claimant furnish a signed proof of loss. The proof of loss must describe the defect, lien, encumbrance, adverse claim, or other matter insured against by this policy that constitutes the basis of loss or damage and must state, to the extent possible, the basis of calculating the amount of the loss or damage.

5. DEFENSE AND PROSECUTION OF ACTIONS

(a) Upon written request by the Insured, and subject to the options contained in Condition 7, the Company, at its own cost and without unreasonable delay, will provide for the defense of an Insured in litigation in which any third party asserts a claim covered by this policy adverse to the Insured. This obligation is limited to only those stated causes of action alleging matters insured against by this policy. The Company has the right to select counsel of its choice (subject to the right of the Insured to object for reasonable cause) to represent the Insured as to those covered causes of action. The Company is not liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs, or expenses incurred by the Insured in the defense of any cause of action that alleges matters not insured against by this policy.

(b) The Company has the right, in addition to the options contained in Condition 7, at its own cost, to institute and prosecute any action or proceeding or to do any other act that in its opinion may be necessary or desirable to establish the Title, as insured, or to prevent or reduce loss or damage to the Insured. The Company may take any appropriate action under the terms of this policy, whether or not it is liable to the Insured. The Company's exercise of these rights is not an admission of liability or waiver of any provision of this policy. If the Company exercises its rights under Condition 5.b., it must do so diligently.

(c) When the Company brings an action or asserts a defense as required or permitted by this policy, the Company may pursue the litigation to a final determination by a court having jurisdiction. The Company reserves the right, in its sole discretion, to appeal any adverse judgment or order.

6. DUTY OF INSURED CLAIMANT TO COOPERATE

(a) When this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding and any appeals, the Insured will secure to the Company the right to prosecute or provide defense in the action or proceeding, including the right to use, at its option, the name of the Insured for this purpose.

When requested by the Company, the Insured, at the Company's expense, must give the Company all reasonable aid in:

i. securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement; and

ii. any other lawful act that in the opinion of the Company may be necessary or desirable to establish the Title or any other matter, as insured.

If the Company is prejudiced by any failure of the Insured to furnish the required cooperation, the Company's liability and obligations to the Insured under this policy terminate, including any obligation to defend, prosecute, or continue any litigation, regarding the matter requiring such cooperation.

(b) The Company may reasonably require the Insured Claimant to submit to examination under oath by any authorized representative of the Company and to produce for examination, inspection, and copying, at such reasonable times and places as may be designated by the authorized representative of the Company, all records, in whatever medium maintained, including books, ledgers, checks, memoranda, correspondence, reports, e-mails, disks, tapes, and videos, whether bearing a date before or after the Date of Policy, that reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the Insured Claimant must grant its permission, in writing, for any authorized representative of the Company to examine, inspect, and copy all the records in the custody or control of a third party that reasonably pertain to the loss or damage. No information designated in writing as confidential by the Insured Claimant provided to the Company pursuant to Condition 6 will be later disclosed to others unless, in the reasonable judgment of the Company, disclosure is necessary in the administration of the claim or required by law. Any failure of the Insured Claimant to submit for examination under oath, produce any reasonably requested information, or grant permission to secure reasonably necessary information from third parties as required in Condition 6.b., unless prohibited by law, terminates any liability of the Company under this policy as to that claim.

7. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY

In case of a claim under this policy, the Company has the following additional options:

(a) *To Pay or Tender Payment of the Amount of Insurance.*

To pay or tender payment of the Amount of Insurance under this policy. In addition, the Company will pay any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment or tender of payment and that the Company is obligated to pay.

Upon the exercise by the Company of this option provided for in Condition 7.a., the Company's liability and obligations to the Insured under this policy terminate, including any obligation to defend, prosecute, or continue any litigation.

(b) *To Pay or Otherwise Settle with Parties other than the Insured or with the Insured Claimant*

i. To pay or otherwise settle with parties other than the Insured for or in the name of the Insured

Claimant. In addition, the Company will pay any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment and that the Company is obligated to pay; or

ii. To pay or otherwise settle with the Insured Claimant the loss or damage provided for under this policy. In addition, the Company will pay any costs, attorneys' fees, and expenses incurred by the Insured Claimant that were authorized by the Company up to the time of payment and that the Company is obligated to pay.

Upon the exercise by the Company of either option provided for in Condition 7.b., the Company's liability and obligations to the Insured under this policy for the claimed loss or damage terminate, including any obligation to defend, prosecute, or continue any litigation.

8. CONTRACT OF INDEMNITY; DETERMINATION AND EXTENT OF LIABILITY

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by an Insured Claimant who has suffered loss or damage by reason of matters insured against by this policy. This policy is not an abstract of the Title, report of the condition of the Title, legal opinion, opinion of the Title, or other representation of the status of the Title. All claims asserted under this policy are based in contract and are restricted to the terms and provisions of this policy. The Company is not liable for any claim alleging negligence or negligent misrepresentation arising from or in connection with this policy or the determination of the insurability of the Title.

(a) The extent of liability of the Company for loss or damage under this policy does not exceed the lesser of:
   i. the Amount of Insurance; or
   ii. the difference between the fair market value of the Title, as insured, and the fair market value of the Title subject to the matter insured against by this policy.

(b) Except as provided in Condition 8.c. or 8.d., the fair market value of the Title in Condition 8.a.ii. is calculated using the date the Insured discovers the defect, lien, encumbrance, adverse claim, or other matter insured against by this policy.

(c) If, at the Date of Policy, the Title to all of the Land is void by reason of a matter insured against by this policy, then the Insured Claimant may, by written notice given to the Company, elect to use the Date of Policy as the date for calculating the fair market value of the Title in Condition 8.a.ii.

(d) If the Company pursues its rights under Condition 5.b. and is unsuccessful in establishing the Title, as insured:
   i. the Amount of Insurance will be increased by 15%; and
   ii. the Insured Claimant may, by written notice given to the Company, elect, as an alternative to the dates set forth in Condition 8.b. or, if it applies, 8.c., to use either the date the settlement, action, proceeding, or other act described in Condition 5.b. is concluded or the date the notice of claim required by Condition 3 is received by the Company as the date for calculating the fair market value of the Title in Condition 8.a.ii.

(e) In addition to the extent of liability for loss or damage under Conditions 8.a. and 8.d., the Company will also pay the costs, attorneys' fees, and expenses incurred in accordance with Conditions 5 and 7.

9. LIMITATION OF LIABILITY

(a) The Company fully performs its obligations and is not liable for any loss or damage caused to the Insured if the Company accomplishes any of the following in a reasonable manner:
   i. removes the alleged defect, lien, encumbrance, adverse claim, or other matter;
   ii. cures the lack of a right of access to and from the Land; or
   iii. cures the claim of Unmarketable Title,
   all as insured. The Company may do so by any method, including litigation and the completion of any appeals.

(b) The Company is not liable for loss or damage arising out of any litigation, including litigation by the Company or with the Company's consent, until a State or federal court having jurisdiction makes a final, non-appealable determination adverse to the Title.

(c) The Company is not liable for loss or damage to the Insured for liability voluntarily assumed by the Insured in settling any claim or suit without the prior written consent of the Company.

(d) The Company is not liable for the content of the Transaction Identification Data, if any.

10. REDUCTION OR TERMINATION OF INSURANCE

All payments under this policy, except payments made for costs, attorneys' fees, and expenses, reduce the Amount of Insurance by the amount of the payment.

11. LIABILITY NONCUMULATIVE

The Amount of Insurance will be reduced by any amount the Company pays under any policy insuring a Mortgage to which exception is taken in Schedule B or to which the Insured has agreed, assumed, or taken subject, or which is executed by an Insured after the Date of Policy and which is a charge or lien on the Title, and the amount so paid will be deemed a payment to the Insured under this policy.

12. PAYMENT OF LOSS

When liability and the extent of loss or damage are determined in accordance with the Conditions, the Company will pay the loss or damage within 30 days.

13. COMPANY'S RECOVERY AND SUBROGATION RIGHTS UPON SETTLEMENT AND PAYMENT

(a) If the Company settles and pays a claim under this policy, it is subrogated and entitled to the rights and remedies of the Insured Claimant in the Title and all other rights and remedies in respect to the claim that the Insured Claimant has against any person, entity, or property to the fullest extent permitted by law, but limited to the amount of any loss, costs, attorneys' fees, and expenses paid by the Company. If requested by the Company, the Insured Claimant must execute documents to transfer these rights and remedies to the Company. The Insured Claimant permits the Company to sue, compromise, or settle in the name of the Insured Claimant and to use the name of the Insured Claimant in any transaction or litigation involving these rights and remedies.

(b) If a payment on account of a claim does not fully cover the loss of the Insured Claimant, the Company defers the exercise of its subrogation right until after the Insured Claimant fully recovers its loss.

(c) The Company's subrogation right includes the Insured's rights to indemnity, guaranty, warranty, insurance policy, or bond, despite any provision in those instruments that addresses recovery or

subrogation rights.

14. POLICY ENTIRE CONTRACT

(a) This policy together with all endorsements, if any, issued by the Company is the entire policy and contract between the Insured and the Company. In interpreting any provision of this policy, this policy will be construed as a whole. This policy and any endorsement to this policy may be evidenced by electronic means authorized by law.

(b) Any amendment of this policy must be by a written endorsement issued by the Company. To the extent any term or provision of an endorsement is inconsistent with any term or provision of this policy, the term or provision of the endorsement controls. Unless the endorsement expressly states, it does not:

i. modify any prior endorsement,
ii. extend the Date of Policy,
iii. insure against loss or damage exceeding the Amount of Insurance, or
iv. increase the Amount of Insurance.

15. SEVERABILITY

In the event any provision of this policy, in whole or in part, is held invalid or unenforceable under applicable law, this policy will be deemed not to include that provision or the part held to be invalid, but all other provisions will remain in full force and effect.

16. CHOICE OF LAW AND CHOICE OF FORUM

(a) *Choice of Law*

The Company has underwritten the risks covered by this policy and determined the premium charged in reliance upon the State law affecting interests in real property and the State law applicable to the interpretation, rights, remedies, or enforcement of policies of title insurance of the State where the Land is located.

The State law of the State where the Land is located, or to the extent it controls, federal law, will determine the validity of claims against the Title and the interpretation and enforcement of the terms of this policy, without regard to conflicts of law principles to determine the applicable law.

(b) *Choice of Forum*

Any litigation or other proceeding brought by the Insured against the Company must be filed only in a State or federal court having jurisdiction.

17. NOTICES

Any notice of claim and any other notice or statement in writing required to be given to the Company under this policy must be given to the Company at COMMONWEALTH LAND TITLE INSURANCE COMPANY, Attn: Claims Department, P.O. Box 45023, Jacksonville, FL 32232-5023.

18. ARBITRATION

(a) All claims and disputes arising out of or relating to this policy, including any service or other matter in connection with issuing this policy, any breach of a policy provision, or any other claim or dispute arising out of or relating to the transaction giving rise to this policy, may be submitted to binding arbitration only when agreed to by both the Company and the Insured. Arbitration must be conducted pursuant to the Title Insurance Arbitration Rules of the American Land Title Association ("ALTA Rules"). The ALTA Rules are available online at www.alta.org/arbitration. The ALTA Rules incorporate, as appropriate to a particular dispute, the Consumer Arbitration Rules and Commercial Arbitration Rules of the American Arbitration Association ("AAA Rules"). The AAA Rules are available online at www.adr.org.

(b) *If there is a final judicial determination that a request for particular relief cannot be arbitrated in accordance with this Condition 18, then only that request for particular relief may be brought in court. All other requests for relief remain subject to this Condition 18.*

(c) Fees will be allocated in accordance with the applicable AAA Rules. The results of arbitration will be binding upon the parties. The arbitrator may consider, but is not bound by, rulings in prior arbitrations involving different parties. The arbitrator is bound by rulings in prior arbitrations involving the same parties to the extent required by law. The arbitrator must issue a written decision sufficient to explain the findings and conclusions on which the award is based. Judgment upon the award rendered by the arbitrator may be entered in any State or federal court having jurisdiction.

American Government Services
3812 W. Linebaugh Avenue
Tampa, Florida 33618
(813) 933-3355

POLICY FOR TITLE INSURANCE
SCHEDULE A

Issued with Policy No.:	N/A
Policy No.:	2023.8151209-229960451
File Number:	29643
Amount of Insurance:	$3,854,580.00| Premium: 12,212.50
Date of Policy:	April 17, 2023 at 10:47 A.M.

1. Name of Insured: Board of Trustees of the Internal Improvement Trust Fund of the State of Florida.

2. The estate or interest in the land insured by this policy is: Fee Simple and is at the effective date hereof vested in the named insured as shown by instrument recorded in Official Records Book 1706, Page 887, of the Public Records of Putnam County, Florida.

3. The Title is vested in: Board of Trustees of the Internal Improvement Trust Fund of the State of Florida.

4. The Land is described as follows:

See Exhibit "A"

5. The item is left intentionally Blank.

American Government Services Corporation
3812 W. Linebaugh Avenue
Tampa, FL 33618
(813) 933-3355

Countersigned: _____
Authorized Officer of Agent

1

SCHEDULE B

Policy No.: 2023.8151209-229960451
File Number: 29643

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Policy treats any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage, resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the company:

1. Easement in favor of Florida Power & Light Company, a Florida corporation, dated June 15, 1928 and recorded July 21, 1928 in Deed Book 116, Page 140, of the Public Records of Putnam County, Florida.

2. Reservation of oil, gas and mineral rights as set forth in that certain deed dated May 8, 1943 and recorded May 29, 1943 in Deed Book 144, Page 28, as thereafter conveyed in Official Records Book 383, Page 302, both of the Public Records of Putnam County, Florida.

3. Easement Grant in favor of Houston Texas Gas and Oil Corporation, dated April 16, 1959 and recorded April 29, 1959 in Official Records Book 32, Page 316, of the Public Records of Putnam County, Florida.

4. Resolution as to fixing set-back lines along State Highways executed by Putnam County Board of County Commissioners, dated August 15, 1961 and recorded September 7, 1961, in Official Records Book 74, Page 646, of the Public Records of Putnam County, Florida.

5. Resolution as to fixing set-back lines along roads in the County Road system by Putnam County Board of County Commissioners, dated February 27, 1962 and recorded March 4, 1962 in Official Records Book 84, Page 369; Official Records Book 101, Page 544, both of the Public Records of Putnam County, Florida.

6. Reservation of fifteen feet along section and half section lines for public highway purposes as set forth in that certain deed dated June 2, 1977 and recorded June 2, 1977 in Official Records Book 346, Page 480; as there after restated in Official Records Book 356, Page 1160, both of the Public Records of Putnam County, Florida.

7. Easement for ingress and egress and utilities as set forth in that certain deed dated July 29, 1982 and recorded August 30, 1982 in Official Records Book 423, Page 953, of the Public Records of Putnam County, Florida.

SCHEDULE B (Continued)

Policy No.: 2023.8151209-229960451
File Number: 29643

8. Easement Grant in favor of Florida Gas Transmission Company, a Delaware corporation, dated September 24, 1982 and recorded September 27, 1982 in Official Records Book 425, Page 123, of the Public Records of Putnam County, Florida.

9. Easement in favor of Florida Power & Light Company, a Florida corporation, dated January 5, 1983 and recorded January 7, 1983 in Official Records Book 428, Page 1418, of the Public Records of Putnam County, Florida.

10. Easement in favor of Florida Power & Light Company, a Florida corporation, dated January 5, 1983 and recorded January 7, 1983 in Official Records Book 428, Page 1420, of the Public Records of Putnam County, Florida.

11. Easement in favor of Florida Power & Light Company, a Florida corporation, dated August 10, 1983 and recorded August 12, 1983 in Official Records Book 438, Page 81, of the Public Records of Putnam County, Florida.

12. Reservation of oil, gas and mineral rights as set forth in that certain deed dated March 24, 1978 and recorded April 10, 1978 in Official Records Book 358, Page 1865; as thereafter re-stated in Official Records Book 509, page 79, both of the Public Records of Putnam County, Florida.

13. Grant of Easement in favor of Plum Creek Timberlands, L.P., a Delaware limited partnership, dated August 21, 2008 and recorded August 28, 2008 in Official Records Book 1203, Page 1063, of the Public Records of Putnam County, Florida.

14. Grant of perpetual non-exclusive easement appurtenant in favor of Imogene Coon, dated June 3, 2009 and recorded June 22, 2009 in Official Records Book 1230, Page 55, of the Public Records of Putnam County, Florida.

15. Grant of perpetual non-exclusive unrestrictive easement in favor of Plum Creek Timberlands, L.P., a Delaware limited partnership, dated September 9, 2009 and recorded December 9, 2009 in Official Records Book 1246, Page 703, of the Public Records of Putnam County, Florida.

16. Right-of-Way Easement in favor of Clay Electric Cooperative, Inc., a Florida corporation, dated February 3, 2010 and recorded March 16, 2010 in Official Records Book 1255, Page 826, of the Public Records of Putnam County, Florida.

SCHEDULE B (Continued)

Policy No.: 2023.8151209-229960451
File Number: 29643

17. Declaration of Access Easement executed by W.W. Gay Properties of Putnam County, LLC, a Florida limited liability company, dated June 28, 2010 and recorded June 28, 2010 in Official Records Book 1264, Page 1112; as re-recorded in Official Records Book 1264, Page 1286, both of the Public Records of Putnam County, Florida.

18. Right-of-Way Easement in favor of Clay Electric Cooperative, Inc., a Florida corporation, dated August 6, 2010 and recorded August 19, 2010 in Official Records Book 1269, Page 193, of the Public Records of Putnam County, Florida.

19. Declaration of Restrictive Covenants as contained in that certain deed dated August 29, 2011 and recorded August 31, 2011 in Official Records Book 1298, Page 1561; Release of Restrictive Covenant, dated April 12, 2023 and recorded April 17, 2023, in Official Records Book 1706, Page 881, both of the Public Records of Putnam County, Florida.

20. Restrictions and conditions as set forth in that certain deed dated August 29, 2011 and recorded August 31, 2011 in Official Records Book 1298, Page 1561; Release of Restrictive Covenant, dated April 12, 2023 and recorded April 17, 2023, in Official Records Book 1706, Page 881, both of the Public Records of Putnam County, Florida.

NOTE: In accordance with Florida Statutes section 627.4131, please be advised that the insured hereunder may present inquiries, obtain information about coverage, or receive assistance in resolving complaints, by contacting the Commonwealth Land Title Insurance Company Regional Office, 2400 Maitland Center Parkway, Maitland, Florida 32751. Telephone 877-947-5483.

EXHIBIT "A"

That part of Section 10, Township 10 South, Range 25 East described as:

All of Section 10, Township 10 South, Range 25 East.

That part of Section 14, Township 10 South, Range 25 East described as:

That part of the North ½ of the Northwest ¼ of said Section 14, lying west of Motes Island Road, Less and Except:

Those lands described in Order of Taking recorded in Official Record Book 919, Page 260 of the Public Records of Putnam County, Florida.

AND the Southwest ¼ of the Northwest ¼ of said Section 14, Less and Except U.S. Highway Number 20 right of way and further Less and Except:

Those lands described in Order of Taking recorded in Official Record Book 919, Page 260 of the Public Records of Putnam County, Florida, and those lands conveyed in Official Record Book 1293, Page 903 of the Public Records of Putnam County, Florida.

That part of Section 15, Township 10 South, Range 25 East described as:

The North ½ of the Northwest ¼ of Section 15, EXCEPT the South 660.04 feet of the West 1320 feet thereof described in Official Record Book 658, Page 1109 of the Public Records of Putnam County, Florida.

AND the East ½ of the Southeast ¼ of the Northwest ¼ of said Section 15, Less and Except U.S. Highway Number 20 right of way.

AND the East ½ of the Northeast ¼ of the Southwest ¼ of said Section 15.

AND the East ½ of the Southeast ¼ of the Southwest ¼ of said Section 15.

AND the Southwest ¼ of the Northeast ¼ of said Section 15, Less and Except U.S. Highway 20 right of way.

AND the East ½ of the Southeast ¼ of the Northeast ¼ of said Section 15, Less and Except U.S. Highway 20 right of way.

AND the Northeast ¼ of the Northeast ¼ of said Section 15.

AND the South ½ of the Northwest ¼ of the Northeast ¼ of said Section 15.

AND the Northeast ¼ of the Northwest ¼ of the Northeast ¼ of said Section 15.

AND the South ½ of the Southeast ¼ of said Section 15.

Nine Mile Swamp Park
Putnam County

Approved as to Form and Legality

By: Lois La Seur Digitally signed by Lois La Seur Date: 2023.04.12 11:33:50 -04'00'

BSM
BY SK
Date: 11.05.2019

AND the Northeast ¼ of the Southeast ¼ of said Section 15.

AND the South ½ of the Northwest ¼ of the Southeast ¼ of said Section 15.

AND the Northeast ¼ of the Northwest ¼ of the Southeast ¼ of said Section 15.

AND the Northwest ¼ of the Northwest ¼ of the Northeast ¼ of said Section 15.

AND that part of the Northwest ¼ of Section 15, Township 10 South, Range 25 East, Putnam County, Florida being described as follows:

Commence at the Northwest corner of said Section 15; thence South 00°39'01" East, along the West line of the Northwest ¼ of said Section 15, a distance of 661.81 feet to the Point of Beginning of the herein described parcel; thence North 88°45'19" East, parallel with the North line of lands described in Deed Book 112, Page 234 of the Public Records of Putnam County, Florida, a distance of 1320.00 feet; thence South 00°39'01" East, parallel with the said West line of the Northwest ¼ of Section 15, a distance of 660.04 feet to the said North line of lands described in Deed Book 112, Page 234; thence South 88°45'19" West, along said North line of lands described in Deed Book 112, Page 234, a distance of 1320.00 feet to the Northwest corner of said lands and the Northwest corner of the Southwest ¼ of the Northwest ¼ of said Section 15; thence North 00°39'01" West, along said West line of the Northwest ¼ of Section 15, a distance of 660.04 feet to the Point of Beginning.

AND that part of the Southwest ¼ of the Northwest ¼ of Section 15, Township 10 South, Range 25 East being more particularly described as follows:

Commence at the Northwest corner of said Section 15; thence South 00°02'56" West along the Westerly line of said Section 15, a distance of 1742.35 feet to the South line of those lands described and recorded in Official Records Book 458, Page 1348 of the Public Records of Putnam County, Florida and the Point of Beginning; thence continue South 00°02'56" West, along said Westerly line of said Section 15, also being the Westerly line of those lands described and recorded in Deed Book 112, Page 234 of said Public Records of Putnam County, Florida, a distance of 306.32 feet to the current Northerly right of way line of State Road No. 20; thence South 81°07'33" East along last said line, 174.93 feet to the point of curvature of a curve to the Southeast; thence Southeasterly, continuing also said Northerly right of way line, along and around the arc of said curve, concave Northerly, having a radius of 5696.00 feet, an arc distance of 596.21 feet, said arc being subtended by a chord bearing and distance of South 84°07'28" East, 595.94 feet; thence North 02°46'32" East, 486.01 feet; thence North 87°22'33" East, 212.95 feet; thence South 03°32'22" East, 502.76 feet to the aforesaid Northerly right of way line of State Road No. 20; thence Northeasterly along and around the arc of said curve, concave Northerly, having a radius of 5696.00 feet, an arc distance of 349.32 feet, said arc being subtended by a chord bearing and distance of North 89°03'18" East, 349.18 feet to the East line of the aforesaid lands described and recorded in Deed Book 112, Page 234; thence North 00°02'56" East, 827.93 feet to the North line of said lands described in Deed Book 112, Page 234; thence South 89°21'15" West, along last said line, 1110.15 feet to the Easterly line of those lands described and recorded in Official Records Book 342, Page 570; thence South 00°02'56" West along last said line and along Easterly line of aforesaid lands described and recorded in Official Records Book 458, Page 1348, a distance of 420.00 feet to the aforesaid South line of those lands described and recorded in Official Records Book 458, Page 1348; thence South 89°55'47" West, along last said line, 210.00 feet to the Point of Beginning.

Nine Mile Swamp Park
Putnam County

BSM
BY SK
Date: 11.05.2019

That part of Section 16, Township 10 South, Range 25 East described as:

The Northeast ¼ of the Northeast ¼ of said Section 16.

AND the East ½ of the East ½ of the Northwest ¼ of the Northeast ¼ of said Section 16.

That part of Section 22, Township 10 South, Range 25 East described as:

The Northeast ¼ of the Northeast ¼ of the Northwest ¼ of said Section 22.

AND the East ½ of the Northeast ¼ of said Section 22.

The foregoing property being also described as follows:

Parcel # 1 lying North of State Road 20:

Begin at a concrete monument marking the Northeast corner of Section 16, Township 10 South, Range 25 East, Putnam County, Florida and run South 89°42'58" West, along the North boundary of said Section 16, a distance of 1661.18 feet to a point; thence leaving said Section line, run South 00°08'01" East, a distance of 1318.77 feet to a point; thence North 89°49'11" East, a distance of 1657.47 feet to a point; thence South 89°58'33" East, a distance of 209.83 feet to a point; thence South 00°02'35" West, a distance of 420.13 feet to a point; thence North 89°57'51" West, a distance of 209.85 feet to a point; thence South 00°49'30" East, a distance of 304.81 feet to a point on the Northerly right of way line of State Road 20; thence South 81°54'07" East, along said right of way line, a distance of 174.93 feet to a point, said point being on a curve concave to the North, thence run in an Easterly direction along said right of way line and curve having a radius of 5696.00 feet, through a central angle of 05°57'02" for an arc distance of 591.57 feet (chord of said arc being South 83°39'09" East, a distance of 591.30 feet) to a point; thence leaving said right of way line, run North 02°43'50" East, a distance of 486.17 feet to a point; thence North 87°24'55" East, a distance of 213.36 feet to a point; thence South 03°32'47" West, a distance of 502.64 feet to a point on the Northerly right of way line of State Road 20, said pint being on a curve concave to the North; thence run in an Easterly direction along said right of way and curve having a radius of 5696.00 feet, through a central angle of 03°27'59" for an arc distance of 344.61 feet (chord of said arc being North 89°01'39" East, a distance of 344.57 feet) to a point; thence leaving said right of way line, run North 00°22'38" East, a distance of 827.40 feet to a point; thence North 89°56'30" East, a distance of 659.17 feet to a point; thence South 00°38'41" East, a distance of 767.15 feet to a point on the Northerly right of way line of State Road 20; thence North 84°01'04" East, along said right of way line, a distance of 1422.86 feet to a point, said point being on a curve concave to the North, thence run in an Easterly direction along said right of way line and curve having a radius of 23024.00 feet, through a central angle of 01°24'16" for an arc distance of 564.37 feet (chord of said arc being North 84°43'59" East, a distance of 564.37 feet) to a point; thence leaving said right of way line, run North 00°37'23 West, a distance of 573.17 feet to a point; thence North 89°43'06" East, a distance of 659.57 feet to a point; thence South 00°23'13" East, a distance of 530.24 feet to a point on the Northerly right of way line of State Road 20; thence North 84°54'54" East, along said right of way, a distance of 659.51 feet to a point; thence North 84°03'54" East, along said right of way, a distance of 491.76 feet to a point; thence leaving said right of way line, run North 36°28'39" West, a distance of 498.17 feet to a point; thence North 53°57'04" East, a distance of 312.29 feet to a point; thence North 83°34'35" East, a distance of 250.20

Nine Mile Swamp Park
Putnam County

BSM
BY SK
Date: 11.05.2019

feet to a point; thence North 02°04'11" East, a distance of 358.81 feet to a point; thence North 72°26'09" East, a distance of 377.51 feet to a point on the West boundary of Motes Island Road; thence North 23°37'55" West, along the West boundary of said road, a distance of 735.59 feet to a point on the North boundary of Section 14, Township and Range aforesaid; thence South 89°05'54" West, along the North boundary of said Section 14, a distance of 776.37 feet to the Southeast corner of Section 10, Township and Range aforesaid; thence North 00°20'04" West, along the East boundary of said Section 10, a distance of 5131.70 feet to the Northeast corner of said Section 10; thence South 89°46'33" West, along the North boundary of said Section 10, a distance of 5262.90 feet to the Northwest corner of said Section 10; thence South 00°01'45" West, along the West boundary of said Section 10, a distance of 2497.76 feet to a point; thence South 00°27'00" East, along the West boundary of said Section 10, a distance of 2639.07 feet to the Point of Beginning.

Parcel # 2 lying South of State Road 20:

Begin at an iron rod marking the Southeast corner of Section 15, Township 10 South, Range 25 East, Putnam County, Florida and run North 00°08'42" West, along the East boundary of said Section 15, a distance of 2645.53 feet to a point; thence North 89°18'17" East, a distance of 674.36 feet to a point; thence North 00°03'52" West, a distance of 711.52 feet to a point on the Southerly right of way line of State Road 20; thence South 84°00'52" West, along said Southerly right of way line of State Road 20, a distance of 1338.74 feet to a point; thence leaving said right of way line, run South 00°11'03" West, a distance of 583.20 feet to a point; thence South 89°43'11" West, a distance of 659.72 feet to a point; thence North 00°24'18" East, a distance of 551.24 feet to a point on the Southerly right of way line of said State Road 20, said point being on a curve concave to the North; thence run in a Westerly direction along said right of way line and curve having a radius of 22826.00 feet, through a central angle of 01°25'59" for an arc distance of 570.91 feet (chord of said arc being South 84°38'45" West, a distance of 570.86 feet) to a point; thence South 84°01'10" West, along said right of way line, a distance of 1423.15 feet to a point; thence leaving said right of way line, run South 00°18'52" East, a distance of 3008.43 feet to a point; thence South 00°28'35" East, a distance of 666.18 feet to a point; thence North 89°23'20" East, a distance of 656.56 feet to a point; thence North 01°12'52" West, a distance of 663.32 feet to a point; thence North 89°40'18" East, a distance of 1321.11 feet to a point; thence South 00°37'48" East, a distance of 2663.16 feet to a point; thence North 89°48'14" East, a distance of 1312.16 feet to a point; thence North 00°26'58" West, a distance of 2666.53 feet to the Point of Beginning.

Less and Except the Northwest ¼ of the Northwest ¼ of the Southeast ¼ of Section 15, Township 10 South, Range 25 East, Putnam County, Florida.

Nine Mile Swamp Park
Putnam County

BSM
BY SK
Date: 11.05.2019

APPENDIX C – PUBLIC HEARING

RECORD

PUBLIC HEARING
RICE CREEK CONSERVATION AREA
MANAGEMENT ADVISORY GROUP – PUBLIC HEARING
2024 LAND MANAGEMENT PLAN UPDATE

On December 5, 2023, a public hearing was held from 9:00 AM to 11:00 AM at the St. Johns River Water Management District Headquarters, 4049 Reid Street, Palatka, FL 32177. The hearing was hosted by the Management Advisory Group (MAG) for Rice Creek Conservation Area's Land Management Plan, and the purpose was to solicit input as well as provide a question-and-answer session regarding the 2024 Land Management Plan update. Seven members of the MAG and six District staff participated in the meeting. This record includes an outline of the hearing agenda.

The hearing was noticed through various sources, as shown in Exhibit A. Despite these notifications, the meeting was not attended by any members of the general public. The District requested written public comment be submitted via email. No written comments were received prior to the deadline established in the hearing notice. A summary of the questions, answers and comments are provided below.

PUBLIC HEARING AGENDA

1. Call to Order, Introductions and Remarks
2. Summary of Ten-Year Land Management Plan
3. Question & Answer
4. Public Comment
5. Process Summation and Adjournment

HEARING PARTICIPANTS

MANAGEMENT ADVISORY GROUP
Present: Paul Adamczyk (Commissioner, District 5 – Putnam County Board of County Commissioners), Adam Dunham (Florida Park Service), Chris Farrell (Audubon Florida), Jeff Glenn (Florida Trail Association), Jeremy Olson (District), Jess Rodriguez (FWC), Ben Williams (Wetland Preserve LLC)
Invited, Not Present: Matt Donovan (Weyerhaeuser)

PUBLIC
None

DISTRICT STAFF
Brent Bachelder (Planner, Bureau of Land Resources), Amy Copeland (Land Manager, Bureau of Land Resources), Brian Emanuel (Chief, Bureau of Land Resources), Patrick McCord (Specialist, Bureau of Land Resources), Teresa Monson (Coordinator, Bureau of Land Resources), Bill White (Intergovernmental Coordinator)

HEARING MINUTES/NOTES

CALLED TO ORDER – 9:05 AM
Introduction from *Brent Bachelder* – Mr. Bachelder Provided a presentation outlining the purpose of the meeting, introducing the MAG and summarizing the management plan.

QUESTION AND ANSWER – 9:30 AM
Introduction from *Brent Bachelder* – Mr. Bachelder explained that the purpose of the question and answer session is to provide further detail to the public regarding content of the management plan. District staff, Teresa Monson, will be recording the substantive content of public comments and I will confirm with meeting participants that their information has been recorded accurately. Mr. Bachelder explained that the Management Advisory Group would be present until 11:00 AM in the event any members of the public were to attend the meeting. Questions from the MAG were responded to and recorded.

PUBLIC COMMENT PERIOD – 9:30 AM
Introduction from *Brent Bachelder* – The public comment period is designed as an opportunity for members of the general public to provide input to the land management plan. Suggestions, recommendations and considerations will be incorporated into the plan to the fullest extent possible. District staff, Teresa Monson, will be recording the substantive content of public comments and I will confirm with meeting participants that their information has been recorded accurately. Mr. Bachelder explained that the Management Advisory Group would be present until 11:00 AM in the event any members of the public were to attend the meeting. Additional comments may be submitted by contacting Brent Bachelder at: bbachelder@sjrwmd.com. Comments from the MAG were collected.

PROCESS SUMMATION – 11:25 AM
Conclusion from *Brent Bachelder* – A note was made that there was no public in attendance at the meeting and no public comments were submitted during the public comment period. The draft management plan will be completed with information gathered from this meeting and will be reviewed by an internal team of District staff. Currently, the planning timeline is as follows. The draft management plan will be submitted to the State of Florida's Acquisition and Restoration Council for review by January 2, 2023. The District Governing Board will consider approval of the plan at their March 12, 2024 meeting. The Acquisition and Restoration Council will consider approval of plan at their April 12, 2024 meeting.

HEARING ADJOURNED AT 11:30 A.M.
Brent Bachelder adjourned the meeting.

EXHIBIT A - NOTICES

PUBLIC HEARING
RIVER LAKES CONSERVATION AREA
MANAGEMENT ADVISORY GROUP
2023 LAND MANAGEMENT PLAN UPDATE

PUBLIC NOTICE

Notice of Meeting/Workshop Hearing

St. Johns River Water Management District

The ST. JOHNS RIVER WATER MANAGEMENT DISTRICT and the RICE CREEK CONSERVATION AREA MANAGEMENT ADVISORY GROUP announce a public hearing to which all persons are invited.

DATE AND TIME: Tuesday, December 5, 2023, 9:00 a.m. – 11:00 a.m.

PLACE: St. Johns River Water Management District Headquarters, 4049 Reid Street, Palatka, FL 32177

GENERAL SUBJECT MATTER TO BE CONSIDERED: Public hearing to discuss and receive public comment on the St. Johns River Water Management District's (District) Ten-year Land Management Plan for the Rice Creek Conservation Area. Use contact information provided below to request a copy of the proposed Land Management Plan and/or a summary of the Land Management Plan. Comments may be presented orally or in writing at the hearing. Written comments may also be submitted via mail or electronic mail using the contact information provided below. Comments should be mailed to arrive at the District prior to the date of the public hearing.

A copy of the agenda may be obtained by contacting:
Brent Bachelder,
Land Resource Specialist
P.O. Box 1429
Palatka, FL 32178-1429
Email: bbachelder@sjrwmd.com
Phone: 386-643-1973

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 7 days before the workshop/meeting by contacting: bbachelder@sjrwmd.com. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

If any person decides to appeal any decision made by the Board with respect to any matter considered at this meeting or hearing, he/she will need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence from which the appeal is to be issued.

For more information, you may contact: Brent Bachelder, bbachelder@sjrwmd.com or (386)643-1973.

Legal No. 00098836
11/04/23

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Notice: 27724460

Notice of Meeting/Workshop Hearing

Department: WATER MANAGEMENT DISTRICTS
Division: St. Johns River Water Management District

VIEW NOTICE

Overview

The St. Johns River Water Management District and Rice Creek Conservation Area Management Advisory Group announces a hearing to which all persons are invited.

DATE AND TIME: Tuesday, December 5, 2023, 9:00 a.m. – 11:00 a.m.

PLACE: St. Johns River Water Management District Headquarters, 4049 Reid Street, Palatka, FL 32177

Subject: Public hearing to discuss and receive public comment on the St. Johns River Water Management District's (District) Ten-year Land Management Plan for the Rice Creek Conservation Area. Use contact information provided below to request a copy of the proposed Land Management Plan and/or a summary of the Land Management Plan. Comments may be presented orally or in writing at the hearing. Written comments may also be submitted via mail or electronic mail using the contact information provided below. Comments should be mailed to arrive at the District prior to the date of the public hearing.

A copy of the agenda may be obtained by contacting: Brent Bachelder, Land Resource Specialist P.O. Box 1429 Palatka, FL 32178-1429 Email: bbachelder@sjrwmd.com Phone: 386-643-1973

PRINT PUBLISH DATE: 11/1/2023 Vol. 49/213

REFERENCE MATERIALS: No reference(s).

APPENDIX D – MANAGEMENT ADVISORY GROUP

RECORD

MEETING
RICE CREEK CONSERVATION AREA
MANAGEMENT ADVISORY GROUP
2024 LAND MANAGEMENT PLAN UPDATE

On December 5, 2023, the Management Advisory Group (MAG) for the Rice Creek Conservation Area's (RCCA) Land Management Plan held a meeting regarding the 2024 plan update. Concurrent with their meeting, the MAG hosted a Public Hearing at the St. Johns River Water Management District Headquarters, 4049 Reid Street, Palatka, FL 32177. The purpose of the MAG Meeting was to discuss findings from the Public Hearing and materials developed for the Land Management Plan. Seven members of the MAG and six District staff participated in the meeting. This record includes an outline of the hearing agenda.

A summary of the meeting is provided below.

MEETING AGENDA

1. Call to Order, Introductions and Remarks
2. General Discussion of Plan Contents – Question and Answer/Comments
3. Review of Public Comments
4. Next Steps

MEETING PARTICIPANTS

MANAGEMENT ADVISORY GROUP

Present: Paul Adamczyk (Commissioner, District 5 – Putnam County Board of County Commissioners), Adam Dunham (Florida Park Service), Chris Farrell (Audubon Florida), Jeff Glenn (Florida Trail Association), Jeremy Olson (District), Jess Rodriguez (FWC), Ben Williams (Wetland Preserve LLC)
Invited, Not Present: Matt Donovan (Weyerhaeuser)

DISTRICT STAFF

Brent Bachelder (Planner, Bureau of Land Resources), Amy Copeland (Land Manager, Bureau of Land Resources), Brian Emanuel (Chief, Bureau of Land Resources), Patrick McCord (Specialist, Bureau of Land Resources), Teresa Monson (Coordinator, Bureau of Land Resources), Bill White (Intergovernmental Coordinator)

MEETING MINUTES/NOTES

CALLED TO ORDER – 9:05 AM

Introduction from *Brent Bachelder* – Mr. Bachelder provided a presentation outlining the purpose and agenda for the meeting.

GENERAL DISCUSSION OF PLAN CONTENTS – QUESTION AND ANSWER/COMMENTS – 9:30 AM

Introduction from *Brent Bachelder* – Explained that the purpose of this portion of the meeting is to give the MAG members an opportunity to discuss specific draft goals and/or objectives for River Lakes. MAG members were encouraged to provide additional goals and objectives that are not covered within those drafted.

Question and Answer –

- Farrell: Water quality monitoring on site? Any plans or ability to monitor upstream section?
    - Bachelder: Water quality is currently monitored at three sites downstream of RCCA, including one site at the downstream property boundary. Status and trends at these sites do not indicate water quality changes within RCCA. The District would consider monitoring water quality within the property if requested or if there were to be a change in water quality immediately downstream of RCCA.
- Farrell: Canal hydrologic alterations – can anything be done to restore more natural water patterns?
    - Bachelder: This has been considered in the past. Hydrologic indicators within bottomland forest at RCCA suggest that hydrologic conditions are sufficient. Pursuing hydrologic restoration – through plugging/filling canal may do more harm than good, cost-benefit.
- Levine: Have you begun any hardwood restoration?
    - Bachelder: Not yet. New map for natural communities has shifted understanding of property and needed activities.
- Dunham: With the bottomland forest onsite, how long has agency had property and has high water affected infrastructure? Interested in new tract as well.
    - Bachelder: District has owned and managed land at RCCA since 2002.
    - Olson: Historic impacts from high water events: trees falling with saturation
- Rodriguez: Long-term goal to update species list; cost-estimate and surveys?
    - Bachelder: The District conducted a bio blitz a few years ago. Species list was recently expanded greatly through use of eBird and iNaturalist data. New occurrences are also documented opportunistically by District staff. No budget for surveys. Little available staff time. Property has good plant and decent bird list, could use improvements to mammals, herps and inverts.

- Rodriguea: Nine Mile management/ownership history?
    - Bachelder: Parcel was under Putnam County ownership and management from 2011 until August 2023, when the District took on management. Little if any natural systems and/or timber management was conducted under the County's stewardship.
- A. Dunham: UTV trespass problems?
    - Olson: Not a major problem on the east side of the property due to access points and hunt club members keeping tab.
    - Bachelder: Access to Nine Mile Swamp from adjoining residential area has been documented. No areas of concentrated impact, e.g. wetland or erosional impacts, have been observed by District staff. Land manager is pursuing actions to control and restrict future unauthorized motorized access.
    - Williams: Fence maintenance, eyes on property (cattle lessees, etc.) at Nine Mile could alleviate trespass problems.

Comments –

- Farrell: Species list; would like to see broader species list/description beyond the most well-known and identify actions to protect. Helps to support value of conservation land.
    - Rodriguez: Ebird and citizen surveys can supplement. FWC can provide guidance on surveys.
- Commissioner Adamczyk: Recommend improving trail to reroute away from powerline and maybe loop instead of out and back. Does not endorse active recreational infrastructure (docks, etc.).
    - Dunham: Agrees focus should be observation and passive nature-based recreation.
- Williams: Nine Mile is a 3 condition class (system for keeping track of condition class – 3 is no fire history). Intermediate step not listed in plan, but recommend taking advantage of virtual fencing/cattle lease tech. Maybe have an NRCS demonstration project at Nine Mile. Consider for plan.
- Williams: FPL may allow burn on utility corridor. Maintaining structure of vegetation under powerlines with fire will provide the best natural system results. Additionally, it is desirable from FPL, as it will reduce their vegetation management costs.
- Williams: Fire management page 60: Change word to "essential."
- Williams: Good time to pursue acquiring land within optimal boundary to east. City of Palatka airport runway protection zone, explore filling out footprint with additional protections, smoke shield.
- Williams: Eventual widening of SR 100, wildlife fencing will need consideration.
- Levine: May be opportunity to look into the British records of the period for further historical research. (Interpretive kiosks)
- Adamczyk: Nine Mile trail may be site for Bartram Trail designation.

- Williams: DOT impoundment, track invasive species (cogongrass) spread.
- Dunham: Take care to prevent invasive plant spread to Nine Mile.
- Dunham: Commend regional public land ownership, improves burning, improves recreational access
- Glenn: Trail crossing sign across SR 100 needed for safety but location of signage is problematic because it's not at a Florida Trail trailhead.
- Glenn: Volunteers have been incredible but are aging. Staff and partners will have big shoes to fill when volunteers can no longer serve. Corridor is easy, infrastructure is challenging.
    - Levine: Active recruitment needed (Scouts, etc.).
    - Glenn: One footbridge, not on Florida Trail, needs attention.
    - Glenn: Hard time recruiting volunteers from Putnam County. Need more time and funding to replace more than one structure a year (band-aids). $50K for lumber for 1,500 ft. Hopkins Crossing bridge replacement, volunteers provide labor. Maybe consider swamp hike instead of replacement or major repairs. Would like feedback from District on structure replacement priorities and timeline.
- Levine: Consider replacing wood boards on footbridges with Trex boards.
    - Dunham: Higher cost, certain places may be worth the additional expense. Holds up well in certain environments.

REVIEW OF PUBLIC COMMENTS – 11:25 AM

Introduction from *Brent Bachelder* – Explained that the purpose of the review of public comments period was for the MAG members to discuss comments made by the public during the Public Hearing. No public comments were submitted for review.

NEXT STEPS – 11:25 AM

Conclusion from *Brent Bachelder* – A note was made that there was no public in attendance at the meeting and no public comments were submitted during the public comment period. The draft management plan will be completed with information gathered from this meeting and will be reviewed by an internal team of District staff. Currently, the planning timeline is as follows. The draft management plan will be submitted to the State of Florida's Acquisition and Restoration Council for review by January 2, 2023. The District Governing Board will consider approval of the plan at their March 12, 2024 meeting. The Acquisition and Restoration Council will consider approval of plan at their April 12, 2024 meeting.

APPENDIX E – SOILS

The Adamsville series consists of very deep, somewhat poorly drained, rapidly permeable soils on broad flats, low knolls, and lower side slopes. They formed in thick sandy marine or eolian sediments in central and southern Florida. Natural vegetation consists of pines, laurel, and water oaks with a ground cover of saw palmetto, pineland threeawn, indiangrass, bluestem grasses, and several low panicums.

The Bluff series consists of very deep, very poorly drained, slowly permeable soils in marshes and on broad low terraces along rivers. They formed in thick beds of alkaline loamy marine sediments. These soils are primarily used for woodland or wildlife habitat. The native vegetation consists of swamp white oak, tupelo gum, swamp maple, cypress, and palm, with scattered loblolly pine some areas. The understory vegetation consists of several bluestem species, hairy panicum, longleaf uniola, vines, and forbs.

The Candler series consists of very deep, excessively drained, very rapidly to rapidly permeable soils on uplands of Southern Florida Flatwoods (MLRA 155), South Central Florida Ridge (MLRA 154), Eastern Gulf Coast Flatwoods (MLRA 152A) and the Atlantic Coast Flatwoods (MLRA 153A. They formed in thick beds of eolian or sandy marine deposits. Native vegetation consists of bluejack oak, turkey oak, sand post oak and longleaf pine, sand pine, sand live oak, chapman oak and myrtle oak with a sparse understory of lopsided indiangrass, gopher apple, pineland threeawn, hairy panicum, and other annual forbs.

The Centenary series consists of very deep, well drained or somewhat excessively drained, moderately permeable soils in marine sediments. These soils are commonly associated with longleaf and loblolly pine, blackjack, turkey and post oaks.

The Electra series consists of somewhat poorly drained soils that formed in thick beds of sandy and loamy marine sediments on slight ridges in the flatwoods areas of central and southern Florida. Native vegetation may include dwarf live oak, a few longleaf and sand pine, running oak, saw palmetto, and blueberry. Understory vegetation may include creeping bluestem, chalky bluestem, lopsided indiangrass, low panicum, pineland threeawn, paspalum, and numerous forbs.

The Holopaw series consists of deep and very deep, poorly and very poorly drained soils formed in sandy marine sediments. These soils are on low lying flats, in poorly defined drainages or depressional areas. Native vegetation is scattered slash and pond pine, cabbage and saw palmettos, scattered cypress, myrtle, sand cordgrass, and pineland threeawn.

The Immokalee series consists of deep and very deep, poorly drained and very poorly drained soils that formed in sandy marine sediments. They occur on flatwoods and in depressions of Peninsular Florida. Principal vegetation is longleaf and slash pines and undergrowth of saw palmetto, gallberry, wax myrtle, and pineland threeawn. In depressions, water tolerant plants such as cypress, loblolly

bay gorodonia, red maple, sweet bay, maidencane, blue maidencane, chalky bluestem, sand cordgrass, and blue joint panicum are more common.

The Malabar series consists of very deep, poorly to very poorly drained soils in sloughs, shallow depressions, and along flood plains. They formed in sandy and loamy marine sediments. Native vegetation consists of scattered slash pine, cypress wax myrtle, cabbage palm, pineland threeawn, and maidencane. In depressions, the vegetation is dominantly St. Johns wort or maidencane.

The Myakka series soils are very deep, poorly to very poorly drained soils formed in sandy marine deposits. These soils are on flatwoods, high tidal areas, flood plains, depressions, and gently sloping to barrier islands. Slopes in areas where these soils are found range from 0-8%. Native vegetation includes longleaf and slash pines with an undergrowth of saw palmetto, running oak, inkberry, wax myrtle, huckleberry, chalky bluestem, pineland threeawn, and scattered fetterbush.

The Paisley series consists of deep, poorly drained, slowly permeable soils that formed in clayey marine sediments influenced by underlying calcareous materials. These soils are on nearly level, low board coastal plains with slopes of less than 1%. Native vegetation consists of slash, longleaf, and loblolly pine, swamp white oak, swamp maple, and sweetgum with an understory of wax myrtle, cabbage palmetto, bluestem, and native grasses.

The Palmetto series consists of deep, poorly drained, moderately slowly permeable soils that formed in unconsolidated marine sandy and loamy materials. They occur in sloughs, depressions, and poorly defined drainageways in the flatwoods in Peninsular Florida. Slopes are 0 to 2 percent. Natural vegetation is chalky bluestem, blue maidencane, sand cordgrass, pineland threeawn, low panicums, and scattered slash pines and scattered clumps of sawpalmetto, sawgrass, arrowhead, cattail, spikerush, St. Johnswort, and cypress.

The Placid series consists of very deep, very poorly drained, rapidly permeable soils on low flats, depressions, poorly defined drainageways on uplands, and flood plains on the Lower Coastal Plain. They formed in sandy marine sediments. Natural vegetation consists of pond pine, bay, cypress, gum, pickerel weed, and coarse grasses.

The Pomona series consists of very deep, poorly and very poorly drained, moderate to moderately slowly permeable soils on broad low ridges on the Lower Coastal Plain. They formed in sandy and loamy marine sediments. The native vegetation consists of slash pine, longleaf pine with an understory of saw palmetto, wax myrtle, gallberry, creeping bluestem, chalky bluestem, indiangrass, and pineland threeawn.

The Riviera series consists of very deep, poorly drained, very slowly permeable soils on broad, low flats and in depressions in the Lower Coastal Plain. They formed in stratified sandy and loamy marine sediments on the Lower Coastal Plain. Native vegetation may consist of slash pine, cabbage, and saw palmetto, scattered cypress, maidencane, and pineland threeawn.

The Samsula series consists of very deep, very poorly drained, rapidly permeable soils that formed in moderately thick beds of hydrophytic plant remains and are underlain by sandy marine sediments. These soils are in swamps, poorly defined drainageways and flood plains. Most areas are in native vegetation and used for water storage and as wildlife habitat. Natural vegetation is loblolly bay with scattered cypress, maple, gum, and pine trees with a ground cover of greenbriers, ferns, and other aquatic plants.

The Tavares series consists of very deep, moderately well drained soils that formed in sandy marine or eolian deposits. Tavares soils are on hills, ridges and knolls of the lower Coastal Plain. In most places the natural vegetation consists of slash pine, longleaf pine, a few scattered blackjack oak, turkey oak, and post oak with an undercover of pineland threeawn. In some places natural vegetation consists of turkey oak, blackjack oak, and post oak with scattered slash pine and longleaf pine.

The Tomoka series consists of deep, very poorly drained, moderately permeable soils that formed in decomposed dark reddish brown and black organic material about 27 inches thick over sand and loamy mineral material. Native vegetation is saw grass, lilies, reeds, sedges, myrtle and other aquatic plants. Cypress, red and white bay, maple and pond pine are common tree species.

The Winder series consists of very deep, poorly drained, slowly to very slowly permeable soils on broad, low flats, and depressional areas. Formed in loamy marine sediments on the lower coastal plain. Slopes in areas where these soils are found range from 0-2%. Most areas are native vegetation and used for wildlife habitat. Natural vegetation consists of cordgrass, maidencane, cabbage palmetto, saw palmetto, and pineland threeawn.

The Zolfo series consists of very deep, somewhat poorly drained soils that formed in sandy marine sediments. Zolfo soils are on ridges, rises, and knolls on adjacent flatwoods on marine terraces. Potential native vegetation consists of scattered turkey, laurel, or water oaks; long leaf or slash pine with an undercover of pineland threeawn, bluestem, lopsided indiangrass, gallberry, native weeds and sawpalmetto.

APPENDIX F – SPECIES LIST

PLANTS

Scientific Name	Common Name	Status	Source
Abutilon theophrasti	velvetleaf		SJR
Acalypha gracilens	slender threeseed mercury		SJR
Acrostichum danaeifolium	giant leather fern		SJR
Aeschynomene americana	Shyleaf		SJR
Aeschynomene indica	Indian jointvetch		SJR
Aesculus pavia	red buckeye		SJR
Agalinis fasciculata	Beach false foxglove		SJR
Agalinis filifolia	Seminole false foxglove		SJR
Agalinis linifolia	flaxleaf false foxglove		SJR
Agalinis purpurea	purple false foxglove		SJR
Agalinis setacea	threadleaf false foxglove		SJR
Agarista populifolia	Florida hobblebush		SJR, iNaturalist
Ageratina aromatica	lesser snakeroot		SJR
Ageratina jucunda	hammock snakeroot		SJR
Agrostis hyemalis	winter bentgrass		SJR
Aletris lutea	yellow colicroot		SJR
Aletris obovata	southern colicroot		SJR
Alocasia odora	taro		SJR
Alternanthera philoxeroides	alligatorweed	FISC II	SJR
Amaranthus hybridus	pigweed		SJR
Ambrosia artemisiifolia	common ragweed		SJR
Amorpha fruticosa	false indigo-bush		SJR
Ampelopsis arborea	peppervine		SJR
Amphicarpum muhlenbergianum	blue maidencane		SJR
Andropogon brachystachyus	shortspike bluestem		SJR
Andropogon glomeratus	bushy bluestem		SJR
Andropogon glomeratus glaucopsis	purple bluestem		SJR
Andropogon ternarius	splitbeard bluestem		SJR
Andropogon virginicus	broomsedge bluestem		SJR
Andropogon virginicus glaucus	chalky bluestem		SJR
Anthenantia villosa	green silkyscale		SJR
Apios americana	groundnut		SJR
Apteria aphylla	nodding nixie		iNaturalist
Aralia spinosa	Devil's walkingstick		SJR
Ardisia crenata	scratchthroat	FISC I	SJR
Arisaema triphyllum	Jack-in-the-pulpit		SJR
Aristida purpurascens	arrowfeather threeawn		SJR

Aristida spiciformis	bottlebrush threeawn		SJR
Aristida stricta beyrichiana	wiregrass		SJR
Aristolochia serpentaria	Virginia snakeroot		SJR
Arundinaria tecta	switch cane		SJR, iNaturalist
Asclepias pedicellata	savannah milkweed		SJR
Asclepias perennis	aquatic milkweed		SJR, iNaturalist
Asimina angustifolia	slimleaf pawpaw		SJR
Asimina parviflora	smallflower pawpaw		SJR
Axonopus fissifolius	common carpetgrass		SJR
Axonopus furcatus	big carpetgrass		SJR
Baccharis glomeruliflora	silverling		SJR, iNaturalist
Baccharis halimifolia	groundseltree		SJR
Bacopa caroliniana	Carolina water-hyssop		SJR, iNaturalist
Bacopa monnieri	water hyssop		SJR
Balduina angustifolia	coastal plain honeycombhead		SJR
Bejaria racemosa	tarflower		SJR
Berchemia scandens	supplejack		SJR, iNaturalist
Berlandiera subacaulis	Florida greeneyes		SJR
Bidens alba	romerillo		SJR
Bidens bipinnata	Spanish needles		SJR
Bigelowia nudata	Pineland rayless goldenrod		SJR
Boehmeria cylindrica	false nettle		SJR
Boehmeria nivea	ramie		SJR
Brasenia schreberi	watershield		SJR
Brassica juncea	India mustard		SJR
Buchnera americana	American bluehearts		SJR
Bulbostylis barbata	watergrass		SJR
Callicarpa americana	American beautyberry		SJR, iNaturalist
Callisia graminea	grassleaf roseling		SJR
Calystegia sepium limnophila	hedge false bindweed		SJR
Campanula floridana	Florida bellflower		SJR
Campsis radicans	American trumpet vine		SJR, iNaturalist
Canna flaccida	golden canna		SJR
Cardamine bulbosa	bulbous cress		SJR, iNaturalist
Carex alata	broadwing sedge		SJR
Carex chapmannii	Chapman's sedge	FDACS-T, S3/G3	SJR
Carex cherokeensis	Cherokee sedge		SJR
Carex dasycarpa	sandywoods sedge		SJR
Carex fissa aristata	hammock sedge		SJR
Carex gholsonii	Gholson's sedge		SJR
Carex gigantea	giant sedge		SJR

Carex leptalea	bristlystalked sedge		SJR
Carex longii	Long's sedge		SJR
Carex lupuliformis	false hop sedge		SJR
Carex oxylepis	sharpscale sedge		SJR
Carex stipata	Awlfruit sedge		SJR
Carex verrucosa	warty sedge		SJR
Carex vexans	Florida hammock sedge		SJR
Carphephorus corymbosus	Florida painbrush		SJR
Carphephorus odoratissimus	vanillaleaf		SJR
Carphephorus paniculatus	hairy chaffhead		SJR, iNaturalist
Carpinus caroliniana	American hornbeam		SJR, iNaturalist
Carya aquatica	water hickory		SJR
Celtis laevigata	sugarberry		SJR
Centella asiatica	spadeleaf		SJR
Centrosema virginianum	butterfly pea		SJR, iNaturalist
Cephalanthus occidentalis	buttonbush		SJR, iNaturalist
Cercis canadensis	eastern redbud		SJR
Chaerophyllum tainturieri	hairyfruit chervil		SJR
Chamaecrista fasciculata	partridge pea		SJR
Chamaecrista nictitans	sensitive pea		SJR
Chamaecrista nictitans aspera	sensitive pea		SJR
Chamaesyce hyssopifolia	hyssopleaf sandmat		SJR
Chapmannia floridana	Florida alicia		SJR
Chaptalia tomentosa	pineland daisy		SJR, iNaturalist
Chasmanthium laxum	slender woodoats		SJR
Chasmanthium laxum sessiliflorum	longleaf woodoats		SJR
Chasmanthium nitidum	shiny woodoats		SJR, iNaturalist
Chenopodium album	lamb's-quarters		SJR
Chionanthus virginicus	white fringetree		SJR
Christella dentata	soft fern		iNaturalist
Chrysopsis scabrella	coastalplain goldenaster		SJR
Cicuta maculata	spotted water hemlock		SJR
Cinnamomum camphora	camphortree	FISC I	SJR
Cirsium horridulum	bristle thistle		SJR, iNaturalist
Cirsium nuttallii	Nuttall's thistle		SJR
Cladium jamaicense	Jamaica swamp sawgrass		SJR
Clematis crispa	swamp leatherflower		SJR, iNaturalist
Clematis reticulata	netleaf leatherflower		SJR
Clethra alnifolia	coastal sweetpepperbush		SJR
Clitoria mariana	Atlantic pigeonwings		SJR
Cnidoscolus stimulosus	tread-softly		SJR

Commelina communis	Asiatic dayflower		SJR
Commelina diffusa	common dayflower		SJR
Commelina erecta	whitemouth dayflower		SJR
Commelina virginica	virginia dayflower		SJR
Conoclinium coelestinum	blue mistflower		SJR
Conyza canadensis	horseweed		SJR
Coreopsis gladiata	coastalplain tickseed		SJR
Coreopsis leavenworthii	Leavenworth's tickseed		SJR, iNaturalist
Cornus florida	flowering dogwood		SJR
Cornus foemina	stiff dogwood		SJR, iNaturalist
Corydalis micrantha australis	smallflower fumewort		SJR
Crataegus crus-galli	cockspur hawthorn		SJR
Crataegus marshallii	parsley hawthorn		SJR
Crinum americanum	Florida swamp-lily		SJR
Croptilon divaricatum	slender scratchdaisy		SJR
Croton argyranthemus	silver croton		SJR
Croton glandulosus	vente conmigo		SJR
Ctenium aromaticum	toothachegrass		SJR
Ctenium floridanum	Florida toothachegrass	FDACS-E, G2/S2	SJR
Cuphea carthagenensis	Colombian waxweed		SJR
Cuscuta pentagona	fiveangled odder		SJR
Cynanchum scoparium	leafless swallowwort		SJR
Cynodon dactylon	Bermuda grass		SJR
Cyrilla racemiflora	Titi		SJR
Dactyloctenium aegyptium	durban crowfootgrass		SJR
Decumaria barbara	climbing hydrangea		SJR
Desmodium paniculatum	panicled ticktrefoil		SJR
Desmodium tenuifolium	slimleaf ticktrefoil		SJR
Dichanthelium aciculare	needleleaf witchgrass		SJR
Dichanthelium commutatum	variable witchgrass		SJR, iNaturalist
Dichanthelium dichotomum	forked rosette-panicgrass		SJR
Dichanthelium ensifolium	sword-leaf panicgrass		SJR
Dichanthelium ensifolium unciphyllum	cypress witchgrass		SJR
Dichanthelium erectifolium	erectleaf witchgrass		SJR
Dichanthelium laxiflorum	open-flower witchgrass		SJR, iNaturalist
Dichanthelium leucothrix	rough witchgrass		SJR
Dichanthelium ovale	eggleaf witchgrass		SJR
Dichanthelium portoricense	hemlock witchgrass		SJR
Dichanthelium scabriusculum	woolly witchgrass		SJR
Dichanthelium scoparium	velvet witchgrass		SJR

Dichanthelium strigosum	roughhair witchgrass	SJR
Dichanthelium tenue	white-edged witchgrass	iNaturalist
Dichondra carolinensis	Carolina ponysfoot	SJR
Digitaria ciliaris	southern crabgrass	SJR
Digitaria filiformis	slender crabgrass	SJR
Digitaria serotina	blanket crabgrass	SJR
Diodia teres	poorjoe	SJR
Diodia virginiana	Virginia buttonweed	SJR
Diospyros virginiana	common persimmon	SJR
Drosera brevifolia	dwarf sundew	SJR
Drosera capillaris	pink sundew	SJR, iNaturalist
Drosera intermedia	oblong-leaved sundew	SJR
Dryopteris ludoviciana	southern wood fern	SJR
Dulichium arundinaceum	threeway sedge	SJR
Dyschoriste humistrata	swamp twinflower	SJR
Echinochloa crusgalli	barnyardgrass	SJR
Echinochloa paludigena	Florida cockspur	SJR
Echinochloa walteri	coast cockspur	SJR
Eclipta prostrata	false daisy	SJR
Eichhornia crassipes	common water-hyacinth	SJR
Eleocharis flavescens	bright green spikerush	SJR
Eleocharis geniculata	canada spikerush	SJR
Eleocharis tuberculosa	conecup spikerush	SJR
Eleocharis vivipara	viviparous spikerush	SJR
Elephantopus elatus	tall elephantsfoot	SJR
Elephantopus nudatus	smooth elephant's foot	SJR, iNaturalist
Eleusine indica	Indian goosegrass	SJR
Epidendrum conopseum	green-fly orchid	SJR
Eragrostis elliottii	Elliott's lovegrass	SJR
Eragrostis hirsuta	bigtop lovegrass	SJR
Eragrostis spectabilis	purple lovegrass	SJR
Eragrostis virginica	coastal lovegrass	SJR
Erechtites hieraciifolius	American burnweed	SJR
Eremochloa ophiuroides	centipedegrass	SJR
Erigeron quercifolius	oakleaf fleabane	SJR
Erigeron vernus	early whitetop fleabane	SJR
Eriocaulon compressum	flattened pipewort	SJR
Eriocaulon decangulare	tenangle pipewort	SJR
Eryngium baldwinii	Baldwin's eryngo	SJR
Eryngium prostratum	creeping eryngo	SJR
Eryngium yuccifolium	rattlesnake master	SJR

Erythrina herbacea	Cherokee bean	SJR
Euonymus americanus	American strawberrybush	SJR
Eupatorium album	white thoroughwort	SJR
Eupatorium capillifolium	dogfennel	SJR
Eupatorium compositifolium	yankeeweed	SJR
Eupatorium leptophyllum	falsefennel	SJR
Eupatorium leucolepis	justiceweed	SJR
Eupatorium mohrii	Mohr's thoroughwort	SJR
Eupatorium pilosum	rough boneset	SJR
Eupatorium rotundifolium	roundleaf thoroughwort	SJR
Eupatorium serotinum	lateflowering thoroughwort	SJR
Euphorbia exserta	coastal sand spurge	SJR
Euphorbia inundata	Florida pineland spurge	SJR
Eustachys neglecta	fourspike fingergrass	SJR
Eustachys petraea	pinewoods fingergrass	SJR
Euthamia caroliniana	slender flattop goldenrod	SJR
Fimbristylis autumnalis	slender fimbry	SJR
Fimbristylis dichotoma	forked fimbry	SJR
Fimbristylis puberula	hairy fimbry	SJR
Fimbristylis schoenoides	ditch fimbry	SJR
Fimbristylis spadicea	marsh fimbry	SJR
Fraxinus caroliniana	pop ash	SJR
Fuirena breviseta	saltmarsh umbrellasedge	SJR
Fuirena pumila	dwarf umbrellasedge	SJR
Fuirena scirpoidea	southern umbrellasedge	SJR
Fumaria officinalis	drug fumitory	SJR
Galactia elliottii	Elliott's milkpea	SJR
Galium hispidulum	coastal bedstraw	SJR
Galium pilosum	hairy bedstraw	SJR
Galium tinctorium	stiff marsh bedstraw	SJR
Gamochaeta pensylvanica	Pennsylvania cudweed	SJR
Gamochaeta purpurea	purple cudweed	SJR
Gaura angustifolia	southern beeblossom	SJR
Gaylussacia dumosa	dwarf huckleberry	SJR
Gaylussacia frondosa tomentosa	blue huckleberry	SJR
Gelsemium sempervirens	yellow jessamine	SJR, iNaturalist
Geranium carolinianum	Carolina cranesbill	SJR
Gleditsia aquatica	water locust	SJR
Gordonia lasianthus	loblolly bay	SJR
Gratiola hispida	rough hedgehyssop	iNaturalist
Gratiola pilosa	shaggy hedgehyssop	SJR

Gratiola ramosa	branched hedgehyssop		SJR
Gratiola virginiana	roundfruit hedgehyssop		SJR
Gymnopogon ambiguus	bearded skeletongrass		SJR
Habenaria floribunda	toothpetal false reinorchid		iNaturalist
Habenaria quinqueseta	longhorn bog orchid		SJR
Habenaria repens	waterspider false reinorchid		SJR
Hartwrightia floridana	hartwrightia	FDACS-T, S2/G2	SJR
Helianthemum carolinianum	Carolina frostweed		SJR
Helianthemum corymbosum	pinebarren frostweed		SJR
Helianthus angustifolius	narrowleaf sunflower		SJR
Helianthus floridanus	Florida sunflower		SJR
Helianthus radula	stiff sunflower		SJR
Heterotheca subaxillaris	camphorweed		SJR
Hibiscus coccineus	scarlet rosemallow		SJR
Hieracium gronovii	queen-devil		SJR
Houstonia procumbens	roundleaf bluet		SJR
Hydrangea barbara	woodvamp		iNaturalist
Hydrilla verticillata	hydrilla	FISC I	SJR
Hydrocotyle verticillata	whorled marshpennywort		SJR
Hypericum cistifolium	roundpod St.John's wort		SJR
Hypericum fasciculatum	peelback St.John's wort		SJR
Hypericum gentianoides	orangegrass		SJR
Hypericum hypericoides	St.Andrew's-cross		SJR
Hypericum mutilum	dwarf St.John's wort		SJR
Hypericum myrtifolium	myrtleleaf St.John's wort		SJR, iNaturalist
Hypericum tetrapetalum	fourpetal St.John's wort		SJR
Hypoxis curtissii	common yellow stargrass		SJR
Hypoxis juncea	fringed yellow stargrass		SJR
Hyptis alata	musky mint		SJR
Hyptis mutabilis	tropical bushmint		SJR
Ilex cassine	dahoon		SJR
Ilex coriacea	large gallberry		SJR
Ilex glabra	gallberry		SJR, iNaturalist
Ilex opaca	American holly		SJR, iNaturalist
Ilex opaca arenicola	scrub holly		SJR
Imperata cylindrica	cogongrass	FISC I	SJR
Indigofera caroliniana	carolina indigo		SJR
Indigofera hirsuta	hairy indigo		SJR
Indigofera suffruticosa	anil de pasto		SJR
Ipomoea alba	tropical white morning-glory		SJR
Ipomoea cordatotriloba	tievine		SJR

Iris hexagona	Dixie iris		SJR
Itea virginica	Virginia sweetspire		SJR, iNaturalist
Iva microcephala	piedmont marsh elder		SJR, iNaturalist
Juncus bufonius	Toad Rush		SJR
Juncus coriaceus	Leathery Rush		SJR
Juncus dichotomus	Forked Rush		SJR
Juncus effusus solutus	Soft Rush		SJR
Juncus marginatus	grassleaf rush		SJR
Juncus repens	lesser creeping Rush		SJR
Juncus scirpoides	needlepod rush		SJR
Juniperus virginiana	red cedar		SJR
Justicia angusta	pineland water-willow		SJR
Justicia ovata	looseflower water-willow		SJR, iNaturalist
Kalmia hirsuta	hairy mountain-laurel		SJR
Kosteletzkya pentacarpos	Virginia saltmarsh mallow		SJR
Krigia virginica	Virginia dwarfdandelion		SJR
Kummerowia striata	Japanese clover		SJR
Kyllinga brevifolia	shortleaf spikesedge		SJR
Kyllinga pumila	low spikesedge		SJR
Lachnanthes caroliana	Carolina redroot		SJR
Lachnocaulon anceps	whitehead bogbutton		SJR
Lachnocaulon beyrichianum	southern bogbutton		SJR
Lactuca graminifolia	grassleaf lettuce		SJR
Lantana strigocamara	lantana	FISC I	SJR
Lechea torreyi	piedmont pinweed		SJR
Leersia hexandra	southern cutgrass		SJR
Leersia virginica	whitegrass		SJR
Lespedeza hirta	hairy lespedeza		SJR
Leucothoe racemosa	swamp doghobble		SJR
Liatris gracilis	slender blazing-star		iNaturalist
Liatris tenuifolia quadriflora	shortleaf gayfeather		SJR
Licania michauxii	gopher apple		SJR
Linaria canadensis	Canadian toadflax		SJR
Linaria floridana	Apalachicola toadflax		SJR
Lindernia dubia anagallidea	yellowseed false pimpernel		SJR
Linum floridanum	Florida yellow flax		SJR
Linum medium texanum	stiff yellow flax		SJR
Liquidambar styraciflua	sweetgum		SJR
Liriodendron tulipifera	tulip tree		SJR, iNaturalist
Lobelia cardinalis	cardinalflower	FDACS-T, G5/SNR	SJR
Lobelia paludosa	white lobelia		SJR

Lonicera sempervirens	coral honeysuckle		SJR
Ludwigia alata	winged primrosewillow		SJR
Ludwigia arcuata	ludwigia needle leaf		SJR
Ludwigia decurrens	wingleaf primrosewillow		SJR
Ludwigia lanceolata	lanceleaf primrosewillow		SJR
Ludwigia leptocarpa	anglestem primrosewillow		SJR
Ludwigia linifolia	southeastern primrosewillow		SJR
Ludwigia maritima	seaside primrosewillow		SJR
Ludwigia microcarpa	smallfruit primrosewillow		SJR
Ludwigia octovalvis	Mexican primrosewillow		SJR
Ludwigia palustris	marsh seedbox		SJR
Ludwigia peruviana	Peruvian primrosewillow	FISC I	SJR
Ludwigia repens	creeping primrosewillow		SJR
Ludwigia suffruticosa	shrubby primrosewillow		SJR
Ludwigia virgata	savannah primrosewillow		SJR
Lupinus diffusus	skyblue lupine		SJR
Luziola fluitans	southern watergrass		SJR
Lycopus amplectens	clasping waterhorehound		SJR
Lycopus rubellus	taperleaf waterhorehound		SJR
Lygodesmia aphylla	rose-rush		SJR
Lygodium japonicum	Japanese climbing fern	FISC I	SJR
Lyonia ferruginea	rusty staggerbush		SJR, iNaturalist
Lyonia fruticosa	coastal plain staggerbush		SJR, iNaturalist
Lyonia ligustrina foliosiflora	maleberry		SJR
Lyonia lucida	fetterbush lyonia		SJR, iNaturalist
Lyonia mariana	piedmont staggerbush		SJR
Lysimachia minima	chaffweed		SJR
Lythrum alatum lanceolatum	winged loosestrife		SJR
Magnolia grandiflora	southern magnolia		SJR, iNaturalist
Magnolia virginiana	sweetbay magnolia		SJR, iNaturalist
Marshallia graminifolia	grassleaf barbara's buttons		SJR
Matelea pubiflora	sandhill spiny-pod	FDACS-E, G3G4/S3S4	FNAI
Mecardonia acuminata	axilflower		SJR
Melanthera nivea	snow squarestem		SJR
Melica mutica	twoflower melicgrass		SJR
Melilotus albus	white sweetclover		SJR
Merremia dissecta	noyau vine		SJR
Micranthemum umbrosum	shade mudflower		SJR
Micromeria brownei pilosiuscula	browne's savory		SJR
Mikania scandens	climbing hempvine		SJR
Mimosa quadrivalvis angustata	sensitive brier		SJR

Mitchella repens	partridgeberry		iNaturalist
Mitreola petiolata	lax hornpod		SJR
Mitreola sessilifolia	swamp hornpod		SJR
Mollugo verticillata	green carpetweed		SJR
Monarda punctata	spotted beebalm		SJR
Morella cerifera	wax myrtle		iNaturalist
Morus alba	white mulberry		SJR
Morus rubra	red mulberry		iNaturalist
Murdannia nudiflora	nakedstem dewflower		SJR
Myrica caroliniensis	southern bayberry		SJR
Myrica cerifera	southern wax myrtle		SJR
Nasturtium officinale	European watercress		SJR
Nemastylis floridana	celestial lily	FDACS-E, S3/G3	SJR
Nothoscordum bivalve	false garlic		SJR
Nuphar advena	spatterdock		SJR
Nymphaea odorata	American white waterlily		SJR
Nyssa biflora	swamp tupelo		iNaturalist
Nyssa sylvatica	blackgum		SJR
Oclemena reticulata	pine barren whitetop aster		SJR
Oenothera laciniata	cutleaf eveningprimrose		SJR
Oenothera simulans	southern beeblossom		iNaturalist
Oldenlandia corymbosa	flattop mille graines		SJR
Oldenlandia uniflora	clustered mille graines		SJR
Orontium aquaticum	golden-club		SJR
Osmanthus americanus	american olive		SJR
Osmunda cinnamomea	cinnamon fern	FDACS-CE, G5/S4	SJR
Osmunda regalis spectabilis	royal fern		SJR
Osmunda spectabilis	American royal fern		iNaturalist
Oxalis corniculata	creeping woodsorrel		SJR
Oxalis violacea	violet woodsorrel		SJR
Oxypolis filiformis	water cowbane		SJR
Palafoxia integrifolia	coastalplain palafox		SJR
Panicum anceps	beaked panicum		SJR
Panicum dichotomiflorum	fall panicgrass		SJR
Panicum hemitomon	maidencane		SJR
Panicum hians	gaping panicum		SJR
Panicum longifolium	long-leaved panic grass		SJR
Panicum repens	torpedo grass	FISC I	SJR
Panicum rigidulum	redtop panicum		SJR
Panicum tenerum	bluejoint panicum		SJR

Panicum verrucosum	warty panicgrass		SJR
Parietaria floridana	florida pellitory		SJR
Parnassia grandifolia	large-leaved grass-of-parnassus	FDACS-E, S2/G3	SJR
Parthenocissus quinquefolia	Virginia creeper		SJR
Paspalum dilatatum	dallisgrass		SJR
Paspalum distichum	knotgrass		SJR
Paspalum floridanum	Florida paspalum		SJR
Paspalum notatum	bahiagrass		SJR
Paspalum praecox	early paspalum		SJR
Paspalum setaceum	thin paspalum		SJR
Paspalum urvillei	vaseygrass		SJR
Passiflora incarnata	purple passionflower		SJR
Pediomelum canescens	buckroot		SJR
Peltandra virginica	green arrow arum		SJR, iNaturalist
Persea borbonia	red bay		SJR
Persea palustris	swamp bay		SJR
Phalaris angusta	timothy canarygrass		SJR
Phalaris caroliniana	Carolina canarygrass		SJR
Phanopyrum gymnocarpon	cottonmouth grass		SJR, iNaturalist
Phlebodium aureum	golden polypody		SJR, iNaturalist
Phlox drummondii	annual phlox		SJR
Phlox pilosa	downy phlox		SJR
Phoradendron leucarpum	oak mistletoe		SJR
Photinia pyrifolia	red chokeberry		SJR
Phyla nodiflora	turkey tangle frogfruit		SJR
Phyllanthus tenellus	Mascarene Island leafflower		SJR
Physalis angulata	cutleaf groundcherry		SJR
Physostegia leptophylla	slenderleaf false dragonhead		SJR
Physostegia purpurea	eastern false dragonhead		SJR
Phytolacca americana	American pokeweed		SJR
Pilea pumila	Canadian clearweed		SJR
Piloblephis rigida	wild pennyroyal		SJR
Pinguicula caerulea	blueflower butterwort		SJR
Pinguicula lutea	yellow butterwort		SJR
Pinguicula pumila	small butterwort		SJR, iNaturalist
Pinus clausa	sand pine		SJR
Pinus elliottii	slash pine		SJR
Pinus glabra	spruce pine		SJR
Pinus palustris	longleaf pine		SJR, iNaturalist
Pinus serotina	pond pine		SJR
Pinus taeda	loblolly pine		SJR

Piriqueta cistoides caroliniana	pitted stripeseed		SJR
Pityopsis graminifolia	narrowleaf silkgrass		SJR
Plantago sparsiflora	pineland plantain		SJR
Plantago virginica	Virginia plantain		SJR
Platanthera blephariglottis conspicua	white fringed orchid		SJR
Platanthera nivea	snowy orchid	FDACS-T, G3G4/S4	SJR
Pleopeltis michauxiana	resurrection fern		SJR, iNaturalist
Pluchea baccharis	rosy camphorweed		SJR, iNaturalist
Pluchea foetida	stinking camphorweed		SJR
Pluchea longifolia	longleaf camphorweed		SJR
Pluchea odorata	sweetscent		SJR
Polanisia tenuifolia	slenderleaf clammyweed		SJR
Polygala cymosa	tall pinebarren milkwort		SJR
Polygala leptostachys	Georgia milkwort		SJR
Polygala lutea	orange milkwort		SJR, iNaturalist
Polygala mariana	Maryland milkwort		SJR
Polygala nana	candyroot		SJR
Polygala ramosa	low pinebarren milkwort		SJR
Polygala rugelii	yellow milkwort		SJR
Polygala setacea	coastalplain milkwort		SJR
Polygala violacea	showy milkwort		SJR
Polygonella gracilis	tall jointweed		SJR
Polygonum glabrum	denseflower knotweed		SJR
Polygonum hirsutum	hairy smartweed		SJR
Polygonum hydropiperoides	swamp smartweed		SJR
Polygonum punctatum	dotted smartweed		SJR
Polypogon monspeliensis	rabbitsfootgrass		SJR
Polypremum procumbens	juniper leaf		SJR
Pontederia cordata	pickerelweed		SJR, iNaturalist
Portulaca oleracea	little hogweed		SJR
Proserpinaca palustris	marsh mermaidweed		SJR
Proserpinaca pectinata	combleaf mermaidweed		SJR
Prunus americana	American plum		SJR
Prunus caroliniana	Carolina laurelcherry		SJR
Prunus umbellata	flatwoods plum		SJR
Pseudognaphalium obtusifolium	rabbit tobacco		SJR
Psilotum nudum	whisk-fern		SJR
Pteridium aquilinum pseudocaudatum	tailed bracken fern		SJR, iNaturalist
Pteris vittata	Chinese ladder brake	FISC II	SJR

Pterocaulon pycnostachyum	blackroot		SJR
Pteroglossaspis ecristata	giant orchid	FDACS-T, G2G3/S2	FNAI
Ptilimnium capillaceum	herbwilliam		SJR, iNaturalist
Pycnanthemum floridanum	Florida mountain-mint	FDACS-T, S3/G3	SJR
Pyrrhopappus carolinianus	Carolina desert-chicory		SJR, iNaturalist
Quercus chapmanii	Chapman's oak		SJR
Quercus geminata	sand live oak		SJR
Quercus incana	bluejack oak		SJR
Quercus laevis	turkey oak		SJR
Quercus laurifolia	laurel oak		SJR
Quercus margaretta	sand post oak		SJR
Quercus michauxii	swamp chestnut oak		SJR, iNaturalist
Quercus myrtifolia	myrtle oak		SJR
Quercus nigra	water oak		SJR, iNaturalist
Quercus shumardii	Shumard's oak		Franz
Quercus virginiana	live oak		SJR
Raphanus raphanistrum	wild radish		SJR
Rhapidophyllum hystrix	needle palm	FDACS-CE, G4/S4	SJR, iNaturalist
Rhexia alifanus	savannah meadowbeauty		SJR
Rhexia cubensis	West Indian meadowbeauty		SJR
Rhexia lutea	yellow meadowbeauty		SJR
Rhexia mariana	pale meadow beauty		SJR
Rhexia nashii	maid marian		SJR
Rhexia nuttallii	Nuttall's meadowbeauty		SJR
Rhexia petiolata	fringed meadowbeauty		SJR
Rhododendron canescens	mountain azalea	FDACS-CE, G5/SNR	iNaturalist, FNAI
Rhododendron viscosum	swamp azalea		SJR
Rhus copallinum	winged sumac		SJR
Rhynchospora caduca	anglestem beaksedge		SJR
Rhynchospora ciliaris	fringed beaksedge		SJR
Rhynchospora colorata	whitetop sedge		SJR, iNaturalist
Rhynchospora corniculata	shortbristle horned beaksedge		SJR
Rhynchospora fascicularis	fascicled beaksedge		SJR
Rhynchospora fernaldii	Fernald's beaksedge		SJR
Rhynchospora filifolia	threadleaf beaksedge		SJR
Rhynchospora globularis	globe beaksedge		SJR
Rhynchospora grayi	Gray's beaksedge		SJR
Rhynchospora harperi	Harper's beaksedge		SJR

Rhynchospora intermedia	pinebarren beaksedge		SJR
Rhynchospora inundata	narrowfruit horned beaksedge		SJR
Rhynchospora latifolia	sandswamp whitetop		SJR
Rhynchospora megalocarpa	sandyfield beaksedge		SJR
Rhynchospora microcarpa	southern beaksedge		SJR
Rhynchospora microcephala	bunched beaksedge		SJR
Rhynchospora miliacea	millet beaksedge		SJR, iNaturalist
Rhynchospora mixta	mingled Beaksedge		SJR
Rhynchospora nitens	short-beak beaksedge		SJR
Rhynchospora odorata	fragrant beaksedge		SJR
Rhynchospora plumosa	plumed beaksedge		SJR
Rhynchospora tracyi	Tracy's beaksedge		SJR
Rhynchospora wrightiana	Wright's beaksedge		SJR
Richardia brasiliensis	tropical Mexican clover		SJR
Ricinus communis	castorbean	FISC II	SJR
Rorippa palustris	yellow watercress		SJR
Rosa palustris	swamp rose		SJR
Rubus cuneifolius	sand blackberry		SJR
Rubus pensilvanicus	Pennsylvania blackberry		iNaturalist
Rubus trivialis	southern dewberry		SJR
Rudbeckia hirta	blackeyed susan		SJR
Ruellia caroliniensis	Carolina ruellia		SJR, iNaturalist
Rumex hastatulus	heartwing sorrel		SJR
Rumex obovatus	tropical dock		SJR
Rumex pulcher	fiddle dock		SJR
Rumex verticillatus	swamp dock		SJR
Sabal minor	dwarf palmetto		SJR, iNaturalist
Sabal palmetto	cabbage palm		SJR
Sabatia brevifolia	shortleaf rose gentian		SJR, iNaturalist
Sabatia calycina	coastal rose gentian		SJR, iNaturalist
Sabatia grandiflora	largeflower rosegentian		SJR
Saccharum giganteum	sugarcane plumegrass		SJR
Sacciolepis indica	Indian cupscale		SJR
Sacciolepis striata	American cupscale		SJR
Sageretia minutiflora	smallflower mock buckthorn		SJR
Sagittaria graminea	grassy arrowhead		SJR
Sagittaria isoetiformis	quillwort arrowhead		SJR
Sagittaria lancifolia	bulltongue arrowhead		SJR
Sagittaria subulata	awl-leaf arrowhead		SJR
Salix caroliniana	Carolina willow		SJR, iNaturalist
Salvia lyrata	lyreleaf sage		SJR, iNaturalist

Sambucus nigra canadensis	American black elderberry		SJR
Samolus valerandi parviflorus	seaside brookweed		SJR
Sanicula canadensis	black snakeroot		iNaturalist
Saururus cernuus	lizard's tail		SJR, iNaturalist
Schizachyrium sanguineum	crimson bluestem		SJR
Schizachyrium scoparium	little bluestem		SJR
Schoenoplectus pungens	threesquare bulrush		SJR
Scirpus cyperinus	woolgrass		iNaturalist
Scleria ciliata	fringed nutrush		SJR
Scleria oligantha	littlehead nutrush		SJR
Scleria reticularis	netted nutrush		SJR
Scleria triglomerata	whip nutrush		SJR
Scleria verticillata	low nutrush		SJR
Scoparia dulcis	licorice weed		SJR
Scutellaria integrifolia	helmet skullcap		SJR, iNaturalist
Sebastiania fruticosa	Gulf sebastian-bush		SJR
Selaginella apoda	meadow spike-moss		SJR
Senna obtusifolia	sicklepod		SJR
Serenoa repens	saw palmetto		SJR, iNaturalist
Sericocarpus tortifolius	whitetop aster		SJR, iNaturalist
Sesbania herbacea	danglepod		SJR
Sesbania punicea	rattlebox		SJR
Sesbania vesicaria	bagpod		SJR
Setaria parviflora	marsh bristlegrass		SJR
Sida rhombifolia	arrowleaf sida		SJR
Sida ulmifolia	common fanpetals		SJR
Sideroxylon lanuginosum	gum bully		SJR
Sideroxylon lycioides	buckthorn	FDACS-E, S2/G5	SJR
Sideroxylon tenax	tough bully		SJR
Silphium compositum	kidneyleaf rosinweed		SJR
Sisyrinchium angustifolium	narrowleaf blue-eyed grass		SJR
Smilax auriculata	earleaf greenbrier		SJR
Smilax bona-nox	saw greenbrier		SJR, iNaturalist
Smilax glauca	cat greenbrier		SJR
Smilax laurifolia	laurel-leaf greenbrier		SJR, iNaturalist
Smilax pumila	sarsaparilla vine		SJR, iNaturalist
Smilax tamnoides	bristly greenbrier		SJR, iNaturalist
Solanum capsicoides	cockroach berry		SJR
Solanum carolinense	Carolina horsenettle		SJR
Solanum viarum	tropical soda apple	FISC I	SJR
Solidago fistulosa	pinebarren goldenrod		SJR

Solidago odora	sweet goldenrod	SJR
Solidago stricta	wand goldenrod	SJR
Solidago tortifolia	twistedleaf goldenrod	SJR
Sonchus oleraceus	common sowthistle	SJR
Sorghastrum nutans	yellow indiangrass	SJR
Sorghastrum secundum	lopsided indiangrass	SJR
Sorghum halepense	Johnsongrass	SJR
Spartina bakeri	sand cordgrass	SJR
Spermacoce verticillata	shrubby false buttonweed	SJR
Spermolepis divaricata	roughfruit scaleseed	SJR
Sphenopholis obtusata	prairie wedgescale	SJR
Sphenopholis pensylvanica	swamp wedgescale	SJR
Spiranthes odorata	marsh ladies' tresses	SJR, iNaturalist
Sporobolus compositus clandestinus	hidden dropseed	SJR
Sporobolus curtissii	Curtiss' dropseed	SJR
Sporobolus indicus	smutgrass	SJR
Sporobolus junceus	pineywoods dropseed	SJR
Stachys floridana	Florida betony	SJR
Stillingia sylvatica	queensdelight	SJR
Stipulicida setacea	pineland scalypink	SJR
Stylisma patens	coastalplain dawnflower	SJR
Stylodon carneum	Carolina false vervain	SJR
Stylosanthes biflora	sidebeak pencilflower	SJR
Styrax americanus	American snowbell	SJR
Symphyotrichum carolinianum	climbing aster	SJR
Symphyotrichum dumosum	rice button aster	SJR
Symphyotrichum elliottii	Elliott's aster	SJR
Symphyotrichum lateriflorum	calico aster	iNaturalist
Symphyotrichum simmondsii	Simmonds' aster	SJR
Syngonanthus flavidulus	yellow hatpins	SJR
Taraxacum officinale	common dandelion	SJR
Taxodium distichum	baldcypress	SJR, iNaturalist
Tephrosia chrysophylla	scurf hoarypea	SJR
Tephrosia florida	Florida hoarypea	SJR
Tephrosia hispidula	sprawling hoarypea	SJR
Tephrosia rugelii	Rugel's hoarypea	SJR
Tephrosia spicata	spiked hoarypea	SJR
Teucrium canadense	American germander	SJR, iNaturalist
Thelypteris dentata	downy maiden fern	SJR
Thelypteris hispidula versicolor	Hairy Maiden Fern	SJR
Thelypteris kunthii	southern shield fern	SJR

Thelypteris palustris pubescens	marsh fern		SJR
Tiedemannia filiformis	water cowbane		iNaturalist
Tilia americana caroliniana	Carolina basswood		SJR
Tillandsia bartramii	Bartram's airplant		SJR
Tillandsia recurvata	ballmoss		SJR
Tillandsia simulata	Florida airplant		SJR
Tillandsia usneoides	Spanish moss		SJR
Tillandsia utriculata	spreading airplant		SJR
Torenia crustacea	Malaysian false pimpernel		SJR
Toxicodendron radicans	Eastern poison ivy		SJR, iNaturalist
Tradescantia ohiensis	Ohio spiderwort		SJR
Triadenum virginicum	Virginia marsh St.John's-wort		SJR
Triadica sebifera	Chinese tallow	FISC I	iNaturalist
Trichostema dichotomum	forked bluecurls		SJR
Tridens ambiguus	pinebarren fluffgrass		SJR
Tridens flavus	purpletop tridens		SJR
Triodanis perfoliata	clasping Venus's looking-glass		SJR
Triplasis americana	perennial sandgrass		SJR
Typha latifolia	broadleaf cattail		SJR
Ulmus alata	winged elm		SJR
Ulmus americana	American elm		SJR, iNaturalist
Urena lobata	Caesarweed	FISC I	SJR
Urochloa mutica	paragrass	FISC I	SJR
Urochloa ramosa	browntop millet		SJR
Utricularia floridana	Florida yellow bladderwort		SJR
Utricularia subulata	zigzag bladderwort		SJR
Vaccinium arboreum	farkleberry		SJR
Vaccinium corymbosum	highbush blueberry		SJR
Vaccinium elliottii	mayberry		iNaturalist
Vaccinium fuscatum	black highbush blueberry		iNaturalist
Vaccinium myrsinites	shiny blueberry		SJR
Vaccinium stamineum	deerberry		SJR, iNaturalist
Verbena scabra	sandpaper vervain		SJR
Vernonia gigantea	giant ironweed		SJR
Vernonia noveboracensis	New York ironweed		SJR
Viburnum obovatum	Walter's viburnum		SJR, iNaturalist
Vicia acutifolia	fourleaf vetch		SJR
Vicia sativa	common vetch		SJR
Vicia villosa	hairy vetch		SJR
Vigna luteola	hairypod cowpea		SJR
Viola edulis	salad violet		iNaturalist

Viola lanceolata	bog white violet		SJR
Viola palmata	early blue violet		SJR
Viola primulifolia	primroseleaf violet		SJR
Viola septemloba	Southern coastal violet		iNaturalist
Viola sororia	common blue violet		SJR
Viola vittata	Southern water violet		iNaturalist
Vitis aestivalis	summer grape		SJR
Vitis cinerea floridana	Florida grape		SJR
Vitis rotundifolia	muscadine		SJR
Vitis vulpina	frost grape		SJR
Vittaria lineata	shoestring fern		SJR, iNaturalist
Woodwardia areolata	netted chain fern		SJR
Woodwardia virginica	Virginia chainfern		SJR, iNaturalist
Ximenia americana	tallow wood		SJR
Xyris ambigua	coastalplain yelloweyed grass		SJR
Xyris baldwiniana	Baldwin's yelloweyed grass		SJR
Xyris brevifolia	shortleaf yelloweyed grass		SJR
Xyris caroliniana	Carolina yelloweyed grass		SJR
Xyris elliottii	Elliott's yelloweyed grass		SJR
Xyris fimbriata	fringed yellow grass		SJR
Xyris flabelliformis	savannah yelloweyed grass		SJR
Xyris floridana	Florida yelloweyed grass		SJR
Xyris jupicai	Richard's yelloweyed grass		SJR
Xyris platylepis	tall yelloweyed grass		SJR
Xyris smalliana	Small's telloweyed grass		SJR
Zanthoxylum clava-herculis	Hercules'-club		SJR
Zeuxine strateumatica	centipede grass orchid		iNaturalist
INVERTEBRATES			
Scientific Name	**Common Name**	**Status**	**Source**
Agraulis vanillae	Gulf Fritillary		SJR
Amblyomma maculatum	Gulf Coast Tick		iNaturalist
Anax junius	Common Green Darner		SJR
Anisomorpha buprestoides	Southern Two-striped Walkingstick		iNaturalist
Apis mellifera	Western Honey Bee		iNaturalist
Asterocampa clyton	Tawny Emperor		iNaturalist
Chalcophora georgiana	Southern Sculptured Pine Borer		iNaturalist
Danaus gilippus	Queen		SJR
Danaus plexippus	Monarch		iNaturalist
Ectemnius maculosus	Square-headed Wasp		iNaturalist
Erythemis simplicicollis	Eastern Pondhawk		SJR

Erythrodiplax minuscula	Little Blue Dragonlet		iNaturalist
Ischnura hastata	Citrine Forktail		iNaturalist
Ixodes scapularis	Eastern Black-legged Tick		iNaturalist
Junonia coenia	Common Buckeye		iNaturalist
Lethe portlandia	Southern Pearly-eye		iNaturalist
Limenitis archippus	Viceroy		SJR
Lycia ypsilon	Woolly Gray Moth		iNaturalist
Megalopyge opercularis	Southern Flannel Moth		iNaturalist
Pachydiplax longipennis	Blue Dasher		SJR
Papilio glaucus	Eastern Tiger Swallowtail		iNaturalist
Papilio palamedes	Palamedes Swallowtail		SJR
Papilio troilus	Spicebush Swallowtail		SJR
Phyciodes tharos	Pearl Crescent		iNaturalist
Procambarus fallax	Deceitful Crayfish		SJR
Procambarus geodytes	Muddiver Crayfish		SJR
Procambarus paeninsulanus	Peninsula Crayfish		SJR
Sphodros rufipes	Red-legged purse web spider		SJR
Strymon melinus	Gray Hairstreak		iNaturalist
Taxodiomyia cupressiananassa	Cypress Twig Gall Midge		iNaturalist
Tramea carolina	Carolina saddlebags		SJR
Trichonephila clavipes	Golden Silk Spider		iNaturalist
Vanessa atalanta	Red Admiral		iNaturalist
Verrucosa arenata	Arrowhead Orbweaver		iNaturalist
VERTEBRATES			
AMPHIBIANS			
Scientific Name	**Common Name**	**Status**	**Source**
Acris gryllus	Southern Cricket Frog		iNaturalist
Amphiuma means	Two-toed Amphiuma		SJR
Anaxyrus terrestris	Southern Toad		SJR
Hyla cinerea	Green Treefrog		SJR
Hyla femoralis	Pine Woods Treefrog		SJR
Hyla squirella	Squirrel Treefrog		SJR
Lithobates calmitans calmitans	Bronze Frog		SJR
Lithobates grylio	Pig Frog		SJR
Lithobates sphenocephalus	Leopard Frog		SJR
Siren lacertina	Greater Siren		SJR
REPTILES			
Scientific Name	**Common Name**	**Status**	**Source**
Agkistrodon conanti	Florida Cottonmouth		iNaturalist
Alligator mississippiensis	American Alligator		SJR
Anolis carolinensis	Green Anole		iNaturalist

Anolis sagrei	Cuban Brown Anole		SJR
Apalone ferox	Florida Softshell Turtle		SJR
Coluber constrictor priapus	Southern Black Racer		SJR
Deirochelys reticularia chrysea	Florida Chicken Turtle		SJR
Gopherus polyphemus	gopher tortoise	FWC-T, G3/S3	FNAI
Kinosternon baurii	Striped Mud Turtle		SJR
Nerodia fasciata	Banded Watersnake		SJR
Pantherophis alleghaniensis	Eastern Ratsnake		SJR
Plestiodon laticeps	Broadhead Skink		SJR
Scincella lateralis	Little Brown Skink		iNaturalist
Sistrurus miliarius barbouri	Dusky Pygmy Rattlesnake		iNaturalist
Sternotherus minor minor	Loggerhead Musk Turtle		SJR
Terrapene Carolina	Box Turtle		SJR
Thamnophis saurita sackenii	Peninsula Ribbon Snake		iNaturalist
BIRDS			
Scientific Name	**Common Name**	**Status**	**Source**
Accipiter cooperii	Cooper's Hawk		eBird
Agelaius phoeniceus	Red-winged Blackbird		eBird
Aix sponsa	Wood Duck		eBird
Ammospiza leconteii	LeConte's Sparrow		eBird
Anhinga anhinga	Anhinga		eBird
Antigone canadensis	Sandhill Crane		eBird
Antigone canadensis pratensis	Florida Sandhill Crane	FWC-T, S2/G5T2	eBird
Antrostomus carolinensis	Chuck-will's-widow		eBird
Archilochus colubris	Ruby-throated Hummingbird		eBird
Ardea alba	Great Egret		eBird
Ardea herodias	Great Blue Heron		eBird
Baeolophus bicolor	Tufted Titmouse		eBird
Bombycilla cedrorum	Cedar Waxwing		eBird
Bubo virginianus	Great Horned Owl		eBird
Bubulcus ibis	Cattle Egret		eBird
Buteo brachyurus	Short-tailed Hawk	S1/G4G5	eBird
Buteo jamaicensis	Red-tailed Hawk		eBird
Buteo lineatus	Red-shouldered Hawk		SJR, eBird
Buteo sp.	Buteo sp.		eBird
Butorides virescens	Green Heron		SJR, eBird
Cardinalis cardinalis	Northern Cardinal		eBird
Cathartes aura	Turkey Vulture		eBird
Catharus guttatus	Hermit Thrush		eBird
Chaetura pelagica	Chimney Swift		eBird
Charadrius vociferus	Killdeer		eBird

Chordeiles minor	Common Nighthawk		eBird
Cistothorus palustris	Marsh Wren		eBird
Cistothorus stellaris	Sedge Wren		eBird
Coccyzus americanus	Yellow-billed Cuckoo		eBird
Colaptes auratus auratus/luteus	Northern Flicker (Yellow-shafted)		eBird
Colinus virginianus	Northern Bobwhite		SJR, eBird
Contopus virens	Eastern Wood-Pewee		eBird
Coragyps atratus	Black Vulture		eBird
Corthylio calendula	Ruby-crowned Kinglet		eBird
Corvus brachyrhynchos	American Crow		SJR, eBird
Corvus ossifragus	Fish Crow		eBird
Corvus sp. (crow sp.)	crow sp.		eBird
Cyanocitta cristata	Blue Jay		SJR, eBird
Dendroica pinus	Pine Warbler		SJR
Dryobates pubescens	Downy Woodpecker		eBird
Dryocopus pileatus	Pileated Woodpecker		SJR, eBird
Dumetella carolinensis	Gray Catbird		SJR, eBird
Egretta caerulea	Little Blue Heron	FWC-T, S4/G5	eBird
Egretta thula	Snowy Egret	S3/G5	eBird
Elanoides forficatus	Swallow-tailed Kite	S2/G5	eBird
Empidonax virescens	Acadian Flycatcher		eBird
Eudocimus albus	White Ibis	S4/G5	eBird
Falco sparverius	American Kestrel		eBird
Gallinago delicata	Wilson's Snipe		eBird
Geothlypis trichas	Common Yellowthroat		SJR, eBird
Haliaeetus leucocephalus	Bald Eagle	S3/G5	eBird
Hirundo rustica	Barn Swallow		eBird
Icteridae sp.	blackbird sp.		eBird
Icterus spurius	Orchard Oriole		eBird
Ictinia mississippiensis	Mississippi Kite		eBird
Leiothlypis celata	Orange-crowned Warbler		eBird
Leiothlypis peregrina	Tennessee Warbler		eBird
Megaceryle alcyon	Belted Kingfisher		eBird
Melanerpes carolinus	Red-bellied Woodpecker		SJR, eBird
Melanerpes erythrocephalus	Red-headed Woodpecker		eBird
Meleagris gallopavo	Wild Turkey		SJR, eBird
Melospiza georgiana	Swamp Sparrow		eBird
Melospiza melodia	Song Sparrow		eBird
Mimus polyglottos	Northern Mockingbird		SJR, eBird
Mniotilta varia	Black-and-white Warbler		SJR, eBird
Molothrus ater	Brown-headed Cowbird		eBird

Mycteria americana	Wood Stork	FWS-DL, FWC-T, S2/G4	eBird
Myiarchus crinitus	Great Crested Flycatcher		SJR, eBird
Nannopterum auritum	Double-crested Cormorant		eBird
Pandion haliaetus	Osprey	S3S4/G5	eBird
Parkesia motacilla	Louisiana Waterthrush		eBird
Parkesia noveboracensis	Northern Waterthrush		eBird
Passerculus sandwichensis	Savannah Sparrow		eBird
Passeriformes sp.	passerine sp.		eBird
Passerina caerulea	Blue Grosbeak		eBird
Passerina cyanea	Indigo Bunting		eBird
Peucaea aestivalis	Bachman's Sparrow		eBird
Pheucticus ludovicianus	Rose-breasted Grosbeak		eBird
Picoides pubescens	Downy Woodpecker		SJR
Pipilo erythrophthalmus	Eastern Towhee		SJR, eBird
Pipilo erythrophthalmus alleni	White-eyed Eastern Towhee		eBird
Piranga rubra	Summer Tanager		eBird
Poecile carolinensis	Carolina Chickadee		eBird
Polioptila caerulea	Blue-gray Gnatcatcher		SJR, eBird
Pooecetes gramineus	Vesper Sparrow		eBird
Progne subis	Purple Martin		eBird
Protonotaria citrea	Prothonotary Warbler		eBird
Quiscalus major	Boat-tailed Grackle		eBird
Quiscalus quiscula	Common Grackle		eBird
Regulus satrapa	Golden-crowned Kinglet		eBird
Sayornis phoebe	Eastern Phoebe		SJR, eBird
Seiurus aurocapilla	Ovenbird		eBird
Setophaga americana	Northern Parula		eBird
Setophaga caerulescens	Black-throated Blue Warbler		eBird
Setophaga citrina	Hooded Warbler		eBird
Setophaga coronata coronata	Myrtle Yellow-rumped Warbler		eBird
Setophaga discolor	Prairie Warbler		eBird
Setophaga dominica	Yellow-throated Warbler		eBird
Setophaga palmarum	Palm Warbler		eBird
Setophaga palmarum palmarum	Western Palm Warbler		eBird
Setophaga pinus	Pine Warbler		eBird
Setophaga ruticilla	American Redstart	S2/G5	SJR, eBird
Setophaga tigrina	Cape May Warbler		eBird
Sialia sialis	Eastern Bluebird		eBird
Sitta pusilla	Brown-headed Nuthatch		SJR, eBird
Sphyrapicus varius	Yellow-bellied Sapsucker		eBird
Spinus pinus	Pine Siskin		eBird

Spinus tristis	American Goldfinch		eBird
Spizella passerina	Chipping Sparrow		eBird
Spizella pusilla	Field Sparrow		eBird
Streptopelia decaocto	Eurasian Collared-Dove		eBird
Strix varia	Barred Owl		SJR, eBird, iNaturalist
Tachycineta bicolor	Tree Swallow		eBird
Thryothorus ludovicianus	Carolina Wren		SJR, eBird
Thryothorus ludovicianus	Northern Carolina Wren		eBird
Toxostoma rufum	Brown Thrasher		eBird
Tringa melanoleuca	Greater Yellowlegs		eBird
Troglodytes aedon	House Wren		eBird
Turdus migratorius	American Robin		eBird
Tyrannus tyrannus	Eastern Kingbird		eBird
Vireo flavifrons	Yellow-throated Vireo		eBird
Vireo griseus	White-eyed Vireo		SJR, eBird
Vireo olivaceus	Red-eyed Vireo		eBird
Vireo solitarius	Blue-headed Vireo		eBird
Zenaida macroura	Mourning Dove		SJR, eBird
Zonotrichia albicollis	White-throated Sparrow		eBird
MAMMALS			
Scientific Name	**Common Name**	**Status**	**Source**
Dasypus novemcinctus	Nine-Banded Armadillo		SJR
Didelphis virginiana	Virginia Opossum		SJR
Odocoileus virginianus	White-tailed Deer		SJR, iNaturalist
Sciurus carolinensis	Eastern gray squirrel		SJR
Sus scrofa	Wild Hog	non-native	SJR
Ursus americanus floridanus	Florida black bear	S4/G5T4	SJR
FISH			
Scientific Name	**Common Name**	**Status**	**Source**
Ameiurus natalis	Yellow bullhead		SJR
Ameiurus nebulosus	Brown bullhead		SJR
Amia calva	Bowfin		SJR
Aphredoderus sayanus	Pirate perch		SJR
Erimyzon sucetta	Lake chubsucker		SJR
Esox americanus americanus	Redfin pickerel		SJR
Lepisosteus platyrhincus	Florida gar		SJR
Lepomis auratus	Redbreast sunfish		SJR
Lepomis gulosus	Warmouth		SJR
Lepomis macrochirus	Bluegill		SJR
Lepomis punctatus	Spotted sunfish		SJR
Noturus leptacanthus	Speckled madtom		SJR

STATUS

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.
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).

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.
SNR = Element not yet ranked (temporary).

Federal (FWS) Legal Status
DL = Species has been delisted.
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
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.

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

State Legal Status
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
FWC-T = 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.
FDACS-CE = Listed as Commercially Exploited by the Florida Department of Agriculture and Consumer Services.
FDACS-E = Listed as Endangered by the Florida Department of Agriculture and Consumer Services.
FDACS-T = Listed as Threatened by the Florida Department of Agriculture and Consumer Services.

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

APPENDIX G: DISTRICT FOREST MANAGEMENT PLAN

In 1998 the Florida Legislature charged all state land management agencies with managing the forest resources on the lands they have acquired (253.036, Florida Statutes). To date, the St. Johns River Water Management District (District) has acquired nearly 621,000 acres of land. Approximately 46% of these acres are forested.

Even prior to the legislative directive, the District has been managing its forest resources. Timber sales began in 1991 with a salvage sale at Lake George Conservation Area following a wildfire. Since then, timber sales are conducted based upon the immediate needs of the natural communities and recommendations from individual area management plans. This plan provides guidance and coordination for the management of the District's forest resources.

PURPOSE OF FOREST MANAGEMENT

The District manages forest resources for the:

1) Restoration of natural communities.
2) Maintenance of the health and vigor of natural communities.
3) Generation of revenues to counterbalance the cost of land management activities
4) Reduce wildfire risks
5) Sustainable progress towards core missions

Restoring Natural Communities

The District acquires its land from a variety of private owners, and each owner had their own vision for the land. Many times in fulfilling their vision, private owners altered the natural communities by clearing for agricultural purposes or for planting trees. Whenever practicable, the District is charged with maintaining and/or restoring the land to its natural state and condition.

Thinning, clearcutting, invasive plant management and planting are all tools used to restore natural communities, but in almost all cases they are used in conjunction with fire. The combinations of overstory control and fire management are the primary restoration tools in forested communities.

In forested communities, controlling or manipulating the overstory serves as the primary tool to maintain or restore the natural community. The density of the

overstory dictates the health and diversity of understory species. If the overstory becomes too dense, both the overstory and understory species begin to suffer. In cases where the overstory remains crowded too long, individual understory plants begin to disappear. Often seeds of these plants will remain dormant in the soil. Thinning individual trees from an overcrowded stand allows more light, moisture, and nutrients to be available for groundcover plants. This allows dormant plants to reoccupy their former sites, thereby restoring the natural state and condition.

In some cases, private owners planted a species of tree that did not naturally occupy the site. In these cases, the District will clearcut the undesired tree species and replant with the more appropriate species.

In cases where the previous owner cleared the site, the District will prepare the site and plant the appropriate tree species. Since longleaf pine (*Pinus palustris*) occupies approximately 5% of the area it did in 1900, and since longleaf offers a suite of wildlife benefits greater than most other pines, the District will emphasize planting of longleaf on all sites where longleaf is suited for the site.

Maintenance of the Health and Vigor of the Natural Communities

The health or quality of a forested natural community is maintained by three primary factors: 1) the availability of water, 2) the frequency of fire, and 3) the density and species composition of the overstory.

In few cases do the activities of the District affect the availability of water on District forestlands. Exceptions are where sites are restored through rehydration of historically wetland systems or managing vegetation for water yield benefits. Weather is the primary factor influencing the availability of water.

Fire influences the health of forested communities by altering the process of succession. Fire holds natural communities in an intermediate stage of succession that is referred to as a fire climax community. If fire is removed, these natural communities follow the path of succession to become some other community. In Florida, most natural communities historically experienced fire on a frequent basis. In fact, most communities are dependent upon frequent fire for their continued existence. Because of its importance as a management tool, fire is specifically addressed in detail in the District's Fire Management Plan.

The third factor influencing the health and/or quality of forested natural communities is the overstory density and species composition. In a truly natural

system, wildfire, climatic disturbances, along with insects and diseases combined to control the composition of the overstory, which in turn controls the composition of the understory. Wildfire, insects and disease kill trees as individuals or groups, which reduces the density of the overstory and alters the species composition. These events or outbreaks would often impact large areas, especially areas where the stand density was high, weakening the overstory trees and increasing their susceptibility to pathogens. Prior to human intervention, there were huge expanses of natural land that could easily absorb large-scale alterations of the overstory so that no plant or animal species could be extirpated. Today, Florida is fast approaching a condition where natural areas are becoming islands. Plants and animals have fewer areas to populate and it is more difficult to transfer their genetic material between isolated areas of ideal habitat. Therefore, conservation land managers no longer rely entirely on large-scale disturbances to control overstory density and species composition. By managing the overstory with selective harvesting, the density and species composition can be controlled to maintain a healthy natural community while minimizing the potential for large-scale impacts.

As land managers, the District also has an obligation to protect neighboring landowners from any large-scale wildfire, insect, non-native invasive plant or disease outbreaks that may originate on District land and spread to adjacent lands. This obligation prohibits the District from employing a truly natural management system to control overstory species, density, and composition and requires the District to utilize a more interactive management program.

Generation of Revenues

The Florida legislature has directed public land managers to manage forest resources for an economic return (253.036, Florida Statutes). The District generates revenue when implementing sound overstory management practices to maintain the health of the natural community. These practices include but are not limited to thinning operations, removal of undesired species (clearcuts), and salvage cuts to remove trees damaged from wildfires, insect infestations, non-native invasive plant species and/or disease outbreaks. The revenue generated from these operations can be used to fund land acquisition, restoration and other land management activities.

FOREST RESOURCES INVENTORY

Following legislative directive, and seeking to keep its land management efficient, the District has sought management partners. The following chart illustrates the lead manager status of District owned lands (Figure 1).

The District's Land Management Rule, agreements and philosophy call for the lead manager's rules and policies to direct the management of the affected lands, therefore this plan will be focused on the lands where the District is identified as the lead manager. The District serves as the lead manager on 374,796 acres. These acres managed by the District are broken down as follows (Figure 2).

Thirty-seven percent of the District Managed Lands are forested, with 16% being forested uplands and 21% forested wetlands.

OBJECTIVES OF FOREST MANAGEMENT

The District's forest management objectives are to:

- Maintain the health and diversity of forested communities on District lands.
- Provide for older aged forest conditions. As public landowners we have the opportunity to provide habitat for species requiring older age classed trees.
- Provide for an array of forest stand structures and age classes. Each species of plant and animal has an age-class of forest stand that is most desirable. By providing the array of structures and age-classes, the District can provide habitat for a wide variety of species.
- Implement activities that sustainably advance the District's core missions.

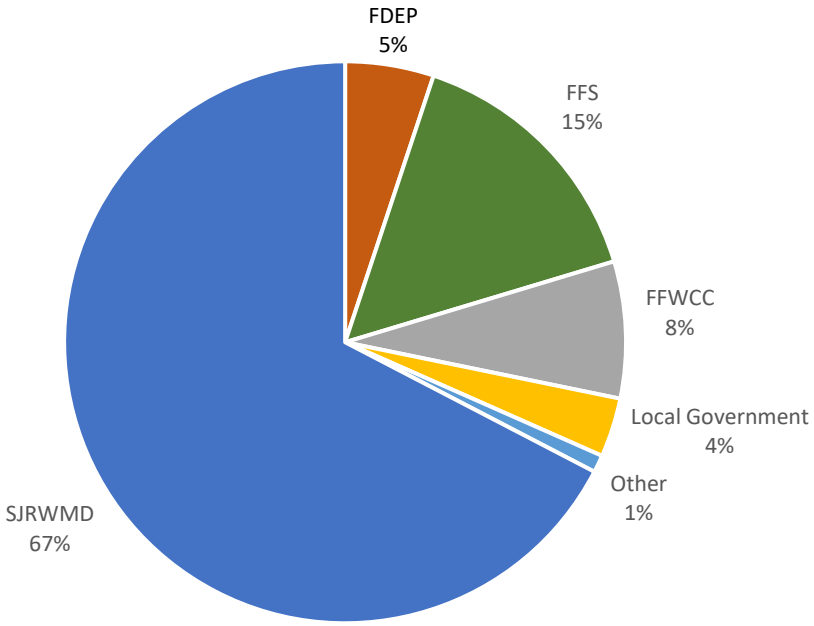


Figure 1: District Owned Land by Lead Manager.

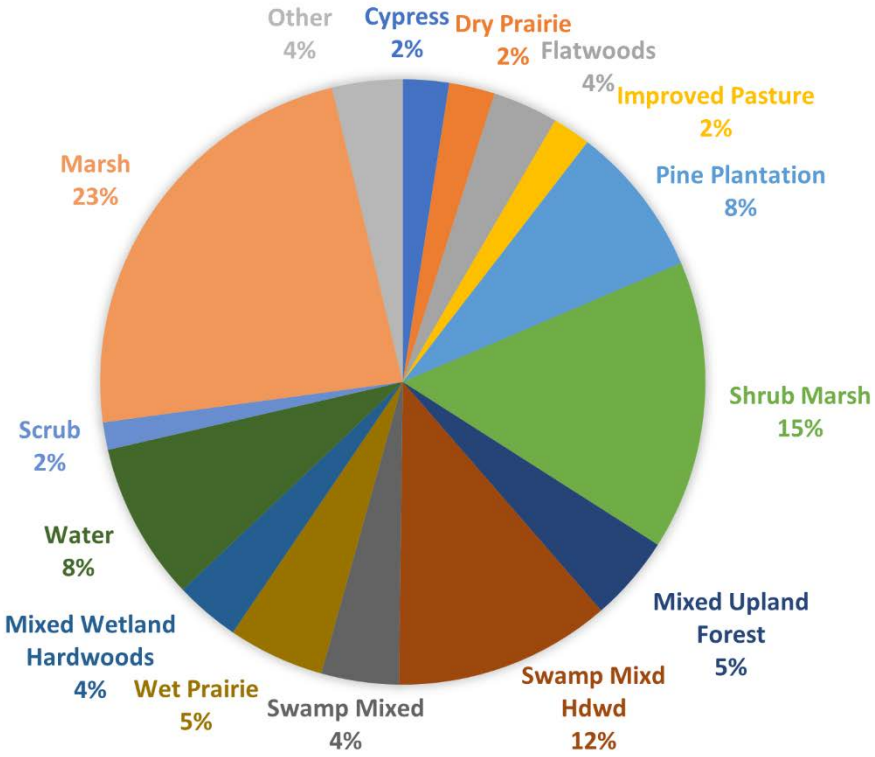


Figure 2: Percentage acres SJRWMD Managed Lands by Land Type.

Techniques of Forest Management

Inventory

The District developed a GIS Forestry database that links timber attribute information, inventory plots, and timber volume information with its spatial location. The database incorporated with annually collected inventory data will track forest changes over time. Changes resulting from harvests, wildfires, insect infestations, disease outbreaks and reforestation efforts can be updated quickly and easily. Periodic updates of volume and growth information is incorporated into the database. The database aids in determining natural community needs along with geographic distribution and appropriate management techniques to implement. The database is an intricate part in managing for community health and in developing future land management workplans.

Harvesting

To accomplish its goals the District employs a suite of harvesting systems. Clearcutting is a silvicultural operation used to remove the entire overstory at one time. This tool will be used with limited application dependent upon the specific management needs. Those needs may include:

1. Insect or disease control. Forest pests occur naturally at low population densities and are a vital part of the forested community. When population densities reach epidemic levels control measures to remove the host and adjacent trees must be implemented to protect the remainder of the stand.
2. Salvage. If the overstory has been killed or severely damaged, removing (salvaging) the overstory will recover some financial value of the timber and will allow the District access necessary to replant the site.
3. Species conversion. If offsite species exist, clearcutting enables the District to replace the offsite species with one that is appropriate.

Thinning is a silvicultural operation where selected individual trees are removed from the stand to reduce the density of overstory trees to improve growing conditions for the remaining overstory trees and the understory plants. This method is not applied with a goal of establishing regeneration.

The seed tree system is a silvicultural operation where the entire overstory except 10-15 prime trees per acre are harvested at one time. These 10-15 trees serve as the seed source for the next generation. This technique is seldom used by the District. While the seed tree system is effective, it creates major change in the stand condition both visually to the public and biologically to the plants and animals in the stand.

Shelterwood is a silvicultural operation in which the overstory is removed in phases. When it is time to regenerate the stand, approximately 60-70 percent of the stand is removed either in one or two harvests. Again, the older trees serve as the seed source for the next generation. Once the younger trees are established the original overstory trees can be removed or they can remain on site and be subject to thinning at the same time as the younger generation. The major benefit of this system is it results in a more gradual change from the mature trees to the next generation both visually to the public and biologically to the plants and animals.
A new modification of the shelterwood called an irregular shelterwood has been developed. An irregular shelterwood begins the same as shelterwood but portions of the original overstory remain on site. When the second-generation trees are thinned, a few of the first-generation trees are also thinned. To be established, both the first- and second-generation trees are reduced to 30-40 square feet of basal area to make room for the third-generation trees. Once the third-generation trees are established the site has few first-generation trees, some second-generation trees and many third-generation trees. This provides for a variety of age classes in a single stand but is much easier to apply and requires much less staff time than uneven-aged selection management.
Uneven-aged selection is a silvicultural operation in which trees, either as individuals or in small ½ acre groups are harvested from throughout the stand every five - ten years. The holes left by the removal of these trees are filled with seedlings from adjacent trees thereby creating a patchwork stand composed of trees of all ages. While this system offers the greatest distribution of age within a stand, truly an uneven aged condition which some scientists think is best for wildlife, it also requires significant staff inputs and to date appears too labor intensive to employ on a large scale.

Site Preparation

When it is necessary to establish regeneration, either naturally or artificially the District may employ one or more of the site preparation techniques described below.
Herbicide will be used when staff have determined that it is the most effective means to control the competing vegetation. Herbicides will not be used if it adversely affects the desirable understory species within the planting site. The use of herbicide is necessary when attempting to restore native trees and groundcover to improved pasture areas. Herbicide can be applied with hand sprayers, tank sprayers, or aerially from a helicopter, depending upon the species to be treated and site conditions.

Disking/Scalping these techniques are most useful when trees are being planted in improved pasture areas. Both techniques protect the seedlings from grass competition but offer no benefit to groundcover restoration.
Drum Chopping is effective at reducing competition from shrub species, especially saw palmetto. If properly applied grasses within the treatment area will survive chopping and will often benefit from the choppers' effect on the shrubs.
Bedding is a technique where a small ridge of surface soil is formed to provide an elevated planting or seedbed. It is used primarily in wet areas to improve soil drainage and aeration for seedlings. This type of site preparation technique is not utilized by the District because of the adverse effects it has on groundcover, sheetflow and thus water quality and availability. Therefore, the District's planting costs are often higher than private industry's because without bedding several plantings are often necessary to establish seedlings on wet sites.

Regeneration

Emphasis will be placed on natural regeneration to the extent practicable. In cases where species conversion is required or where no overstory exists to provide natural seed fall, planting will be necessary.
Hand planting is primarily method used by the District because it offers the following benefits:

1. Trees can be placed on the best microsites (i.e., highest ground in wet areas, areas with the least competition.)
2. Groundcover disturbance is minimized.
3. Seedlings can be randomly spaced or planted in clusters to provide a more natural appearance.

Machine planting is used primarily in old field conditions where scalping is employed and rows are suitable.

OVERALL METHODOLOGY

Forested natural communities can be lumped into three different groups with regards to forest management. These include Pine Forests, Upland Hardwoods, and Wetland Hardwood/Cypress. The management of each will differ and be described separately.

Pine Forests

Pine forests include flatwoods, plantations, sandhills and sand pine scrub. With the exception of sand pine scrub pine forests will be managed through thinning. Once the stand is established and trees have reached merchantable size (5 inches at

diameter breast height) at approximately 15-20 years of age depending on tree species and sites, thinning will begin. Stands will be thinned as necessary to maintain an overstory basal area range of 60 to 90 square feet per acre. This range promotes good growth of understory plants and provides good habitat for most wildlife using forested natural communities. In order to maintain this basal area range harvests will occur in each stand approximately every ten years, depending on growth rates of the trees. Great care will be exercised during harvesting operations to minimize disturbance of the soil and groundcover. When properly performed, harvesting actually benefits groundcover regeneration by reducing shrub species and improving growing conditions, such as an increase in light availability.

The need for regeneration will be determined by an inventory of the health, vigor and species composition for the trees in each stand. Once the conditions of the overstory trees indicate the need, a regeneration harvest will be scheduled employing the appropriate silvicultural system described previously. Emphasis will be placed on making the most seamless transition from one generation to the next. Irregular shelterwood harvests will be employed frequently in loblolly, slash and longleaf pine stands.

Emphasis will be placed on having a wide array of age classes between stands and an array of different aged trees within stands. Included in the desired array of ages will be trees and stands significantly older than those typically found on private lands.

To ensure the wide array of age classes is met, the District will separate pine stands into four different types based upon general age and condition. These four types include:

1. Regeneration (age 0 - 10) The site is occupied primarily by tree seedlings and saplings, herbs and shrubs. Competition from the trees has not yet resulted in any reduction in herb or shrub layer. This type begins at planting and continues until crown closure. Herbs, shrubs and grasses occupy 20%-80% of the ground. This type offers benefits to early successional wildlife species such as quail, rabbits, gopher tortoises, deer, turkeys and their predators.
2. Closed Canopy (age 11 - 20) Trees fully occupy the site and form a single, main canopy layer. There is little understory development due to the lack of light passing through the canopy. Where understory exists it is dominated frequently by palmetto and/or gallberry. This type benefits fewer wildlife species but does offer bear and deer good escape cover.
3. Understory (age 21 - 60) The overstory density has been reduced through thinning and the understory is beginning to reinitiate. Adequate light is again available to the forest floor. Groundcover plant species and wildlife both begin

to flourish again. Wildlife benefiting from this stand type include: deer, turkey, quail, gopher tortoises.

4. Older Forest Structure (age 60+) This stand type begins to develop a layered overstory. Trees are large, with diameters >12 inches. Snags will begin to appear and should be protected. The understory is diverse and healthy. Wildlife benefiting from this stand are fox squirrels, great horned owl, southeastern kestrel, turkeys, quail, gopher tortoises, red cockaded woodpeckers, eagles and ospreys (nesting trees).

The District will strive to keep 10-15% of its pine forests in type 1, 10-15% in type 2, 30-40% in type 3 and 40% in type 4. The present condition is shown below (Figure 3):

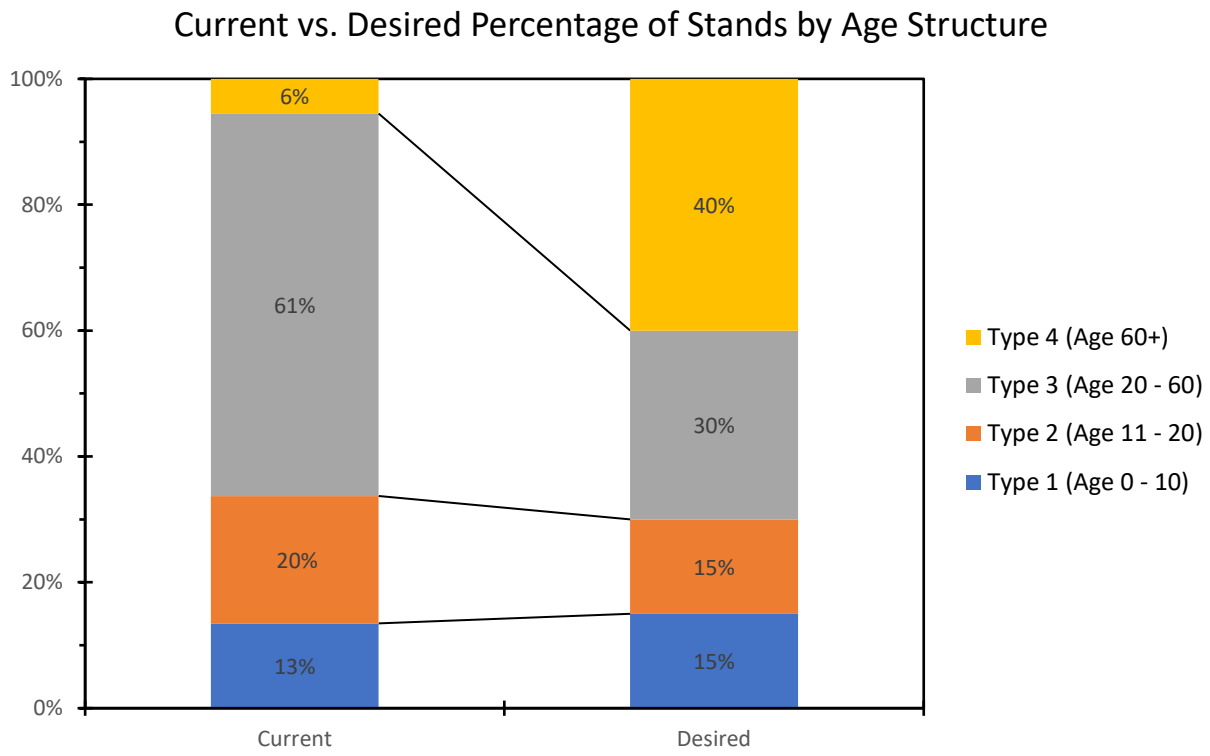


Figure 3: Current vs. Desired Percentage of Stands by Type.

Sand pine management will differ from other pine types because it is adapted to an even aged distribution. Sand pine characteristically grows in dense, even-aged, pure stands, which originated as a direct result of catastrophic fires or similar events. When a killing fire sweeps through a stand of cone-bearing trees, the serotinous cones (which remain tightly closed for many years unless opened by

heat) open and release large quantities of seeds to naturally regenerate the area. These catastrophic fires are difficult to mimic with prescribed fire since they are difficult to control. Complete stand removal (clearcutting) is the preferred method available to mimic the natures stand replacing events. The natural cycle for stand replacing events are from 20 – 60 years. Sand pine stand will therefore be clearcut and regenerated on a similar cycle.

The primary forest management activities of the District will be within these pine stands.

UPLAND HARDWOODS

Currently Upland hardwoods constitute 2% of District managed lands. Typically, they are mesic and xeric hammocks with the dominant species being live oak. There is no ecological need for harvesting within these communities and no commercial value to be derived from harvesting live oak.

Limited areas of upland hardwoods have developed on former sand hills and flatwoods due to a lack of fire or other ownership priorities prior to acquisition. These areas can be returned to their original natural community by harvesting the overstory and planting the original species appropriate to the site. Hardwood species encountered on such site include turkey oak, laurel oak, bays and sweetgum.

WETLAND HARDWOODS AND CYPRESS

As with State Forests, in an effort to protect water quality, the District has no plans to harvest timber from the swamps. However, the following may be situations where limited harvesting would offer the District benefits.

Following a catastrophic outbreak of insects, disease or wildfire harvesting the dead timber can create the growing space for the next generation. Most swamp species reproduce from both seed and sprouting. Removing the dead overstory will reduce the hazard from trees falling on people and young trees.

Twenty to 30 years following some catastrophic event the District may choose to selectively thin the hardwoods and cypress to accelerate the process of developing old-growth conditions. In a truly natural setting, the development of old-growth conditions will take 75 - 100 years since the trees compete with one another until the weaker individuals die. Through thinning, the number of trees can be reduced,

and the growth concentrated on the remaining trees so that they become larger faster and old-growth habitat can be created earlier.

The sensitivity required to log wetland systems cannot be overly stressed. Any harvesting performed in wetlands must be carried out under the most stringent conditions to avoid damage to the site. Harvesting can only be done when rutting and damage to residual trees can be minimized. Harvesting must be closely monitored and shut down if conditions deteriorate.

This plan was approved by the Governing Board in February, 2000 with charts updated January 2020

APPENDIX H – FIRE MANAGEMENT PLAN

Rice Creek Conservation Area
Fire Management Plan
Putnam County, Florida

The District Fire Management Plan provides general fire management information relative to policy, procedure, and reporting. This document provides the guidelines for the implementation of prescribed fire activities on the Rice Creek Conservation Area (RCCA).

Introduction and Objectives

The RCCA covers approximately 6,291 acres in Putnam County and encompasses most of the Rice Creek Swamp, the headwaters to Rice Creek. This conservation area includes seven (7) parcels and is located in numerous sections of Townships 9 and 10 South and Ranges 25 and 26 East.

The property is located south of State Road (SR) 100 near the city of Palatka along Rice Creek. A small portion of the conservation area is located south of State Road 20. The Kay Larkin Airport is approximately two (2) miles east of the conservation area.
Figure 1 depicts the general location of the RCCA and Figure 2 depicts individual parcels.

Historically, fires have played a vital role in the shaping and maintenance of many of the natural communities in Florida. As such, most vegetative communities and associated wildlife are fire adapted and in many instances fire dependent. Conversely, the exclusion of fire from an area allows for successional changes within the natural community. Fire exclusion leads to the excessive accumulation of fuel loads, which increases the risk for catastrophic wildfires. The goals for the implementation of fire management activities within the conservation area include:

- Reduction of fuel loads through the application of dormant season burns to decrease potential risk of damaging wildfires
- Reintroduction of growing season burns to encourage the perpetuation of native fire adapted ground cover species
- Mitigation of smoke management issues
- Restoration and maintenance of a mosaic of natural plant communities and ecological diversity
- Maintenance and restoration of ecotonal areas

The achievement of these goals requires that the conservation area be partitioned into manageable burn units prior to the application of prescribed fire within those units. The following sections summarize the considerations necessary for the safe and effective use of prescribed fire as a land management tool within the RCCA.

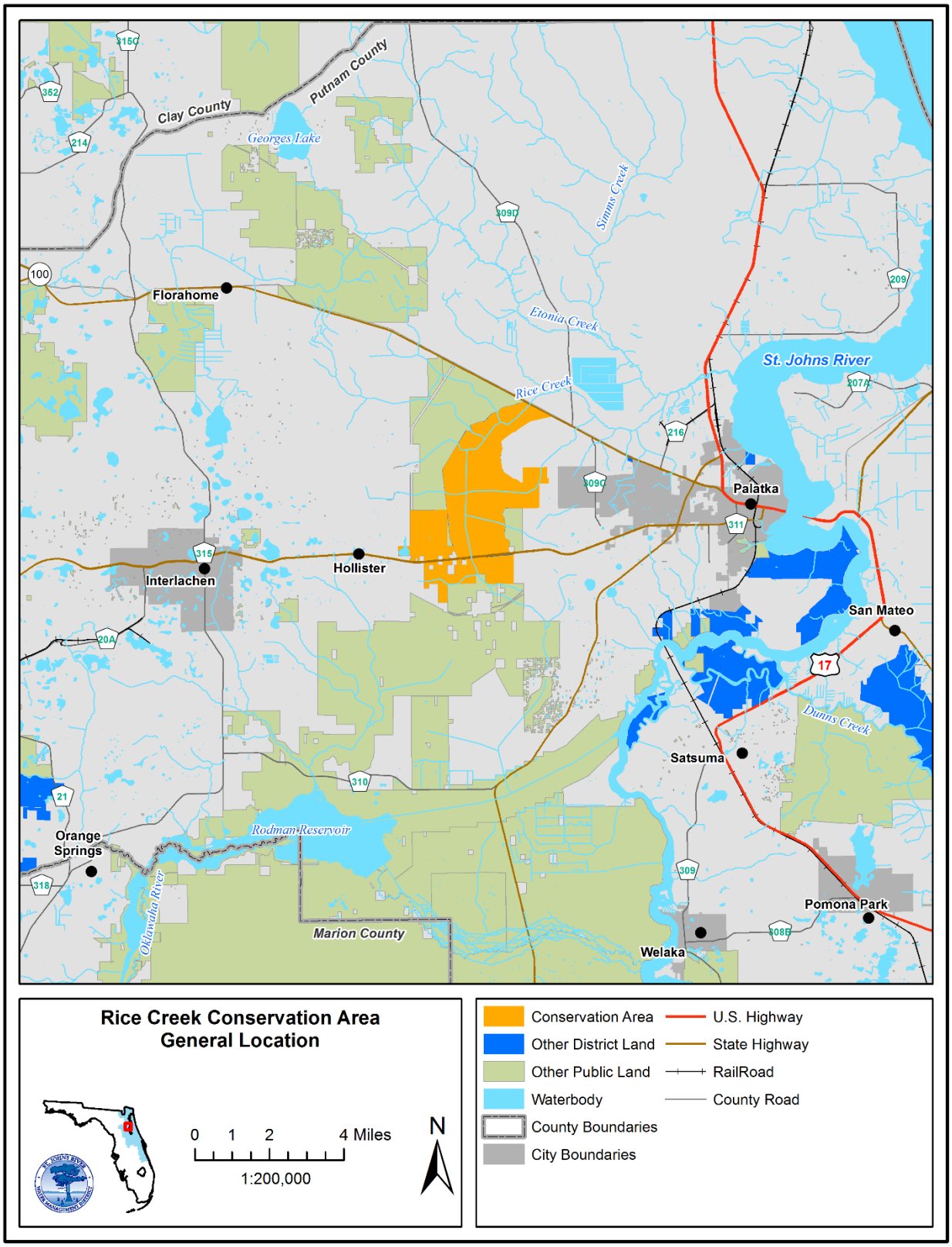


Figure 1: Location

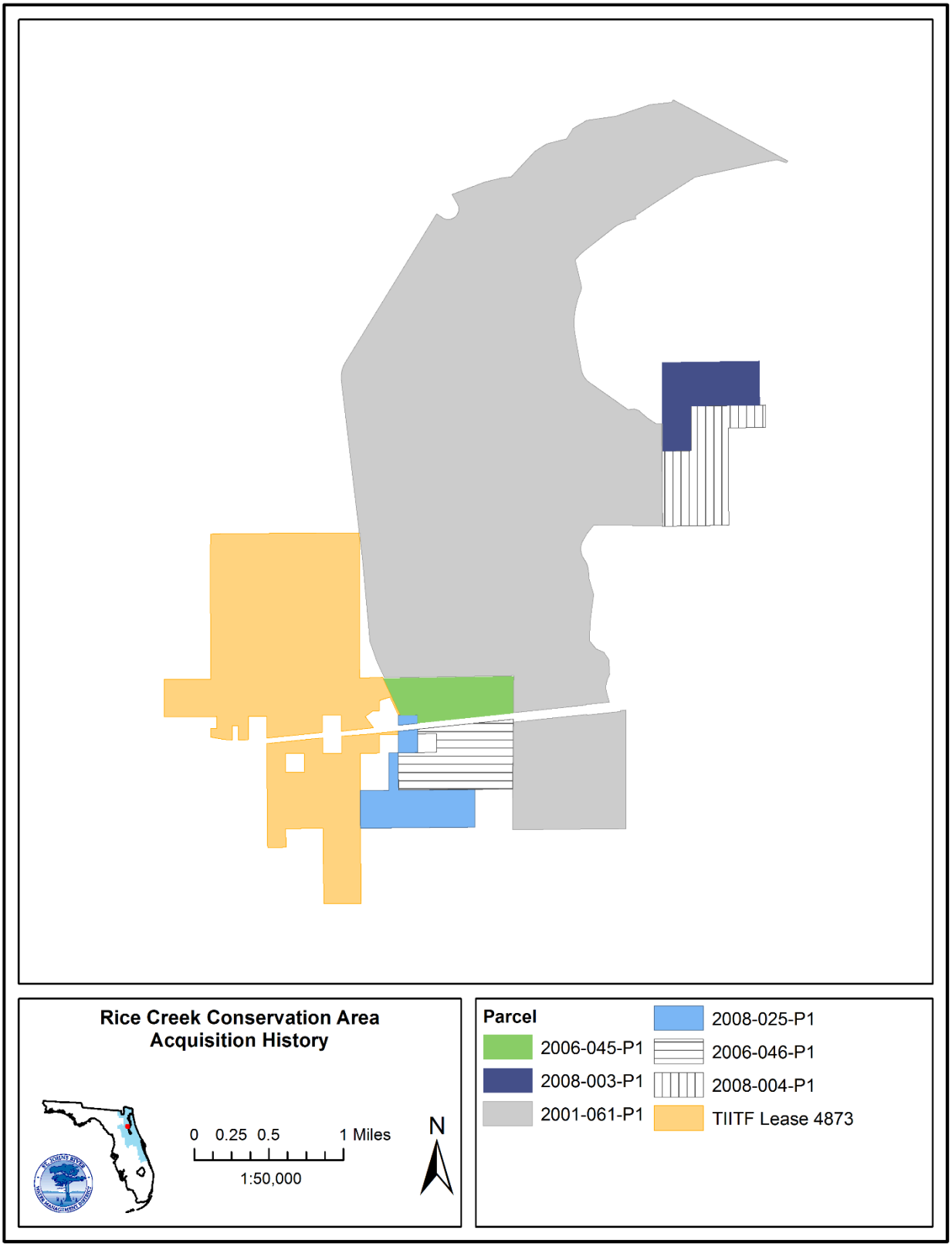


Figure 2: Parcels

Fire Return Interval

The general frequency to which fire returns to a community type under natural conditions is termed its fire return interval. Some communities require frequent pyric disturbances to perpetuate themselves while others are not fire adapted and subsequently do not require fire to maintain their characteristics. Table 1 and the following discussion of native plant communities occurring on the conservation area and optimal fire return intervals was characterized in part using information from the Florida Natural Areas Inventory's *Guide to the Natural Communities of Florida*.

Table 1.

Community	Fire Return Interval (years)
Wet Flatwoods	2-4
Sandhill	1-3
Mesic Flatwoods	2-4
Pasture - Semi-Improved	1-2
Depression Marsh	2-4
Basin Marsh	2-4
Bottomland Forest	Not a fire maintained community
Baygall	Not a fire maintained community
Floodplain Swamp	Not a fire maintained community
Utility Corridor	Not a fire maintained community
Successional Hardwood Forest	Not a fire maintained community
Sandhill Upland Lake	Not a fire maintained community
Dome Swamp	Not a fire maintained community
Borrow Area	Not a fire maintained community
Clearing/Regeneration	Not a fire maintained community
Canal/Ditch	Not a fire maintained community
Developed	Not a fire maintained community

The above referenced fire return intervals relate to high quality natural communities. The fire return interval within degraded systems is variable. Prescribed fire will be applied as necessary to achieve restoration and management goals.

Wet flatwoods are the most prevalent fire adapted natural community types found within the RCCA. This plant community within all parcels of the conservation area were utilized in commercial silviculture operations. As a result, much of the historic flatwoods are planted in primarily loblolly pine (*Pinus taeda*) and slash pine (*P. elliottii*). Additionally, the midstory and groundcover species within these pine plantations are altered and in some areas absent. The primary fuel for carrying fire across dense pine areas is needle litter. Shrub and groundcover components elsewhere on the conservation area include a more diverse and abundant coverage of herbaceous and shrub components including wiregrass and saw palmetto and will contribute to the spread of fire.

Fire management within the remaining pyric plant communities (below) will be in conjunction with the associated flatwoods communities. These plant communities will burn as site conditions permit during the implementation of controlled burns in the adjacent plant

communities. Additionally, these areas will not be excluded from fire activities unless warranted by safety or smoke management issues.

Depression marsh is a fire-adapted community. Though fire may not carry entirely across each marsh during every burn, it is an important factor in the maintenance of the edge habitats surrounding them. The natural fire regime would burn approximately every 1-8 years. Depression marshes are embedded within the uplands across the conservation area. In general, depression marsh fires are carried through the herbaceous layer. Many of these marshy areas have been disturbed by past land use and are small, but all still occupy an important niche in providing habitat for numerous species of wildlife. Fire will be applied to these marshes any time surrounding natural communities are burned.

Dome swamps are scattered throughout the conservation area. As site conditions and safety permits, fire will be allowed to burn into the domes in order to maintain the characteristic open edges of the domes while preventing excessive peat accumulation.

Seasonality and Type of Fire

Historically, most fires in Florida occurred in what is commonly referred to as the "growing season." The growing season usually spans from mid-March through July. Fires during the spring and early summer months generally have significant ecological benefits by perpetuating fire adapted flora. Mimicking lightning ignited natural fires by implementing prescribed fire during the growing season provides benefits to natural systems by controlling shrub layers and encouraging diversity in groundcover species.

Dormant season burns, conducted from mid-November through the end of February, are less intense than growing season burns and are a desirable alternative when igniting fire in young pine plantations. Additionally, dormant season burns help to reduce fuel loads resulting in fewer safety and smoke management issues. While fuel loads are not exceptionally high in most areas of the conservation area, heavy duff and needle litter has accumulated in some areas. These fuel conditions may require that some of the initial applications of fire be in the form of dormant season burning. This will allow for the reduction of fuel loads while providing for the protection of desirable vegetation. The ultimate goal of this strategy will be to move the prescribed fire application into a growing season rotation. District staff anticipates the transition to growing season burns to occur only after a sufficient reduction of fuel levels and tree growth is achieved.

Many of the fire management units (FMUs) within the RCCA have row-based silviculture present in various stages of development. It is not the purpose of this prescribed fire program to harm existing mature pine within the conservation area and furthermore, extra caution will be taken when applying fire to a pine plantation, especially a young plantation where the height to the crown is short. Severe scorch can detrimentally harm or even cause mortality in young pine trees. This type of damage will be mitigated by burning during the dormant season when the trees are not actively growing and the meristem areas are protected by a needle layer.

Prescribed fire should not be applied to a recently thinned area of pines. A period of at least one (1) growing season, post-harvest will allow the residual trees adequate recovery time. The

implementation of prescribed fire inside the recovery window may further stress, weaken, and potentially cause mortality on the remaining trees.

In many cases, fire management units with similar fire management needs may be burned simultaneously, either with crews igniting the areas by hand from the ground, or with the aid of aircraft. Aerial ignition allows District staff to ignite fire management units more quickly, resulting in a faster burnout. In an area with a large mosaic of unavailable fuels, fire can be applied easily to all portions of the unit. With ground-based crews this sometimes is infeasible or impossible and may pose a safety issue. An aerial burn safety plan (Exhibit 1) will accompany the individual burn prescriptions and be onsite and on the ground the day of any aerial burn.

Wildfire Policy

In the event of a wildfire, if conditions permit, suppression strategies will utilize existing fuel breaks to contain the wildfire. These fuel breaks may include previously burned areas, existing roads, trails, and firelines, and wetlands and other water bodies. This is only possible, with the agreement of local fire rescue, Florida Forest Service (FFS), District staff, and when all of the following conditions are met:

1) Fuels within the area have been managed
2) No extreme weather conditions are present or expected
3) There are no other wildfires that may require action
4) There are sufficient resources available to manage the fire to containment
5) The fire and the resulting smoke will not impact neighbors or smoke sensitive areas

If any of these conditions are not met, direct suppression action will be taken.

As soon as possible following a fire in which firelines are plowed, a plan for fireline rehabilitation shall be developed and implemented.

Persons discovering arson or wildfires on the conservation area should report them to the Florida Department of Agriculture and Consumer Services, FFS, the St. Johns River Water Management District, or by dialing 911.

Post Burn Reports

Burn reports must be completed after each controlled burn or wildfire. These reports include detailed information regarding the acreage, natural communities, staff and equipment hours, and contractor hours. The timely completion of these reports is necessary for the compilation of information relative to the entire District burn program. Additionally, these reports provide a documented account of site-specific conditions which are helpful in the planning of future burns.

Smoke Management

A significant challenge to the implementation of any prescribed burn program is smoke management. Fuel accumulation (dead and live) across the flatwoods communities is moderate. This accumulation of fuels has the potential to produce a tremendous amount of smoke as areas

are burned. As surrounding areas become increasingly urbanized, this problem will increase in magnitude, as there become fewer acceptable places to maneuver a smoke column from a prescribed fire.

While the RCCA has an acceptable smoke shed in which to place a smoke column from a prescribed fire, there are smoke sensitive areas that surround the conservation area and may affect the smoke management of each burn unit. Smoke management is a limiting factor in the application of prescribed fire within the conservation area. Figure 3 illustrates smoke sensitive areas in relation to the RCCA. As development increases in the area, fire management will become more difficult. Increasing daily traffic on SR 100, and SR 20 and other local roads will further impair the District's ability to implement prescribed burns at the appropriate fire return intervals within the conservation area.

The majority of fire dependent areas at the RCCA fall within fuel models 2, 7, and 9 or a combination thereof. Depending on the arrangement and composition of fuels, fire spread will be through grasses, needle litter, and/or, the shrub layer. Areas within the conservation area having heavier fuel accumulations can burn for long periods causing additional smoke management issues.

A smoke screening process will be completed with each prescription, before an authorization is obtained from the FFS. A fire weather forecast is obtained and evaluated for suitable burning conditions and smoke management objectives. A wind direction is chosen that will transport smoke away from urbanized areas and/or impact these smoke sensitive areas in the least possible way. When possible, the smoke plume from burns should be directed back through the conservation area. Smoke can then mix and loft into the atmosphere over uninhabited or rural land adequately enough to minimize off-site impacts.

On burn day, the ability of smoke to mix and disperse into the atmosphere should be good. Dispersion indices should be above 35. Dispersions of greater than 69 will only be selected if other weather and/or site conditions allow for the mitigation of potential extreme fire behavior. Forecast mixing heights should be above 1700ft. Transport winds should be at least 9 mph to effectively minimize residual smoke. Lower transport wind speeds can be utilized if dispersion index and mixing heights are above average. Burns will be conducted with a carefully plotted wind direction to limit and/or eliminate negative impacts from smoke to neighbors and urbanized areas.

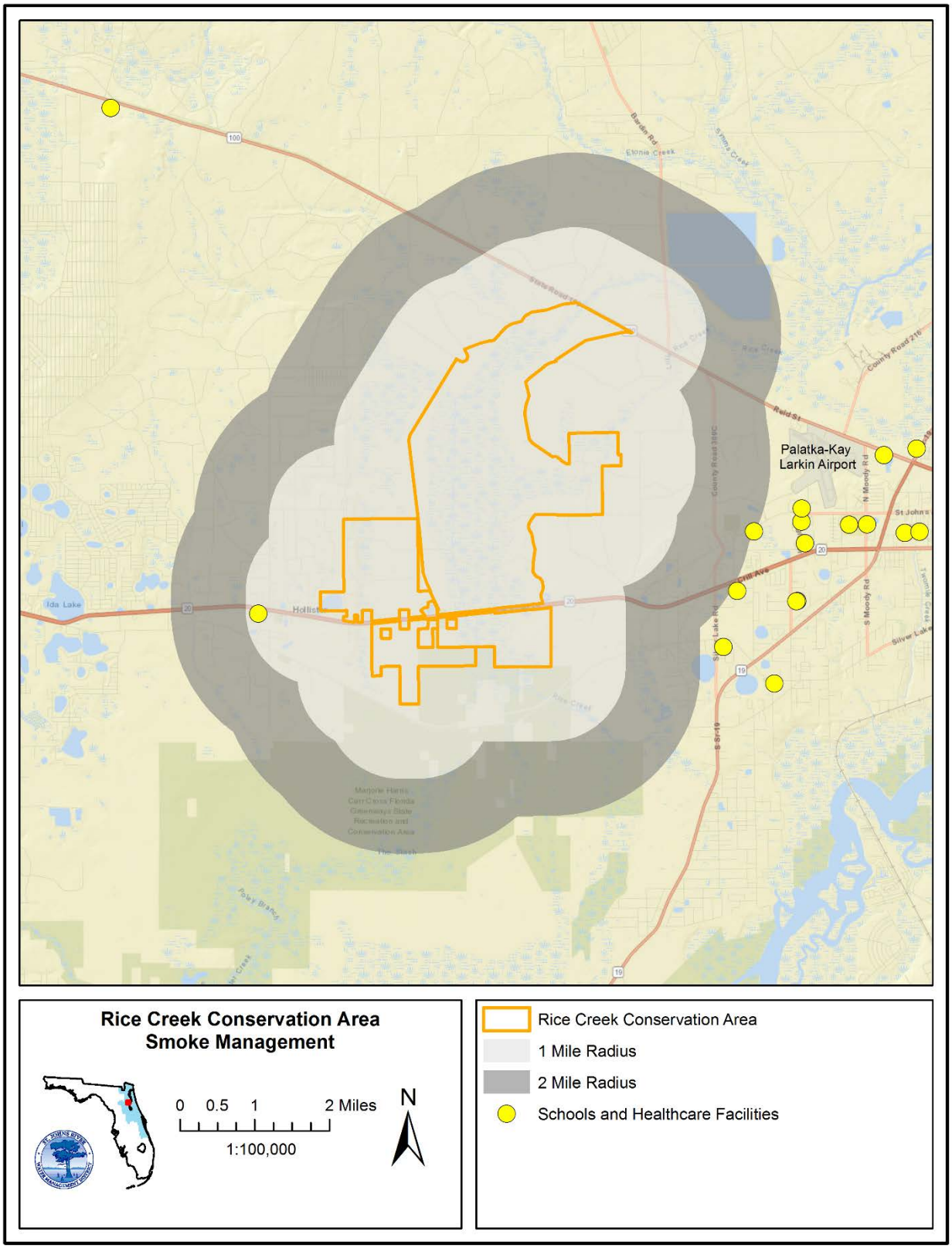


Figure 3: Smoke Management

Mechanical Treatments

Short and long term weather conditions and urban interface issues are important considerations when implementing a prescribed fire program. Weather conditions such as extended droughts or insurmountable smoke management issues due to increased urbanization may require the District to manage natural systems mechanically. A variety of methods including mowing, roller chopping, and herbicide applications may be incorporated as alternatives to prescribed fire.

Many of the pyric plant communities within the conservation area are dominated by pine plantations. An integral component to the implementation of a successful prescribed fire program within the RCCA is the harvesting of planted pine. Harvesting of pine trees will provide safer conditions for prescribed fire staff and decrease the potential for fire related mortality to the remaining pines and other desirable vegetation. Prescribed fire activities are planned for the conservation area over the next five years and will be conducted in conjunction with annual burn plans.

Legal Considerations

Only burn managers certified by FFS will approve the unit prescriptions and must be on site while the burn is being conducted. Certified burn managers adhering to the requirements of F.S. 590.026 are protected from liability for damage or injury caused by fire or resulting smoke, unless negligence is proven.

Fire Management Units

Fire management units have been delineated on the conservation area. Where logical, the District used (or will use) existing timber stand boundaries to delineate fire management units. In many cases, individual timber stands represent the smallest areas of land that are free of roads, trails, or other barriers to fire. Occasionally, several fire management units with similar fire needs will be burned simultaneously and stand lines provide a break in fuels so that staff may burn smaller areas than initially planned if needed. Additionally, in an effort to mitigate smoke management and potential urban interface issues, fire management units may be smaller in size than on other parcels or conservation areas.

Ideally, District staff would thoroughly address and describe each fire management unit in terms of its fire management needs. Though all units within the bounds of the conservation area are somewhat different; all can be categorized into one of several fuel model (FM) descriptions. The thirteen standard fuel models (as described in Hal E. Anderson's *Aids to Determining Fuel Models For Estimating Fire Behavior*) were used as a basis for this categorization. The factors considered in determining each FM are: amount, composition and arrangement of available fuels within units, predicted fire behavior within each unit (under conditions acceptable to implement a prescribed burn), and resources necessary to regain management of a fire in extenuating circumstances. District staff anticipates the change of vegetative assemblages over time due to growth and/or restoration and understand that fuel characteristics, models, and resulting fire behavior will also change.

Below is a brief description of each fuel model occurring within the RCCA and associated natural communities. A detailed description of each individual fire management unit and its associated objectives will be included in the individual prescriptions. Some fire management units within the conservation area contain multiple FMs. In these instances, the designated FM is dominant in coverage. Figure 4 illustrates the FM associated with individual fire management units.

Fuel Models

Fuel Model 2
This category includes fire management unit number 38135 and is primarily mesic flatwoods. This area was cleared of overstory pine prior to being release from reservation. District staff conducted selective herbicide treatments to control hardwood encroachment and planted with longleaf pine in 2009. Fires in these fuels may be intense and fast spreading in the grasses and flames may spread through the upper heights of the grass and young pine.

Fuel Model 7
This category includes fire management units that are best described as mesic, although they may have both wet, and scrubby flatwoods embedded within. The FMUs with this designation are in pine plantations of various stages of growth. Most of these areas include moderate to heavy fuel loading in the shrub layer. Fire in these fuel types is spread through both the shrub and herbaceous layers. The shrub layer components present within the fire management units of this FM on the conservation area include saw palmetto, gallberry and other ericaceous shrubs between 3 and 5 feet tall and are contiguous across the units. Young pine plantations void of shrub and herbaceous components are included in this fuel model as fire may behave similarly in young pines as it does in shrub layers.

Fuel Model 9
This category includes fire management units that are best described as mesic flatwoods with moderate to dense canopies of planted slash and loblolly pine. These areas exhibit suppressed groundcover and shrub layers. While pockets of shrubs (palmetto/gallberry) and groundcover (wiregrass) may contribute to the fire, the contiguous needle litter will serve as the primary carrier of the fire.

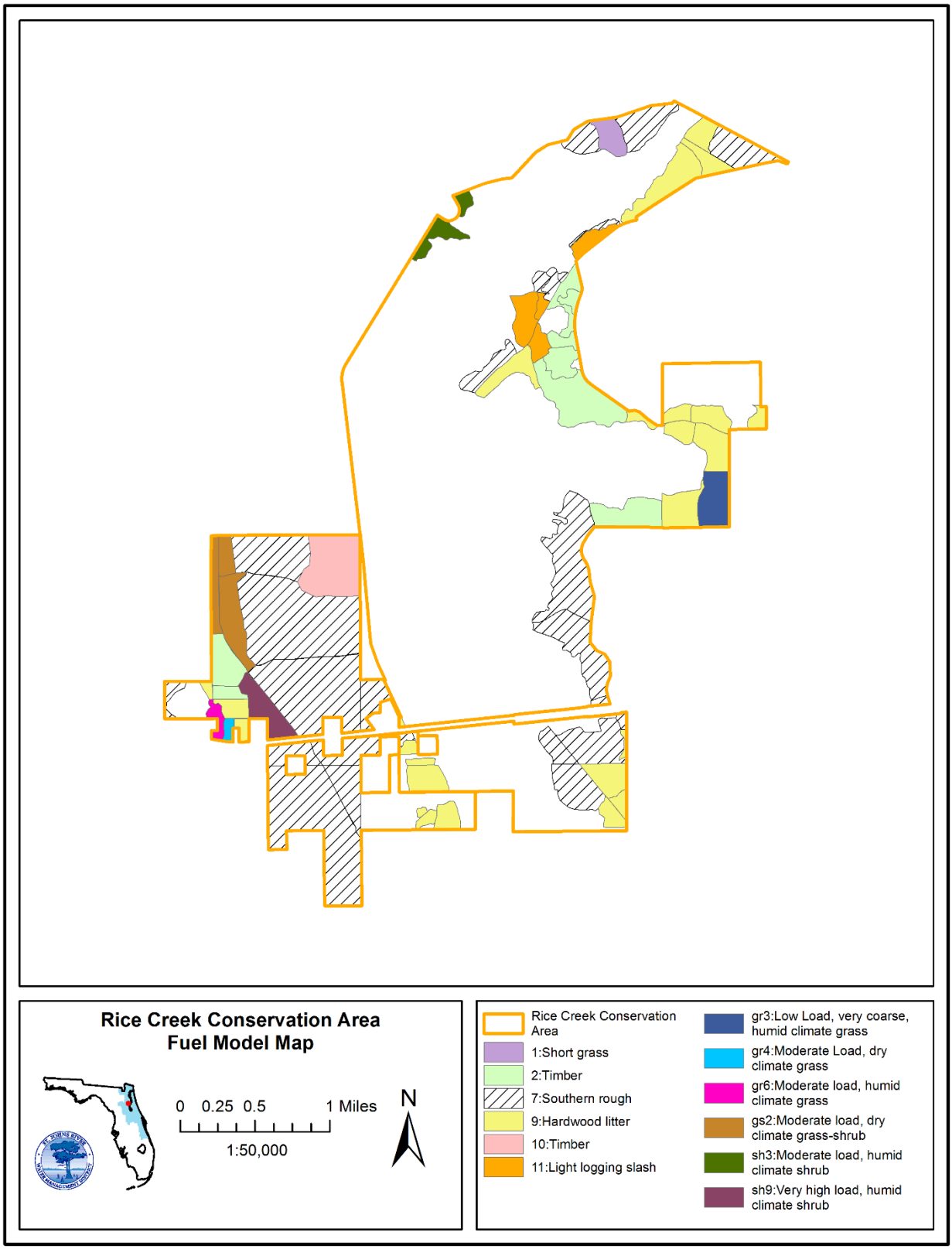


Figure 4: Fuel Models

Exhibit 1
Aerial Burn Safety Plan
Rice Creek Conservation Area

The hazards associated with this type of burning are related to working with the helicopter, the sphere dispenser, and dealing with active fire. All helicopter safety procedures and all district fireline policies and procedures will be followed.

1. **BRIEFING -** During the operational briefing, the safety plan will be reviewed with all personnel on the burn.
2. **HELICOPTER SAFETY -** The pilot will give a helicopter safety briefing at the morning operational briefing.
3. **IGNITION MACHINE SAFETY –** The operator will review the operation and cleaning procedures for the dispenser at the morning briefing.
4. **PERSONAL PROTECTIVE EQUIPMENT –** The incident commander will ensure that all personnel have the required PPE.
5. **HIGH HAZARD AREAS –** All high hazard areas such as power lines shall be designated on the map and attached to the burn plan.
6. **EMERGENCY LANDING ZONES –** These should be confirmed with the pilot and indicated on the burn map. **Helispot** **Latitude _____"N**
   Longitude _____"W

Crash Rescue Plan

In the event of an accident involving the helicopter, the following procedures will be followed.

INCIDENT COMMANDER or BURN BOSS

1. **Notify 911**
2. Notify Putnam County Fire Rescue (386) 329-0479
3. Notify Putnam County Sheriff's Office (386) 329-0800
4. Assume responsibility of the Rescue Operation.
5. Notify NTSB (305)957-4610 OR 404-462-1666)
6. Delegate responsibility of fire control to the second in command or the most qualified.

SECOND IN COMMAND

1. Assume responsibility of the burn.
2. Assist the IC or Burn Boss with resource and personnel needs for the rescue operation.
3. If the IC is in the helicopter, second in command will assume rescue operation responsibilities and assign the most qualified to fire control.

Level I Trauma Center

1. Shands Gainesville – 352-265-0111
2. Halifax – Daytona - 386-254-4000

FLORIDA FOREST SERVICE

1. Waccassa Dispatch 352-355-6454

NTSB

1. Southeast Regional Office **305-957-4610**
2. Southeast Field Office **404-462-1666**

APPENDIX I – FLORIDA TRAIL ASSOCIATION AGREEMENT

Florida Trail Association, Inc.

5415 SW 13 Street
Gainesville, Florida 32608-5037
(352) 378-8823
Toll Free (877) HIKE-FLA

Fax (352) 378-4550
fta@florida-trail.org
www.floridatrail.org

September 29, 2003

Steve Miller, Director
Division of Land Management
St Johns River Water Management District
4049 Reid St.
Palatka, FL 32178

Dear Mr. Miller,

I am pleased to enclose the fully executed agreement certifying the Florida National Scenic Trail through the lands of the St. Johns River Water Management District. The Florida Trail Association and the USDA Forest Service look forward to our continuing partnership with the District in the management and protection of these trail segments.

Sincerely,

Kent L. Wimmer

Kent L. Wimmer, AICP
Florida National Scenic Trail Liaison

Please reply to:
325 John Knox Road, F-100
Tallahassee, FL 32303-4160
(850) 523-8576 or kwimmer@fs.fed.us

cc: Deborah Stewart-Kent, Executive Director, FTA
Nels Parson, SJRWMD
Patricia Burgos, Lake County Water Authority
Tom O'Neil, FL Fish and Wildlife Conservation Commission
Joan Hobson, VP of Trails, FTA
Richard Schuler, FTA Rice Creek Section Leader
David Sibley, FTA Bull Creek Section Leader
Alton Snellgrove, FTA North FL Trailblazers Chapter Trail Coordinator
Michael Karolick, FTA Indian River Chapter Trail Coordinator
Wiley Dykes, FTA Central FL Chapter Trail Coordinator & Seminole Ranch Section Leader
Bill Taylor, FTA Halifax- St. Johns Chapter Trail Coordinator
Francis Keenan, FTA Highlanders Chapter Trail Coordinator & Cassia Section Leader

Certification Agreement

for the

Florida National Scenic Trail

"Florida's Footpath Forever"

Through the Lands of the

St. Johns River Water Management District

Table of Contents

I. Introduction

A. Scope Of The Florida National Scenic Trail

The Florida National Scenic Trail is one of eight National Scenic Trails in the United States. These trails are part of the National Trails System that was designated by Congress upon passage of the National Trails System Act of October 2, 1968, (P.L. 90-543, 82 Stat., 919, 16 U.S.C. 1241). This system of trails was established:

> "...in order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation."

National Scenic Trails as described in the Act are:

> "...extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass."

The Florida National Scenic Trail (FNST) satisfies these requirements in several ways. The Florida National Scenic Trail is unique in that it passes through the only subtropical region in the continental United States. The FNST provides access to a number of environments that are unique among the National Trails System. In Big Cypress National Preserve in south Florida, the trail passes through cypress swamps and sawgrass marshes interspersed with hardwood hammocks. In central Florida, the Trail in the Ocala National Forest passes through extensive stands of sand pine, and in northwest Florida it passes along the Gulf of Mexico coast in the Gulf Islands National Seashore. The Florida National Scenic Trail is also unique in that it is the only National Scenic Trail that is walkable throughout the entire winter. The most desirable months to use the trail are November through May.

From a state and local perspective, the FNST is also significant. Natural and rural areas are fast becoming developed as the urban areas expand to meet the needs of Florida's rapidly growing population. Designation and protection of the FNST will insure a greenway extending the length of the state where people can gain access to and enjoy the natural environment. Creation of such a greenway is in direct accord with the recommendations of the Five Year Implementation Plan for the Florida Greenways and Trails System and the President's Commission on Americans Outdoors (PCAO). In their final report to the President, the PCAO stresses the importance of the public's interaction with the natural environment and the role that the outdoors plays in the heritage of the American people. The FNST provides an outstanding opportunity to enjoy the natural environment and is a valuable asset to the nation and to the residents of Florida.

B. Management Goals, Florida National Scenic Trail

1. Statewide Management Goals

   Presented below are some of the goals for planning, developing and managing the Florida National Scenic Trail. These goals apply to Trail management regardless of landownership.

   a. Develop and manage the Florida National Scenic Trail as a nationally significant recreation facility.
   b. Manage the Florida National Scenic Trail to protect the qualities that inspired its inclusion in the National Trails System.
   c. Florida's finest landscapes are included wherever the opportunity exists.
   d. The opportunity for a quality recreation experience is available along the entire length of the Trail.
   e. Guide short-term and long-term management decisions with FNST permanency being of primary importance.
   f. Partnerships among federal, state, and local governments, commercial and private landowners, and outdoor recreation organizations like the Florida Trail Association exist for the development and successful management of this nationally significant Trail.
   g. Primitive camping and hiking opportunities exist wherever such landscapes lend themselves to these activities.
   h. Trail sections are easily accessible and well marked.
   i. Sections of the Trail are designed for use by the physically handicapped.
   j. Maintain the Trail to high standards.
   k. Florida's diverse ecosystems and cultural and historic resources are interpreted.
   l. Scenic qualities are a major feature of the FNST.

2. Management Goals, SJRWMD lands

   a. Provide opportunities for the public to use and enjoy the District owned lands for outdoor recreational purposes consistent with the goals and purposes of the District's Save Our Rivers Program.
   b. Enhance public appreciation of the indigenous wildlife species and diverse natural communities on District lands and the need to protect and conserve the total natural system
   c. Educate trail users on the District's land stewardship practices.
   d. Promote a better understanding of issues relating to the protection and enhancement of District lands by affording trail users the opportunity to view various restoration measures being undertaken by the District.

C. The Role Of The Certification Plan In The Certification Process

The Comprehensive Plan for the Florida National Scenic Trail outlines three basic phases in the Trail planning process that lead to designation and on the ground establishment of the Florida National Scenic Trail. The first step, completed in February 1982, was the preparation of The Florida Trail National Scenic Trail Study and Environmental Assessment. This study, conducted by the USDI, National Park Service, investigated the feasibility and desirability of the proposed Trail. Based on recommendations contained in this study, Congress authorized the Florida National Scenic Trail through an amendment to the National Trails System Act.

The Act of March 28, 1983, (97 Stat. 42, 16 U.S.C. 1244(a)), laid the foundation for the second basic phase in the planning process, the Florida National Scenic Trail Comprehensive Plan. The Comprehensive Plan established general guidelines for planning, developing, managing and protecting the Trail. It also identified the location of a twenty-mile wide, preferred trail corridor extending the length of the State within which the Trail would be located. In addition, the Comprehensive Plan also described the responsibilities of the organizations involved in the project as well as future actions to be taken to implement the Plan. The chief of the USDA Forest Service approved the Comprehensive Plan on December 4, 1986.

The third and final phase of the planning process is the completion of the Florida National Scenic Trail certification plans. These plans indicate the specific location of the Trail and describe the management actions that will be taken to protect, enhance and maintain the Trail in accordance with the National Trails System Act and Comprehensive Plan. Certification plans are prepared for individual segments of the National Scenic Trail. The trail segments covered by these plans will vary in length and by landowner. This Certification Plan is for the sections of the Florida National Scenic Trail that crosses lands of the St. Johns River Water Management District. It is anticipated that this agreement may be amended in the future to include other District lands through which the FNST may be constructed.

II. Description Of The Trail Covered By This Plan

A. Authority To Manage Land

1. Proof of Landownership

   The St. Johns River Water Management District deeds can be found in the official Records and Deed Books of various counties.

2. Legal Authority to Manage District Lands

   This section of the FNST is located on lands owned by the St. Johns River Water Management District. The authority for the District to administer lands within the boundary of the District comes largely from Chapter 373 of the Florida Statutes. Lands administered by the St. Johns River Management District are managed to provide natural storage areas for floodwaters; reduce loss of life and property due to floods; protect ground and surface water resources of the region; and protect natural systems associated with floodplain ecosystems.

3. Outstanding Legal Interest

   There are no known outstanding legal interests.

B. Trail Location

The Florida National Scenic Trail travels through many different lands of the St. Johns River Water Management District. These lands are described in Attachment A and include Bull Creek, Seminole Ranch, Lake Norris, Rice Creek and Little Big Econ State Forest.

C. Points Of Interest

These are described in Attachment A.

D. Existing Trail Situation

1. Existing Land Uses

Under current land management policy, District lands are managed for multiple uses including water, erosion control, preservation of unique, fragile or endangered species, protection of wildlife and fish habitat, and timber management. District lands are open to the public for recreational opportunities such as fishing, hiking, biking, horseback riding and camping. Some lands are designated as Wildlife Management Areas and are open for hunting. However, not all activities are available on all tracts. Due to the sensitive nature of soils and natural communities found within the river floodplain, most District tracts are managed to provide natural, or "wilderness" type experiences. Normal access is by foot, bicycle or horse from parking areas near the entrances. Vehicle access is limited to existing open roads in certain conservation areas.

2. Types and Level of Trail Use

The proposed section of the Florida National Scenic Trail will be open to hiking only with minor exceptions where short segments are shared with non-motorized users when no alternative trail route exists. Because of the many stream and river crossings and the highly erodable nature of the soils along the trail, it will be necessary to restrict trail activities along the National Scenic Trail to hiking. Levels of trail use initially will not be restricted, however, if future levels of use reach critical levels special management regulations may need to be developed. Any regulations concerning the types and levels of use will be developed in consultation with the St. Johns River Water Management District and the Florida Trail Association.

III. Relationship To Other Plans

A. Existing Plans

Through use of the *District Water Management Plan, Individual Conservation Area Management Plans, the District Recreation Management Plan* and the management planning process, the District systematically determines what activities the lands can support without degrading the environment, where to best locate the facilities, and how to construct and maintain the facilities to provide safe public use.

B. Term of Plan and Method of Review and Revision

Upon approval, this certification agreement and the management standards and guidelines contained within will become an attachment to the *District Water Management Plan* and will be subject to revision when the *District Water Management Plan* is reviewed and revised. This certification plan is considered a self-renewing agreement. At five-year intervals, if none of the signatories requests a formal review and/or amendment of the agreement, the plan will be considered reaffirmed and continued. Amendments can be made to the agreement at any time by consent of the St. Johns River Water Management District, the USDA Forest Service and the Florida Trail Association.

IV. Roles And Responsibilities

A. Statewide FNST Responsibilities

When the National Trails System Act was amended in 1983 to include the Florida Trail, the Secretary of United States Department of Agriculture was charged with the overall administration of the Florida National Scenic Trail. This statewide responsibility has been delegated to the USDA Forest Service, National Forests in Florida. Specific duties associated with the administration of the Trail are outlined in Chapter III of the Comprehensive Plan. As part of these duties the USDA Forest Service shall: coordinate and assist in the planning and development of the FNST, provide technical assistance for trail construction, act as a liaison with the Florida Trail Association, maintain the official records and maps of the trail, provide the standard FNST marker(s), coordinate public relations strategies, review and approve this required certification plan, and monitor plan compliance. The USDA Forest Service will assist the District and the Florida Trail Association with advisory and technical assistance as needed and within the limit of approximated funds and existing authorities.

This Certification Plan was prepared and will be implemented in accordance with National Scenic Trails Act, P.L. 91-660 and all other laws, regulations, and policies affecting the administration and management of the FNST within District lands.

St. Johns River Water Management District has granted permission to the Florida Trail Association to construct and maintain the hiking trail and campsites. The FTA assisted in the preparation of this certification plan, and will coordinate approved volunteer activities, monitor the condition of the Trail and support facilities, and check compliance with the plans and permits. The Florida Trail Association will cooperate with the USDA Forest Service in the management of the Florida National Scenic Trail in accordance with the February 5, 1999 Challenge Cost-Share Agreement (see Attachment C).

B. Responsibilities Specific To This Plan

The Florida Trail Association is responsible for the management and protection of this trail segment as outlined in the standards and guidelines presented in Chapters VI, VII and VIII, except for "Chapter VII, A. Trail Protection Measures". These responsibilities are trail maintenance, routing and re-routing, signing, funding (when available), and trail and visitor protection.

Additional responsibilities are outlined below:

1. The SJRWMD and the Florida Trail Association agree to the following:

    a. They shall cooperatively coordinate all activities and programs related to the Trail;
    b. They shall cooperatively map the location of the Trail and associated facilities;
    c. The District will exercise its right to close any hiking trail when, in its sole discretion, conditions of weather, fire threat, or other hazards make closure necessary for human safety or resource protection;
    d. In carrying out this agreement, FTA shall not discriminate against any person because of race, creed, color, sex, age, or national origin;
    e. This agreement may be amended at any time by mutual consent of SJRWMD, the USDA Forest Service and FTA;
    f. This agreement may be canceled by the SJRWMD, USDA Forest Service or FTA upon 180 days notice to the other parties.

2. The St. Johns River Water Management District shall:

   a. Help to locate and provide a prescribed route for the trail;
   b. Approve the certification plan; and
   c. Periodically monitor the trail to ensure maintenance and operation fall within the requirements established in this certification plan; and
   d. Assist the FTA by providing advisory and technical assistance.
   e. Advise and assist FTA in on-the-ground location of hiking trails, trailheads, campsites, or camping zones, water sources, and parking areas;
   f. Consider providing water at primitive campsites and camping zones on trails constructed or maintained by FTA, where feasible and desirable, if natural water sources are unavailable or unusable,
   g. Consider providing latrine facilities at primitive campsites and camping zones constructed or maintained by FTA, where feasible and desirable;
   h. Notify FTA of damage to trails or trail markings due to District management practices or natural events, and assist in repairing damage;
   i. Make reasonable efforts to publicize any emergency closure and re-opening of a trail;
   j. Coordinate hiking trail development and management with other governmental agencies at units where the SJRWMD is the sole or lead managing agency;
   k. Inform FTA of applicable state and federal laws, rules and regulations affecting volunteer service and hiking trails on lands administered by the District.

3. The Florida Trail Association shall:

   a. Coordinate all planning and development efforts for the Trail;
   b. Acquire all permits and materials necessary for the construction and marking of the trail;
   c. Provide its volunteer force to construct, manage and protect these segments of the FNST according to the standards and guidelines set forth in Chapters VI, VII and VIII of this Certification Plan, the FTA's *Trail Manual for the Florida Trail System*, and the approved plans and applicable regulations of the District and its cooperating agencies. These responsibilities are trail maintenance, trail routing and rerouting, signing and funding, trail protection and visitor protection. All facilities erected or placed upon District property in conjunction with trail development that constitute fixtures shall immediately become the property of the District. The SJRWMD acknowledges that it may be asked from time to time to furnish tools and specialized equipment to assist FTA in completing certain trail facilities beyond the capability of a volunteer organization;
   d. Acquire, erect and maintain the uniform marker system for the Trail;
   e. Notify the District of trail maintenance performed and needed trail re-routing. No trail development or rerouting will occur unless approved in advance by the District;
   f. Develop and maintain appropriate maps of segments of the Florida Trail located on lands administered by the SJRWMD;
   g. Provide instructional signage about the availability and purification of water;
   h. Submit to the District any proposed capital improvements needed on the trail as well as maps depicting proposed trail routings to the SJRWMD for approval prior to beginning trail construction.

V. Public Use And Access

A. Legal Requirements Stated In The Act

The National Trails System Act established the basic requirements for public use and access to National Scenic Trails. These basic requirements must be met before a trail can be certified as a National Scenic Trail. As stated in section 7(c) of the Act,

> "...reasonable efforts shall be made to provide sufficient access opportunities to such trails...Furthermore, access to any part of the National Scenic Trail shall not be denied on the basis of race, creed, or color. Opportunities for handicapped participation shall be encouraged."

Section 7(c) of the Act describes permissible uses of the trail.

> "...efforts shall be made to avoid activities incompatible with the purposes for which such trails were established. The use of motorized vehicles by the general public along any National Scenic Trail shall be prohibited..." and
>
> "...The Secretary charged with the administration of such trail shall establish regulations which shall authorize the use of motorized vehicles when such vehicles are necessary to meet emergencies."

B. Permitted Uses And Special Conditions

1. Only foot travel will be allowed on these County segments with minor exceptions of short segments shared with non-motorized users when there are no alternative trail routes.
2. The Florida National Scenic Trail will be open and accessible to the public year round.
3. Hiking and primitive camping at designated sites shall be permitted year round. No fees or permits are required.
4. Campers are expected to respect and help maintain the land by removing all trash and waste, carefully extinguishing campfires, knowing local burning restrictions, and leaving the natural surroundings undisturbed. Campers should contact the District for more information about restrictions, access or special conditions.
5. Regulatory information governing use of the FNST will be posted at trailheads and campsites.

VI. Trail Management

Presented below are the standards and guidelines that will be used to manage the Florida National Scenic Trail on District lands. Standards and guidelines are rules, policies and principles that apply to trail management activities and adjacent land uses. These guidelines will direct management and policy decisions. Included are standards and guidelines that apply to general trail management, trail design and construction, trail routing, re-routing and relocation, trail maintenance, signing, and facilities.

A. General Guidelines

1. Carry out the National Trails System Act (P.L. 90-543, 82 Stat. 919 as amended; 16 U.S.C. 1241, 1241-1249).

2. Be guided by the *Florida National Scenic Trail Comprehensive Plan*, (1986).

3. The Trail experience will be managed in accordance with the St. Johns River Water Management District's *District Water Management Plan, District Recreation Management plan, and Individual Conservation Area Management Plans,* with particular emphasis on the visual and scenic quality of the trail.

4. The management objective for the Trail is to maximize the primitive, undisturbed experience.

5. Hiker regulations will be developed only to the extent proven necessary to ensure the goals of the District are not negatively impacted, to protect the Trail, its environment and to protect the health and safety of the visitor.

B. Trail Design And Construction

1. Follow the Trail Design Standards of the *Florida National Scenic Trail Comprehensive Plan*, pages 131-136, and the *Trail Manual for the Florida Trail System.*

2. The Trail tread shall be at least 18 inches wide. The Trail may be cleared approximately four (4) feet wide and cleared high enough to permit passage of a hiker and his pack. In dense growth, the width may narrow to three feet and still allow the hiker to pass.

3. The tread should be properly cleared with all vegetation removed or cut at or below ground level to avoid leaving stubs in the tread that trip hikers. Remove logs or cut at an angle to permit foot traffic but restrict vehicles, bicycles and horses.

4. The primary trail will be blazed with a single orange painted mark two inches wide and six inches long. Side or connecting trails will be blazed with blue. Blazes shall be visible from one to the next, so as to assure hikers they are on the route. Change of direction of the trail shall be indicated with a vertical double blaze (one blaze above the other). The Trail shall be blazed so it can be followed in either direction.

5. When crossing open areas or areas without trees for blazing, signposts will be located and along the route to guide trail users. Signposts will be placed at a distance so that the hiker can see from one post to the next.

C. Trail Routing

1. The Trail shall provide for all weather and all season passage where possible.
2. The Trail shall be routed to pass within one-fourth mile of potable water and camping areas when practicable.
3. The trail shall be routed away from developmental and timber management areas to avoid conflicts and to enhance the safety and enjoyment of hikers.
5. Man-made features such as roads shall be crossed at right angles to avoid prolonged visual contact.
6. Trail access, hiker registration and limited parking shall be provided at designated trailheads.
7. The Trail route shall take advantage of opportunities to provide potable drinking water, shelter, and other services needed by hikers where feasible.
8. Any roads used as part of the Florida National Scenic Trail will be closed to motor vehicle use, except for administrative purposes or bridge crossings.
9. Safe trail crossings at highways, railroad tracks, and waterways shall be provided. Footbridges will be used at small stream crossings to enhance user safety and protect stream banks from erosion.
10. Trail access shall be provided at various points along the Trail so users can choose different length trips.

D. Trail Maintenance

1. Brush and logs shall be cleared from the footpath in order to maintain clear passage and side and overhead clearance.
2. Damage to the trail tread, including erosion damage, shall be repaired.
3. Litter left by hikers at campsites and along the Trail shall be removed.
4. Power tools can be used for trail maintenance unless specifically prohibited.
5. Signs, facilities, bridges, and stiles shall be repaired or replaced as necessary.
6. Primitive campsites will be located and designed so as to minimize significant degradation of vegetation, soil and water.

7. Blazes shall be repainted as necessary and obstacles blocking view of the blazes shall be removed.

8. The FTA will inspect the entire Florida National Scenic Trail on District lands at least twice annually for maintenance needs.

9. Vehicular access for trail maintenance shall be coordinated with the lead management agency.

E. Trail Relocation/Re-Routing Procedures

1. The trail may be re-routed and/or relocated to ensure the goals of the District are not negatively impacted, to provide a more desirable trail for the user or to protect sensitive cultural, natural or historical resources.

2. All proposed trail re-routing and relocation must be done in consultation with the Forest Service, the Florida Trail Association and the St. Johns River Water Management District.

F. Trail Signs

1. Standards and Guidelines

   a. Florida National Scenic Trail Signs

      1) As required by Section 7(c) of the Act, the Secretary of Agriculture has established the uniform marker for use on the FNST.
      2) The purpose of the 24-inch and 12-inch markers is to identify the location of the FNST to the motoring public. The markers are to be placed so they can be readily seen from a moving vehicle approaching from either direction. The placement of the markers may require approval of appropriate State or County authorities. Upon approval, two 24-inch markers are to be located at county, state and federal highway crossings. Two 12-inch markers are to be located at forest road crossings.
      3) The purpose of the three and one-half inch marker is to identify the FNST to the person approaching from a side trail. The small marker is to be used only on the FNST at common access junctions; at intersections with other trails; and where needed as a reassurance sign if the trail route is not well defined. The three and one-half inch marker is not intended to be used as a trail blaze. It should be attached to a wooden sign post. In areas subject to vandalism, a brand of identical dimensions may be used.

   b. Directional, Information, Interpretive and Regulatory Signs

      1) These signs shall be placed along the Trail and at trailheads to inform or to add to the enjoyment of the user.
      2) Signing shall be consistent with District standards.
      3) Install hazard-warning signs when appropriate.
      4) A standard regulation sign will be posted at all trailheads.
      5) Routed wood signs are preferred, but other types of signs may be considered where appropriate.
      6) Mileage to important features or facilities should be shown to the nearest tenth of a mile.
      7) Missing or damaged markers and signs shall be repaired or replaced in a timely manner.
      8) Display standard information about the FNST on appropriate visitor center and trailhead bulletin boards.

2. Funding

The USDA Forest Service shall provide for the production of sufficient quantities of the official FNST markers. The markers shall be installed as mandated in this plan. Other signs shall be constructed and maintained as funds permit.

G. Facilities

1. Camping Areas

a. Standards and Guidelines

1) Camping areas are to be reasonably level and large enough to accommodate six to eight tents.
2) Trail users will be educated in the use of "no trace" methods of camping to minimize impacts.
3) Designated campsites should be frequent enough to allow reasonable accommodation for hikers of varying abilities. Campsites are recommended to be located four to six miles apart based on the expected use of the trail and site, but in all cases be no further than one hiking day apart (eight to ten miles). Campsites should be located away from highways, residences, and other populated areas. Sources of water should be accessible from campsites and available along the trail.

b. Existing Camping Areas

Existing camping areas are described in District Recreation Guides and FNST hiking guides.

c. Planned Camping Areas

New campsites may be established as needed with prior approval from the District.

2. Trailheads

a. Standards and Guidelines

1) Major trailheads are described in and should conform to the FNST sign plan. They can include: a bulletin board, trail route map, access regulations, pack-it-in and pack-it-out signs, a self-registration facility, and vehicle parking area facility with a minimum of 5 spaces.
2) Minor trailheads are described in and should conform to the FNST sign plan. They can include a small bulletin board for posting information and regulations, informational signs, and a vehicle parking area.
3) Trailheads and parking will generally be located where the trail is accessible by a short spur trail and not co-located with campsites.
4) Encourage and coordinate patrol by local law enforcement agencies.

b. Existing trailheads

Existing trailheads are described in District Recreation Guides and FNST hiking guides.

c. Planned Trailheads

Additional trailheads may be established as needed with prior approval from the District.

3. Bridges, Boardwalks, and other Trail Structures

   a. Standards and Guidelines

      1) Structures are to be constructed to high standards using quality materials and built by experienced workers.
      2) Construction materials are to be resistant to deterioration and should meet the visual quality objectives for the trail experience.
      3) All structures to be placed on the trail must first be approved by the District and comply with all Federal and state regulations.
      4) All structures will be inspected annually and maintained to insure safe conditions.

   b. Existing Trail Structures

      A database of these trail structures is maintained as part of the FNST Trail Inventory and some are described in the District's Recreation Guides.

   c. Planned Trail Structures

      Elevated boardwalks and bridges will be constructed as needed and as funds are available so to minimize environmental resource degradation and provide hiker safety. The FTA will work with the SJRWMD to secure necessary approvals and permits for boardwalks and bridges. Additional trail structures such as trail shelters will be considered in the future as need warrants and the funding is available.

VII. Protection Measures

Presented below are standards and guidelines that apply to protection of both the physical trail as well as the trail user. The following issues may be addressed on an as-needed basis. Each of these suggested measures are intended to protect the hiker's experience. Although not mandatory, the Florida Trail Association requests trail protection measures to be followed to the best of the Florida Trail Association's volunteers and the district's capabilities.

A. Trail Protection Measures

1. Timber Management

   a. Timber management along the Trail will be prescribed to enhance the trail experience. On certain lands acquired by the District, other parties have temporary timber interests which currently supercede this agreement.

   b. Every effort will be made to avoid clearcutting across the Trail.

   c. Where possible, skid trails, temporary roads, and logging deck landings will not be located within 50 feet of the trail and will be kept parallel to the trail. In cases where skid trails or temporary roads must cross the trail, it will be done perpendicular to the trail and at designated locations. Every effort will be made to minimize the number of trail crossings required. Log dock landings will be screened from view of the Trail.

d. Protect the trailhead, blazed trees, and trail signs from damage during timber operations.

e. Clear treadway of all logging debris.

f. The trail will be routed through a planned effort to minimize the impact on timber management. Train volunteers and District employees to blaze noncommercial and/or nonmerchantable trees where possible.

g. All trail signs will be protected from damage.

2. Reforestation

a. Natural regeneration will be favored along the trail.

b. Site preparation and planting equipment will cross the Trail only at right angles and at designated locations.

c. Dispose of logging debris and construct windrows out of sight of from the trail when possible.

d. Site preparation and planting activities such as disking, chopping, bedding, etc. shall be kept at least two feet from either side of the Trail.

e. Construct beds parallel to the Trail tread.

f. Tree rows should be planted parallel to the Trail tread.

3. Fire Management

a. Notify trail users about prescribed burning activities through posting of signs at campsites and/or trailheads or through personal contact with hikers.

b. Minimize the number of plow lines crossing the Trail. Restore trailhead after fire activities.

4. Wildlife Management

a. Improve wildlife viewing activities through the use of habitat management practices.

b. Promote wildlife viewing activities through appropriate public information techniques.

c. Care shall be taken to restore any portions of the trail damaged as a result of habitat improvement activities.

5. Cultural and Historical Resource Management

a. Protect historical and cultural and resources along the Trail.

b. The Florida Bureau of History and Archives will determine which cultural and historical resources will be protected by nondisclosure and which will be interpreted.

c. Promote awareness of cultural and historical resources through appropriate public information techniques.

d. Use side trails to provide access to areas of geological, historical, and cultural significance, when appropriate.

6. Road Construction, Reconstruction, and Maintenance

a. New road construction should not displace the FNST if possible.

b. Analyze all new road construction and reconstruction that will cross or parallel the Trail within 0.5 mile of the Trail for potential undesirable impacts on the Trail user.

c. Coordinate all road construction, reconstruction, and maintenance activities that could affect the Trail with the Florida Trail Association and the USDA Forest Service.

7. Forest Pest Management

a. Protect and restore the Trail treadway during forest pest management operations.

8. Special Uses

a. Special use activities that could affect the Trail will be done in consultation with the Forest Service, the Florida Trail Association, and the District.

B. Visitor Protection

1. Public safety

a. FTA will inspect the Trail twice annually for maintenance needs.

b. FTA will inform the public of potential hazards in the trail guidebook, brochures, maps, and signs.

c. FTA and the District will advise trail users as to hunting seasons and possible conflicts that may arise as a result of these activities. Hikers will be encouraged to wear hunter safety orange during hunting season.

d. FTA will install self-registration boxes at major access points.

e. FTA will post warnings and safety precautions at trailheads during hunting season.

f. Include Trail use in District search and rescue plans.

2. Special Regulations

a. Information concerning the availability of potable water and the treatment of non-potable water will be posted at the trailheads.

VIII. Public Information

A. Interpretive Program

1. Education efforts shall be directed toward making the public aware of the Trail's purpose and ways to enjoy it with the least environmental impact.

2. No-trace camping will be encouraged and promoted, along with the pack-it-in/pack-it out philosophy, through informational materials and signs.

3. Cultural, historical, and base management shall be interpreted through signs, printed materials, and displays as funds allow.

B. General Trail Information

1. Trail maps, Trail information and Trail guidebooks will be available to the public at all USDA Forest Service offices.

2. The Trail map will be posted at trailheads.

3. Hikers will be informed as to where guidebooks and other Trail literature are available through the standard information poster.

4. All District personnel and appropriate service personnel will be oriented to the Trail's location and available information.

5. FNST promotional materials will be made available to local recreational facilities.

6. Promote the Trail through magazine and newspaper articles and tourist information.

C. Hiking Guide To The Florida Trail

1. The Florida Trail Association may provide The St. Johns River Water Management District with sufficient copies of the FNST segment maps from the Hiking Guide to the Florida Trail for use by the District.

2. The USDA Forest Service shall act as the clearinghouse for information and publications concerning the portion of the Florida National Scenic Trail across St. Johns River Water Management District lands.

IX. Affirmation, Certification And Concurrence

A. Affirmation

I hereby affirm that:

1. I am duly authorized to represent the managing authority named below;
2. The segment is available for public use regardless of race, color, or creed;
3. The segment is managed in accordance with the *Comprehensive Plan of the Florida National Scenic Trail* (FNST) and the segment's management plan;
4. I, or another representative of the managing authority, will notify the USDA, Forest Service if there is a change in the location or status of the segment;
5. The official FNST Markers, to be supplied by the USDA, Forest Service, will be posted along the trail and maintained; and
6. The USDA Forest Service will be informed concerning the status, as well as anticipated changes, of the segment on at least an annual basis.

Signed _____ Date 8/6/03

Steve Miller
Division Director
Division of Land Management
St. Johns River Water Management District

B. Certification

I hereby certify the trail described in this application qualifies and is accepted as a segment of the Florida National Scenic Trail and is officially mapped and recorded.

Signed _____ Date 9/29/03

Marsha Kearney
Forest Supervisor
National Forests in Florida
USDA Forest Service

C. Concurrence

I hereby concur this plan accurately describes the roles and responsibilities of the Florida Trail Association in the development and management of the Florida National Scenic Trail through the St. Johns River Water Management District lands.

Signed _____ Date 9/23/2003

Eileen Wyand
President
Florida Trail Association

D. Preparation And Review

Reviewed by: _____ Date: 8/6/03
Nels Parson, Land Use Coordinator
Division of Land Management
St. Johns River Water Management District

Reviewed by: _____ Date: 9/5/03
Patricia Burgos
Land Manager
Lake County Water Authority

Reviewed by: _____ Date: 8/28/03
Tom O'Neil
Wildlife Biologist
Florida Fish and Wildlife Conservation Commission

Reviewed by: _____ Date: 9/15/03
Mark Warren, Staff Officer
National Forests in Florida
USDA Forest Service

Reviewed by: _____ Date 12 August 2003
Deborah R. Stewart-Kent
Executive Director
Florida Trail Association

Reviewed by: _____ Date: 8-12-03
Joan Hobson
Vice President of Trails
Florida Trail Association

Prepared by: _____ Date: 8/12/03
Kent L. Wimmer, FNST Liaison
Florida Trail Association

Attachment A

Detailed Trail Descriptions for the Florida National Scenic Trail on St. Johns River Water Management District Lands

Trail Location

Bull Creek – This property is owned by the SJRWMD, but the Florida Fish and Wildlife Commission (FWC) manage the land for hunting and recreation.

The Northern terminus for the segment of the Trail that traverses the Bull Creek WMA begins at the junction of Levee 73 and Highway 192 (approximately 21 miles west of Melbourne). Trail users may register at the sign-in box located on the west side of the levee just inside the gate. The Trail follows Levee 73 for 0.4 mile in a southeasterly direction before turning southwesterly for 0.3 mile (primitive camping facilities are located at the point where the Trail turns. At this point, the Trail continues in a southerly direction through the mixed hardwood swamp for another 0.75 mile. From here, the Trail temporarily exists the swamp and continues in a southerly direction. This 1.25 mile walk will take the hiker through pine flatwood interrupted by one of the many drainage areas. This segment will end at a dirt road. The Trail turns northeast and continues along the dirt road for nearly 0.4 mile before turning southeast, southwest, then south for 1.4 miles along the railtram once use by the logging industry. This segment traverses several habitat types and ends at the bridge at Yoke Branch. At this point, the Trail continues in a general southerly direction roughly paralleling the western fringes of Bull Creek for approximately 3.6 miles. This segment ends where it meets Loop Road. The Trail continues southwest along Loop Road through pine flatwood for 1.5 miles, then leaves the Loop Road in a more southerly direction and continues through sand pine to the campground (0.4 mile). After leaving the campsite, the Trail continues in a southwesterly direction for 0.8 mile, then turns west and continues through pine flatwoods for 0.6 mile and terminates at the junction marking the Florida Trail. From the junction the Trail turns south and continues for 0.2 mile to the south boundary of the Bull Creek WMA.

Seminole Ranch – This property is also owned by the SJRWMD but managed by the FWC for hunting and recreation.

The northern terminus for that portion of the FT on the Seminole Ranch WMA is located at the juncture of the northeast corner of the Orlando Wilderness Park and the management area. From this point the trail winds southward for 1.1 miles to the junction of Echo and Fotocho Roads. The trail then turns west, passes through a gate and continues for about 0.6 miles to a GFC trailer. Straight ahead, 0.3 miles west, on a blue blazed trail is the Seminole Ranch Trailhead and Registration Box. From the GFC trailer the trail heads southward and traverses mostly oak/cabbage palm hammock for 1.7 miles where it again reaches the southern portion of Fotocho Road. After crossing Fotocho Road the trail continues south for 0.1 miles to the intersection of a white blazed trail which leads east and northward across the river's flood plain. Continuing south-westward on the orange blazed "Through-Trail" for 0.4 miles the trail leaves Seminole Ranch at the intersection of St. Nicholas Road and State Road 50 (at the SW corner of the Christmas Airstream Park). The southern terminus of this trail portion is 0.1 miles east of this intersection at the eastern city limit sign for Christmas, FL. Note: the FT continues south from this terminus for 0.7 miles across private property which is open to hikers only. This private property is not part of this application for FNST designation.

The northern terminus for the 19.4 mile segment that traversed Tosohatchee State Reserve begins at the north boundary of the Reserve 0.7 miles south of the eastern city limit sign for Christmas, FL. Approximately 0.1 miles from the Reserve boundary the hiker reaches a mandatory registration box. From this box the trail heads southeast for 1.2 miles to the Tosohatchee Creek foot bridge. Continuing southeast for 1.4 miles the trail crosses a major powerline right-of-way and a shallow canal and then turns southward. From this point the hiker will cross Beehead Road in 0.2 miles and will reach an old road and an east-west cross trail junction 1.1 miles farther down the trail. Fish Hole Road is crossed 1.2 miles down the trail and a side trail is found leading to Tiger Branch primitive campsite. In 1.7 miles the hiker again comes to Fish Hole Road where he/she is able to cross over Jim Creek on the road. After crossing Jim Creek the trail leaves Fish Hole Road in an easterly direction and still further along the trail swings to the northeast. At 1.6 miles from Jim Creek a trail intersection is reached - to the right (southeast) is the "Through-Trail" and

straight ahead (northeast), 0.5 miles away is Whetrock campsite. Turning onto the "Through-Trail" the hiker almost immediately crosses Long Bluff Road. In 0.6 miles the trail reaches Mud Lake Canal. Here the trail turns south and parallels the canal for 0.7 miles until it reaches the Beeline Expressway (SR 528) fence. Here, the trail turns eastward and crosses Mud Lake Canal on a heavy timbered foot bridge. The trail continues eastward paralleling SR 528 for 1.1 miles until it reaches Main Back Canal. The trail turns south, passes under the Expressway bridge and about 100 yards south of the bridge reaches an earthen plug (dam) across the Canal. Water normally flows around the western end of this plug, but it is usually shallow enough to wade across and continue onto the levee on the east side of the canal. If the water is too deep at this crossing, hikers may consider crossing on the Beeline bridge using the emergency stopping lanes with great care. After crossing the Main Back Canal the trail continues southward for 4.0 miles along the levee which traverses the St. Johns River flood plain. Here, the hiker reaches a self-operated drawbridge. By pushing on the lower portion of a vertical, counter weighted plank the open span is closed and the hiker is able to continue southward along the levee. At 1.8 miles further the trail almost reaches SR 520 where the levee turns sharply to the west, parallels SR 520 for 0.6 miles to reach the river's western boundary and flood plain intersection. Just inside the hammock the trail again turns south for about 30 yards and reaches SR 520. The "Through-Trail" crosses SR 520 and continues southwestward through an oak/cabbage palm hammock for 2.0 miles to reach the southwest corner of the Reserve.

Lake Norris – The Lake Norris tract extends from the Ocala National Forest North of Lake Norris to the Seminole State Forest South of Lake Norris. The Florida National Scenic Trail enters onto the Shockley Ranch tract from the Ocala National Forest and continues to St. John's Water Management District Lands. The trail again enters into the forest on the Blackwater Creek tract at the edge of wetlands south of Blackwater Creek and crossing the creek north of CR 44A. The trail crosses CR 44A and SR 44 near their intersection and continues eastward leading to the Blackwater Creek Bridge and south to the intersection with SR 46.

Rice Creek – This property is owned by the SJRWMD, but managed by the Lake County Water Authority.

Going North to South: Start at Route 100 just SE of the Rice Creek Bridge. Follow trail SW along hardwood floodplain forest and several boardwalks 1.0 miles to intersection of Rice Creek Trail. Turn NW on Dike Trail, cross several bridges and Rice Creek and proceed .4 miles to intersection with Cedar Swamp Trail. Continue on Dike Trail across several more bridges .7 miles to intersection with proposed FNST junction. Leave Dike Trail and proceed SE 400 ft across two bridges (the old Florida Trail) to woods road. Follow woods road E across small stream E 181 ft. to junction with proposed FNST. Turn SSE and proceed .34 miles to woods road. Go SSE brand of road .4 miles to end of road. Follow along edge of pine plantation .4 miles to 9-mile swamp. Continue SSE .4 miles across swamp (Hoffman Crossing) to beginning of woods road. Take woods road S .2 miles to intersection of E/W woods road. Proceed across E/W woods road and follow woods road going SW and then generally S 1.1 miles to section line road. Follow section line road E .4 miles to the present Florida Trail.

Little Big Econ State Forest – This section is described and will be certified in the plan with the FDOF.

Points Of Interest

Bull Creek – One of the most unique and interesting points of Bull Creek is its vegetative communities. Not only are many community types represented, but they are dispersed throughout the area. The fingerlike drainage areas that meander through the slightly higher flatwoods adds to the diversity and provides the hiker with vistas that frequently change. Some of the larger wetland areas located near the west boundary have several species of ground orchids and other wildflowers that provide a colorful springtime hiking experience. Approximately six (6) flowering plants are considered endemic to the area.

Topographically, Bull Creek is the dominant feature. The creek is located in the eastern one-third of the management area, and flows from south to north. Approximately 75 percent of the land area is drained through Bull Creek and its secondary streams and sloughs. The northern part of the management area is drained by Crabgrass Creek which flows from west to east and then south to join Bull Creek. The confluence of these two streams forms Jane Green Creek which flows east to the St. Johns River. For that part of the trail that parallels the Bull Creek swamp corridor, the hiker will likely encounter a variety of animal and plant life that occupy the ecotone areas between upland and wetland areas. Additionally, parts of the trail follow abandoned railroad beds, or "tram roads", built after the turn of the century for the purpose of logging the virgin cypress pine. Past logging operations are still evident by the huge cypress stumps scattered throughout the Bull Creek floodplain.

Seminole Ranch – This segment of trail traverses primarily oak/cabbage palm hammock. Along the north stretch cedar is a prevalent tree. If the hiker should venture out on the loop trail dense stands of cedar may be observed. As the trail is followed southward, the cedar component slowly disappears due to soil moisture. Many of the large oaks in these hammocks support resurrection fern and numerous bromeliads. A red lichen is also present on many trees. If the hiker is observant, reindeer moss may be found along the drier south portion of the trail.

The two side loop trails offer a closer look at a fresh water marsh. This marsh is regularly control burned to reduce the encroachment of woody vegetation. Waterfowl, wading birds, ospreys and eagles frequent the marsh adjoining the St. Johns River.

Wildlife is fairly abundant on this area. Deer, feral hogs, wild turkeys and the threatened indigo snake are commonly seen from the trail and songbirds are especially abundant during the spring and fall migrations. Wild iris, marsh pinks and wild hibiscus are just a few of the wildflowers commonly seen along the trail.

As a whole, the main segment of this trail passes through some of the most beautiful hammocks in this portion of the state.

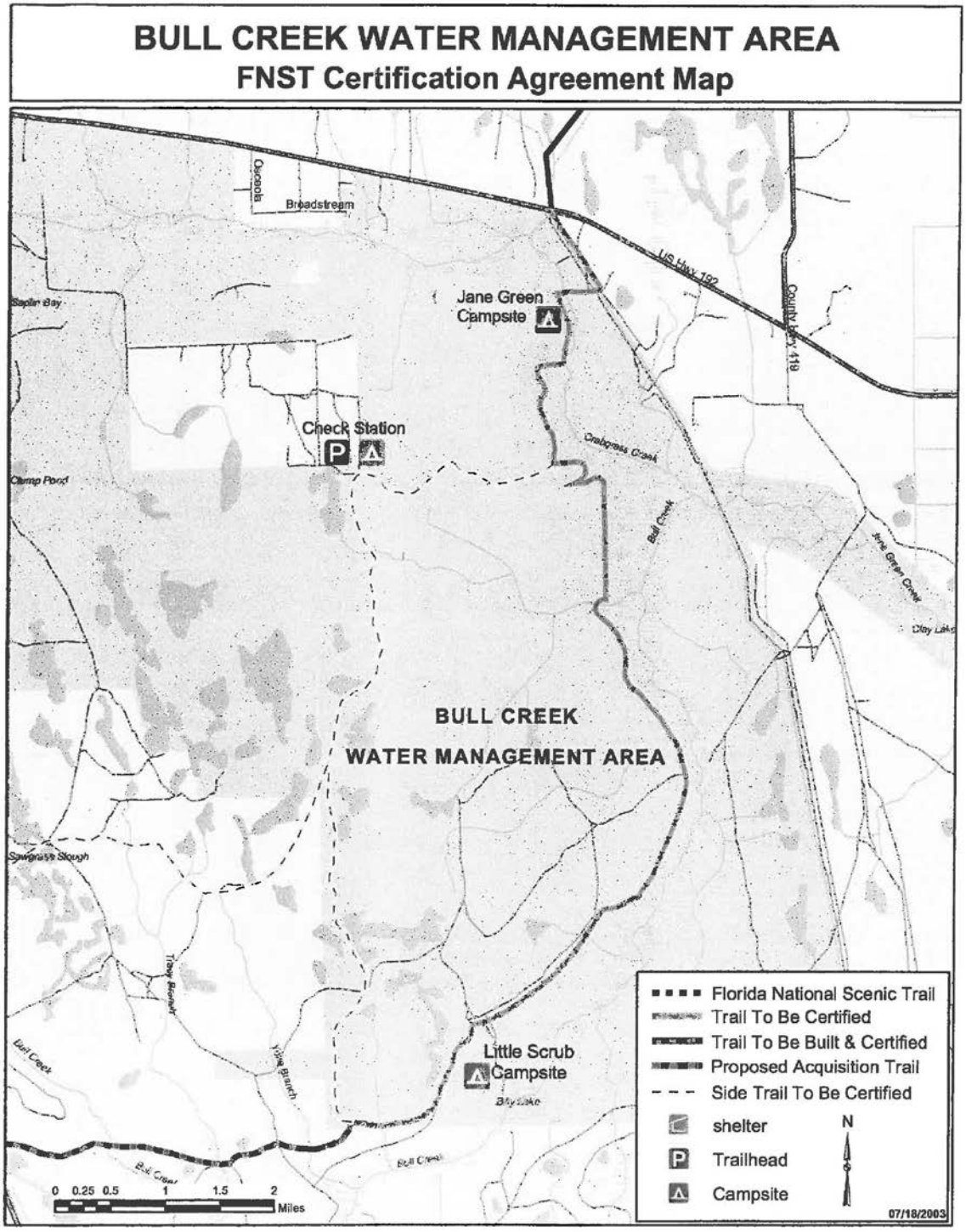
Lake Norris – Lake Norris is a spectacular darkwater lake that supports an impressive number of osprey. Black Water Creek is the major tributary of the Wekiva River. These water bodies together support a habitat for many animals and birds dependent on a wetlands environment.

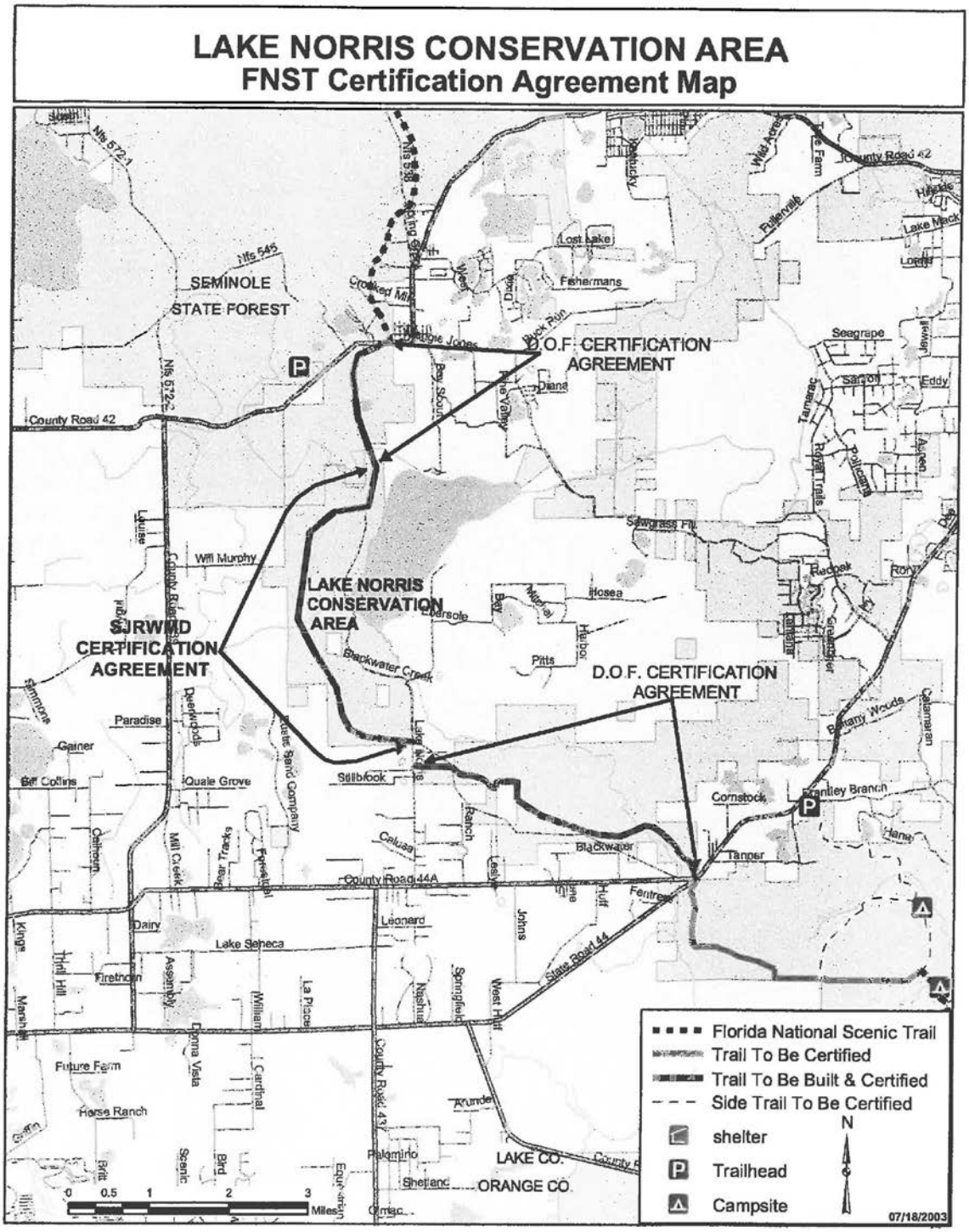
Rice Creek – The Rice Creek loop trail provides access to the Rice Creek Sanctuary, but be cautious on the old boardwalks. These trails go around swamps that have grown over a Revolutionary War rice and indigo plantation. The dikes are still visible. The sanctuary was established by the Hudson Paper Company to protect the old plantation.

Little Big Econ State Forest – This section is described in plan with the FDOF.

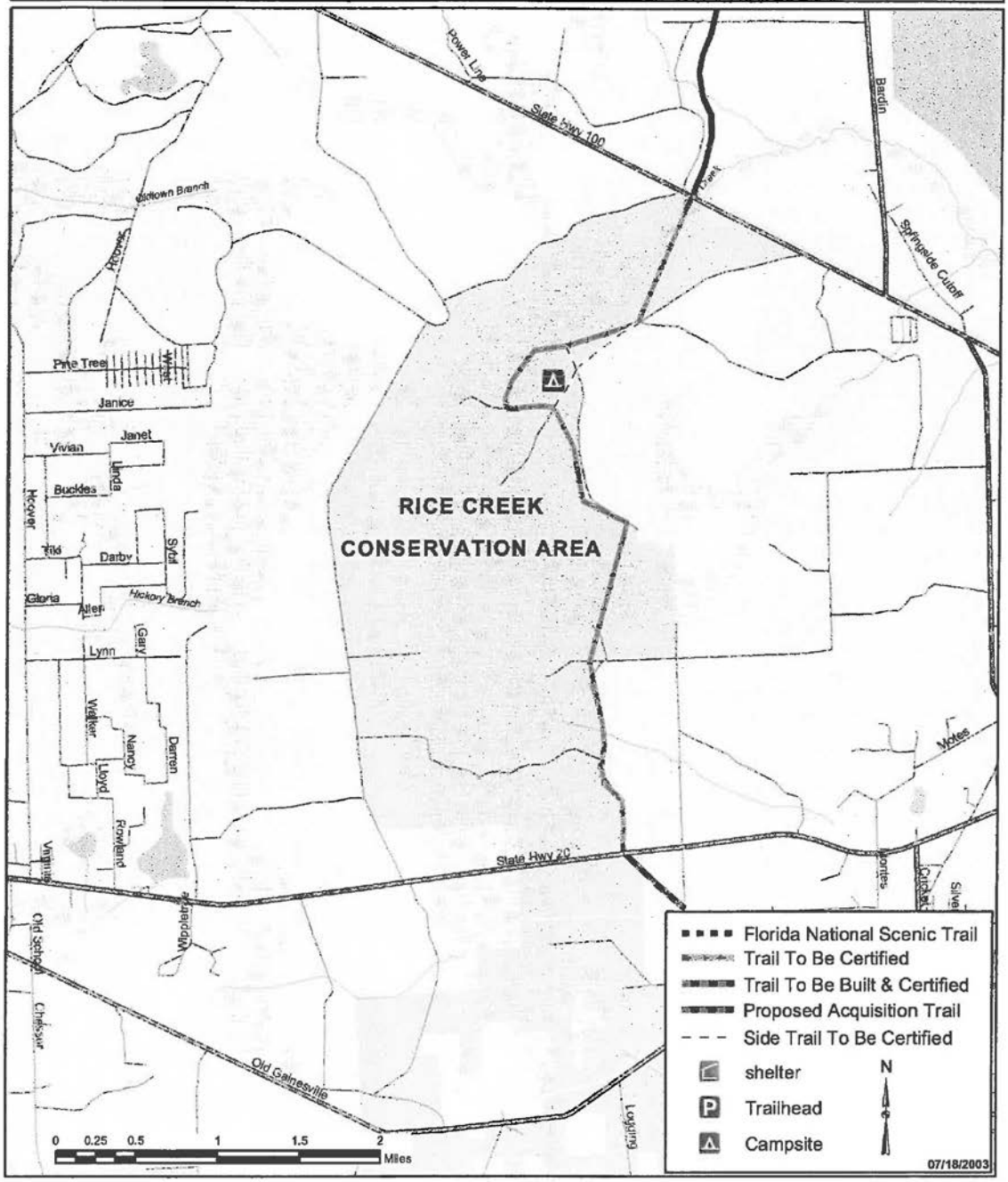
Attachment B

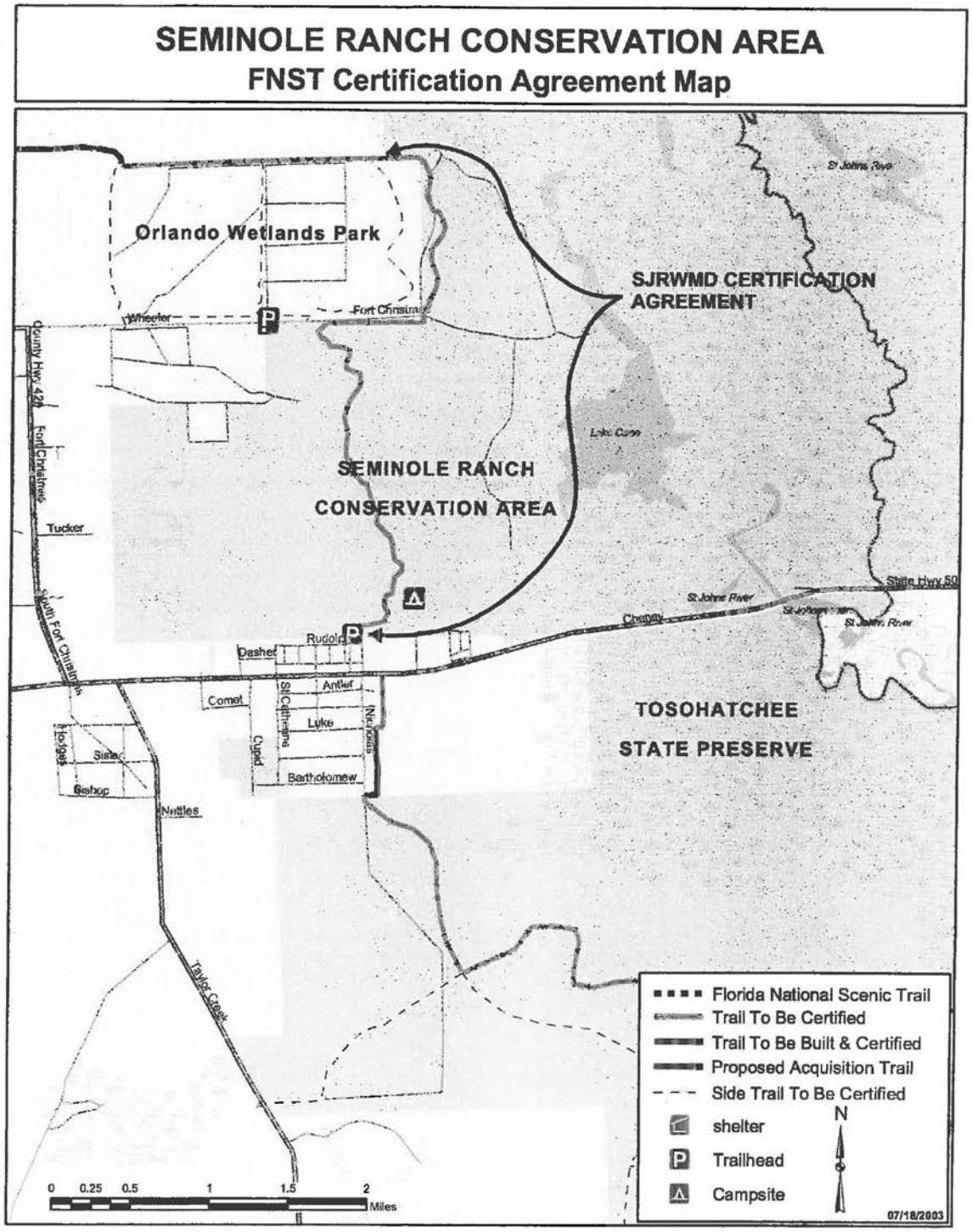
Maps of the
Florida National Scenic Trail on
St. Johns River Water Management District Lands


BULL CREEK WATER MANAGEMENT AREA
FNST Certification Agreement Map
Osceola
Broadstream
US Hwy 192
County Hwy 419
Saplin Bay
Jane Green Campsite
Check Station
Orabgrass Crank
Clamp Pond
Bull Creek
Jane Green Creek
Otey Lake
BULL CREEK
WATER MANAGEMENT AREA
Sawgrass Slough
Tiger Branch
Bull Creek
Little Scrub Campsite
Otey Lake
Bull Creek
Bull Creek
0 0.25 0.5 1 1.5 2
Miles
Florida National Scenic Trail
Trail To Be Certified
Trail To Be Built & Certified
Proposed Acquisition Trail
Side Trail To Be Certified
shelter
Trailhead
Campsite
N
07/18/2003


LAKE NORRIS CONSERVATION AREA
FNST Certification Agreement Map
SEMINOLE STATE FOREST
D.O.F. CERTIFICATION AGREEMENT
SJRWMD CERTIFICATION AGREEMENT
LAKE NORRIS CONSERVATION AREA
D.O.F. CERTIFICATION AGREEMENT
County Road 42
County Road 44A
Lake Seneca
Florida National Scenic Trail
Trail To Be Certified
Trail To Be Built & Certified
Side Trail To Be Certified
shelter
Trailhead
Campsite
LAKE CO.
ORANGE CO.
07/18/2003

RICE CREEK CONSERVATION AREA
FNST Certification Agreement Map




SEMINOLE RANCH CONSERVATION AREA
FNST Certification Agreement Map
Orlando Wetlands Park
SJRWMD CERTIFICATION AGREEMENT
SEMINOLE RANCH CONSERVATION AREA
TOSOHATCHEE STATE PRESERVE
St Johns River
Lake Conn
Wheeler
Fort Christmas
County Hwy 420
Tucker
South Fork Christmas
State Hwy 50
Cheney
Rudolph
Dashed
Antler
Comet
St Catherine
Lake
Narcoss
Cupid
Bartholomew
Hodges
Sisle
Bishop
Nettles
Taylor Creek
Florida National Scenic Trail
Trail To Be Certified
Trail To Be Built & Certified
Proposed Acquisition Trail
Side Trail To Be Certified
shelter
Trailhead
Campsite
N
0 0.25 0.5 1 1.5 2
Miles
07/18/2003

Attachment C

Challenge Cost-Share Agreement
Between
The Florida Trail Association
And
USDA Forest Service

Challenge Cost-Share Agreement No. 00-CS-11080500-057
between
The Florida Trail Association
and
National Forests in Florida

This Challenge Cost-Share (CCS) agreement is entered into by and between the Florida Trail Association, hereinafter referred to as FTA, and the United States Department of Agriculture Forest Service, National Forests in Florida, hereinafter referred to as FS, under the provisions of the Interior and Related Agencies Act of 1992, P.L. 102-154, Challenge Cost Share.

I. Purpose: The purpose of this partnership is to cooperatively maintain, locate and further develop the Florida National Scenic Trail from Gulf Island National Seashore to Big Cypress Preserve for use by the public.

II. Statement of Mutual Interests and Benefits:

The FS is a land management organization dedicated to the management of 191 million acres that comprise National Forest System lands for a variety of uses and activities, including outdoor recreation. It is interested in: (1) providing trail opportunities which are environmentally sensitive, educational, and provide economic stimulus; (2) fostering cooperation among trail organizations; (3) keeping the public informed of trails events, programs and developments; (4) supporting opportunities for education and information sharing among the trails community. In addition, the FS has administrative responsibility for the Florida National Scenic Trail (FNST). As trail administrator, the Forest Service is interested in: (1) connecting existing trail routes to create a continuous trail from Gulf Islands National Seashore to Big Cypress National Preserve; (2) enhancing the public visibility and access to the FNST; and (3) building partnerships along the trail route with other government agencies, private landowners, and other interest parties.

The FTA is a public, non-profit organization dedicated to the promotion of hiking in Florida and specifically to the promotion, construction, maintenance, and management of a long distance, continuous trail, the Florida National Scenic Trail.

The FS and the FTA have established this agreement to help one another accomplish mutually beneficial objectives related to overall program management and maintenance of the Florida National Scenic Trail. These objectives include:

A. Construction and maintenance of trail and trail support facilities along the Florida National Scenic Trail;

B. Research, recommend and negotiate for trail routes;

C. Negotiate, maintain, monitor and administer trail certification plans with partner agencies and private landowners;

D. Member recruitment, education and development in proper trail maintenance and construction techniques as well as participation in the National Trail System; and

E. Public education and information programs promoting the Trail, Leave No Trace, and Tread Lightly.

The FTA provides an opportunity for the Forest Service to coordinate and implement existing projects, create new projects, and develop additional partnerships at regional and national levels for the Florida National Scenic Trail.

9. Remain an active participant in the Partnership for Long Distance Trails and represent the FNST in the long distance trail community.

10. Give the Forest Service or Comptroller General, through any authorized representative, access to and the right to examine all books, papers, documents related to the agreement.

IV. The Forest Service shall:

1. Reimburse the FTA for the Forest Service's proportionate share of actual expenses incurred. The amount will be determined annually, based on the Program of Work.

2. Provide assistance in training volunteers and developing a complete inventory of all non-forest trail segments.

3. Provide technical assistance for the design and construction of trail support facilities.

4. Schedule final inspections of facilities constructed with these funds to be sure they meet the requirements of the FS, the land managers, and this agreement.

5. Develop with the Florida Trail Association, any and all public education programs to ensure the copyright and integrity of the Florida National Scenic Trail and logo are protected and used appropriately. Also, ensure the participating partners in the Trail are included in all programs and are represented fairly and appropriately.

V. It is Mutually Understood and Agreed Upon by and Between the Parties That:

1. Both parties will arrange for a continuing consultation to discuss the conditions covered by this agreement and agree to actions necessary to implement and further the stated goals of the agreement.

2. Either party, in writing, may terminate the agreement in whole, or in part, at any time before the date of expiration, whenever it is determined that the other party has materially failed to comply with the conditions of this agreement. The other party shall not incur any new obligations for the terminated portion of the agreement after the effective date and shall cancel as many obligations as possible. Full credit shall be allowed for the FS share of the obligations incurred to the effective date and all noncancellable obligations properly incurred by the cooperating party prior to termination.

3. Specific indirect cost rates are approved in the initial instrument. If the rates change at any time during the performance period, the proposed adjustments shall be resubmitted to the Forest Service for verification, consideration, and approval, prior to the adjusted rates being billed. Approved rates shall be incorporated by written modification.

4. This instrument is executed as of the last date shown below and expires 5 years from approval, at which time it will be subject to review, renewal, or expiration.

5. Federal wage provisions (Davis-Bacon or Service Contract Act) are applicable to any contract developed and awarded under this instrument where all or part of the funding is provided with Federal funds. Davis-Bacon wage rates apply on all public works contracts in excess of $2,000 and Service Contract Act wage provisions apply to service contracts in excess of $2,500. The Forest Service will award contracts in all situations where their contribution exceeds 50 percent of the costs of the contract. If a cooperator is approved to issue a contract, it shall be awarded on a competitive basis.

13. The cooperator shall comply with all Federal Statutes relating to nondiscrimination and all applicable requirements of all other Federal laws, executive orders, regulations, and policies. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (40 U.S.C. 2000), which prohibits discrimination on the basis of race, color, handicap, or national origin; (b) Title IX of the Education amendments of 1972, as amended (20 U.S.C. 1681-1683 and 1685-1686), which prohibits discrimination on the basis of sex.

14. Improvements placed on National Forest land at the direction of either of the parties, shall thereupon become property of the United States, and shall be subject to the same regulations and administration of the FS as other National Forest improvements of a similar nature.

15. This agreement in no way restricts the FS or their cooperators from participating in similar activities with other public or private agencies, organizations, and individuals.

16. No part of this agreement shall entitle the FTA to any share or interest in the project other than the right to use and enjoy the same under the existing regulations of the FS.

17. Pursuant to Title 41, United States Code, section 22, no member of, or Delegate to, Congress shall be admitted to any share or part of this instrument, or any benefits that may arise therefrom.

18. Nothing herein shall be considered as obligating the FS to expend or as involving the United States in any contract or other obligations for the future payment of money in excess of funding approved and made available for payment under this instrument and modifications thereto.

19. Following receipt of the Forest Service annual budget, the Program of Work and Financial Plan will be updated by both parties.

20. This agreement may be revised as necessary by mutual consent of both parties, by the issuance of a written amendment, signed and dated by both parties.

21. Either party may terminate the agreement by providing 60 days written notice, unless terminated by the FS unilaterally for cause in accordance with Article 2 of this section.

22. The principal contacts for this instrument are:

Mark Warren
USDA Forest Service
Woodcrest Office Park
325 John Knox Road, F-100
Tallahassee, FL 32303
(850) 942-9369

Dick Schuler, President
Florida Trail Association
P.O. Box 13708
Gainesville, FL 32604
(800) 343-1882

The parties hereto have executed this instrument as of the last date written below.

Marsha Kearney
MARSHA KEARNEY
Forest Supervisor
USDA Forest Service

1/29/99
Date

Richard A. Schuler
DICK SCHULER
President
Florida Trail Association

2/5/99
Date

APPENDIX J – NINE MILE SWAMP RESTORATION PLAN

1130977

W.W. Gay Properties of Putnam County, LLC
Circle G Ranch
Restoration Plan

June 21, 2011

Prepared by

Todd G. Gipe
Straightway Environmental, Inc.

Straightway Environmental, Inc.
513 South 19th Street, Palatka, FL 32177 • 386-227-0097 •
straightwayenvironmental@comcast.net

1

W.W. Gay Properties of Putnam County, LLC
Circle G Ranch
Restoration Plan
(rev. 6-21-11)

Summary

The table below summarizes the ten proposed restoration areas that will be carried out on the property known as Circle G Ranch to be sold by the current owner W.W. Gay Properties of Putnam County, LLC.

#	Description	Lin. Ft.	Work Summary
1	North Fence Wetland Crossing	1372 +/-	Remove fill material from wetland (place in borrow pond or approved upland location) to match adjacent grade
2	Raised Field Road w/ Swales	1750 +/-	Grade road and berms into swales to approximate adjacent undisturbed grade
3	Raised Field Road w/ Swales	1503 +/-	Grade road and berms into swales to approximate adjacent undisturbed grade
4	Borrow Pond slope	114 +/-	Re-grade segment between trees to 4H:1V
5	N Rainbow Lake fence (wetl portion)	552 +/-	Remove fence and posts
6	S Rainbow Lake fence (wetl portion)	1371 +/-	Remove fence and posts
7	Culvert and fill crossing of ditch	28	Remove 2-28' length x 30" diameter culverts and restore ditch grade
8	Field Road with Swale	2815 +/-	Grade road and berm into swale to approximate adjacent undisturbed grade
9	Culvert and fill crossing of swale	42	Remove 42' length x 18" diameter culvert and restore swale grade
10	SE Outparcel fence	1806 +/-	Remove fence and posts

The following pages include:

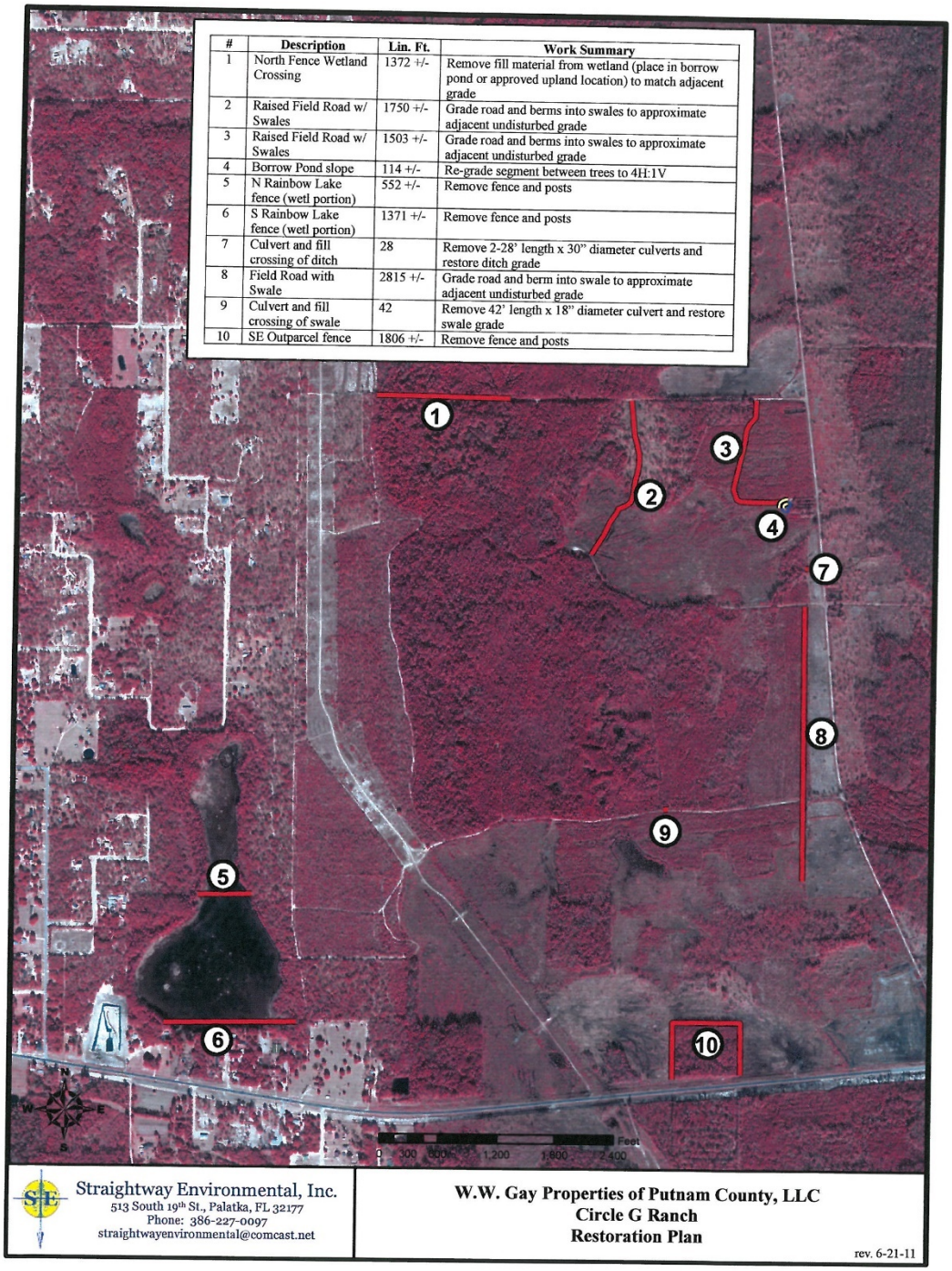
(1) a restoration plan view location map covering all ten areas

(2) individual detail sheets for each restoration location, each of which include:

a. a plan view close-up on a USGS topo quad,

b. detailed cross-section view or views, and

c. a description of the restoration sequencing.



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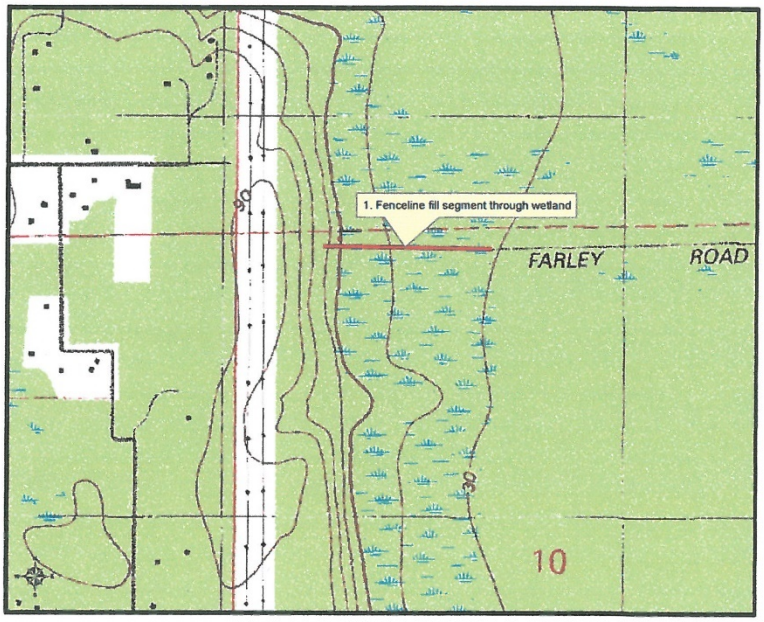
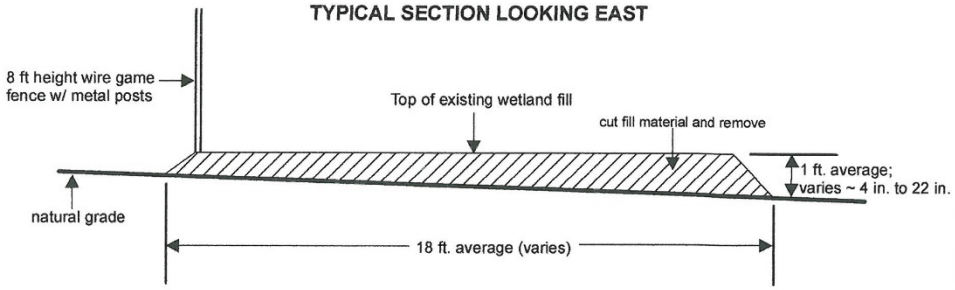


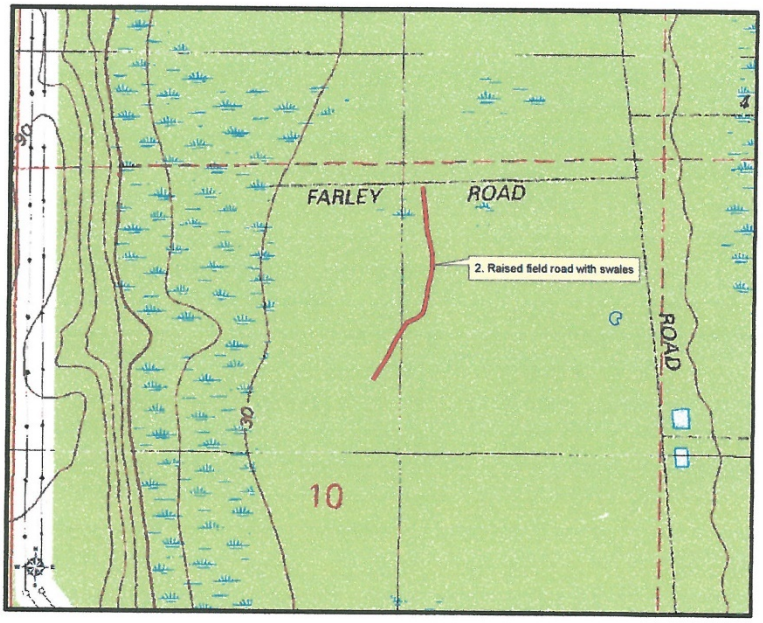
TYPICAL SECTION LOOKING EAST



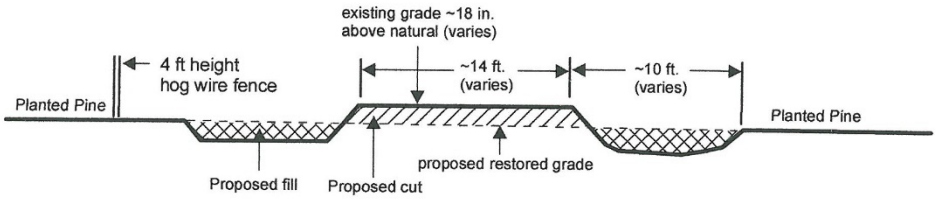
1. Remove fence and posts.
2. Remove fill from wetland limits to match adjacent undisturbed grade.
3. Place spoil in borrow pond or an approved upland location.
4. Install silt fence perpendicular to slope to check soil transfer as needed unitl stabilized.

Straightway Environmental, Inc.
513 South 19th St., Palatka, FL 32177
Phone: 386-227-0097
straightwayenvironmental@comcast.net

W.W. Gay Properties of Putnam County, LLC
Circle G Ranch
Restoration Plan
Detail Sheet Location 1



TYPICAL SECTION LOOKING NNE



1. Remove fence and posts.
2. Cut the top of the road travel path to fill in swales and to approximate the adjacent pine plantation grade.
3. Note that the section varies, tends to decrease in profile height/depth toward the north.

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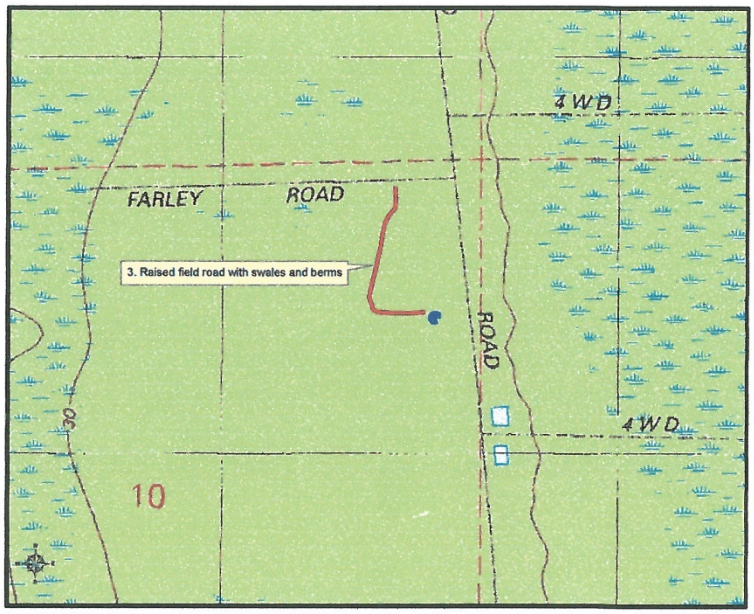
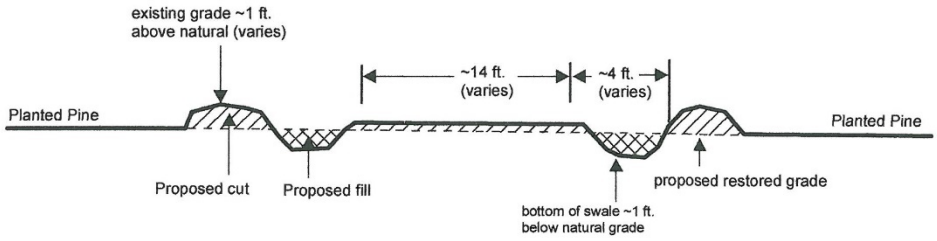
W.W. Gay Properties of Putnam County, LLC
Circle G Ranch
Restoration Plan
Detail Sheet Location 2



TYPICAL SECTION LOOKING WEST
(from southern segment)



1. Cut the top of the berms (and the road travel path as needed) to fill in swales and to approximate the adjacent pine plantation grade.
2. Note that the section varies, tends to decrease in profile height/depth toward the north.

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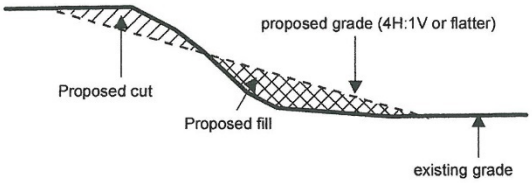
513 South 19th St., Palatka, FL 32177
Phone: 386-227-0097
straightwayenvironmental@comcast.net

W.W. Gay Properties of Putnam County, LLC
Circle G Ranch
Restoration Plan
Detail Sheet Location 3

TYPICAL SECTION LOOKING NNE



1. Place silt fence across the swale at the southeast of the borrow pond.
2. Option to first deposit any excess spoil material from Location #1 (north boundary fence) on to this slope segment.
2. Grade slope to 4H:1V or flatter.

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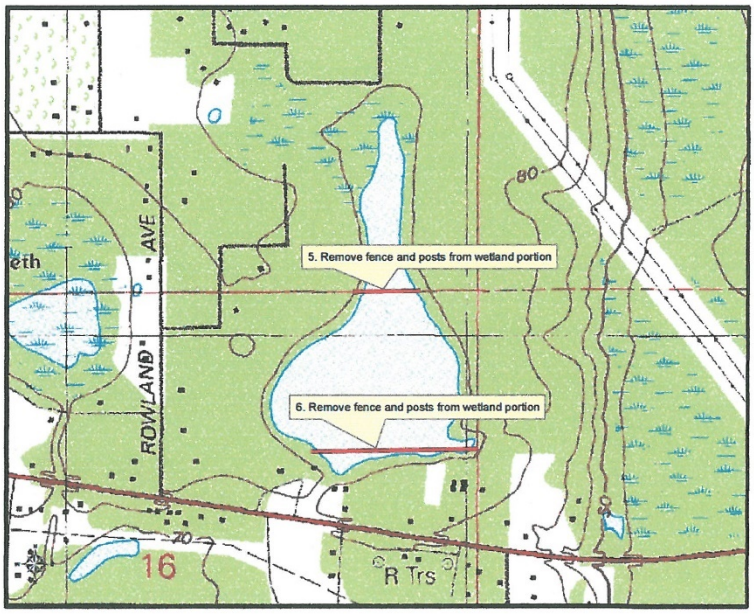
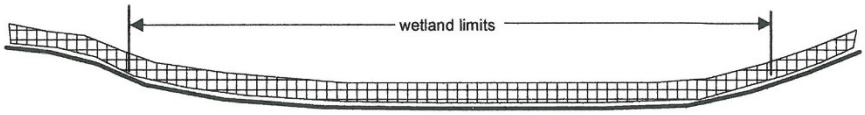
Restoration Plan
Detail Sheet Location 4



TYPICAL LONG SECTION LOOKING N



1. Remove fence and posts from wetland limits (and beyond as otherwise negotiated).

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W.W. Gay Properties of Putnam County, LLC
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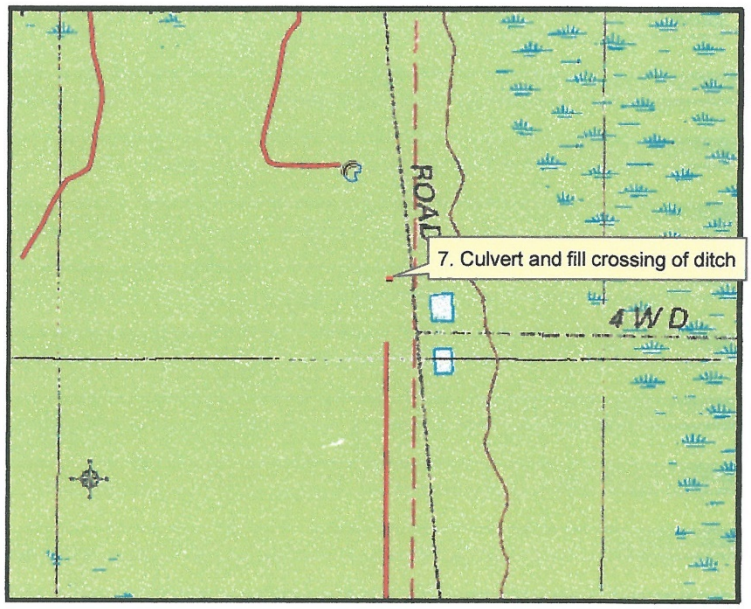
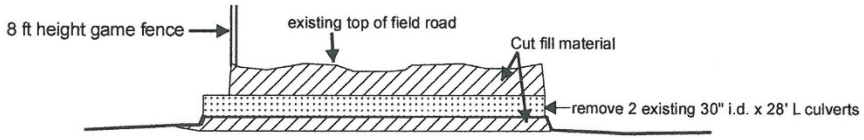
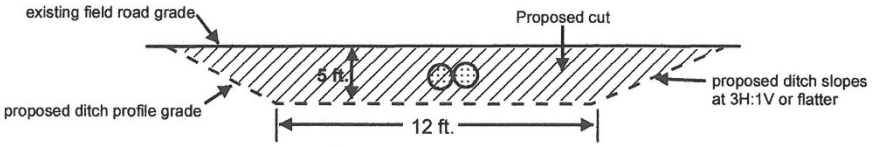
Restoration Plan
Detail Sheet Locations 5 and 6



TYPICAL EXISTING SECTION LOOKING S



TYPICAL X-SECTION LOOKING E



1. Remove fence and posts.
2. Cut the road and remove the culverts.
3. Create ditch profile.
4. Remove any excess material to borrow pond.

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Phone: 386-227-0097
straightwayenvironmental@comcast.net

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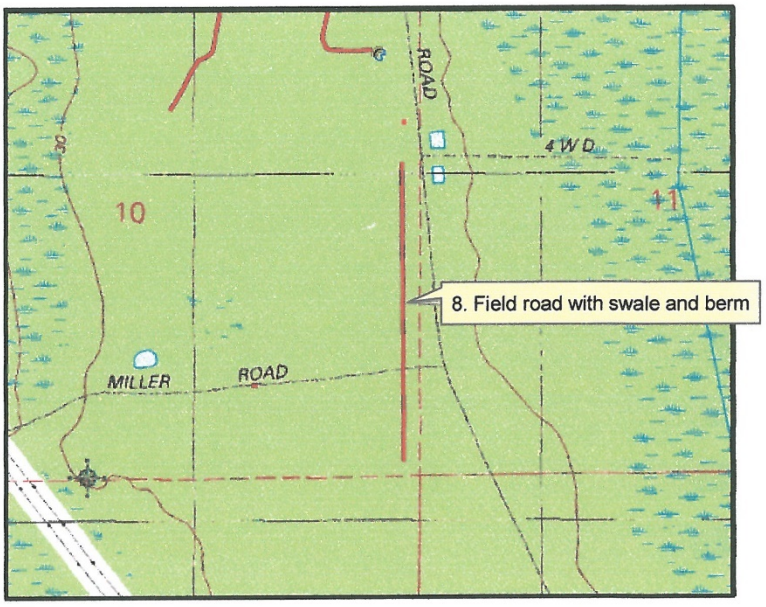
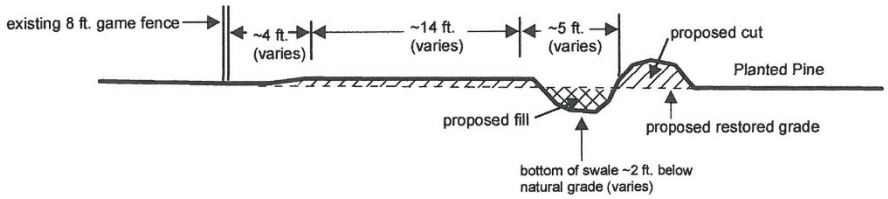
Circle G Ranch
Restoration Plan
Detail Sheet Location 7



TYPICAL SECTION LOOKING SOUTH



1. Cut the top of the berm (and the road travel path as needed) to fill in swales and to approximate the adjacent pine plantation grade.
2. Note that the section varies, tends to decrease in profile height/depth toward the south.
3. If any excess material, remove to borrow pond.

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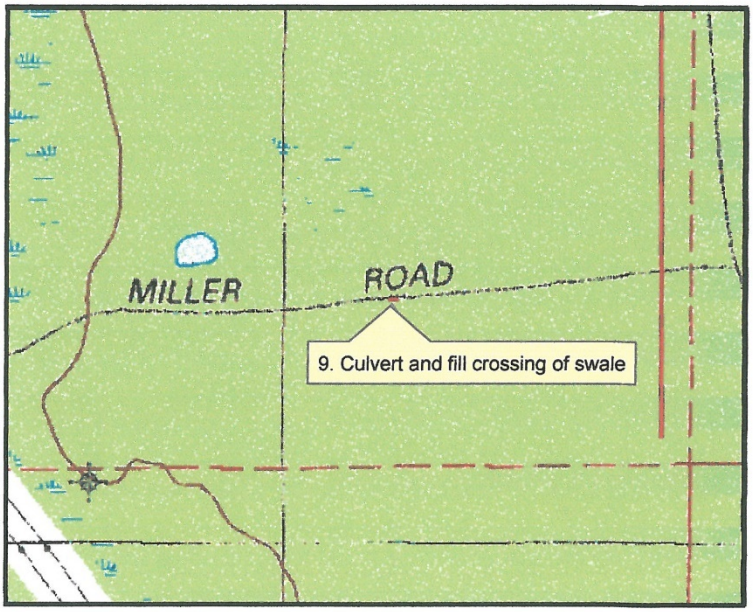
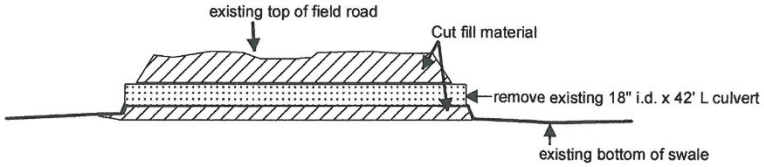
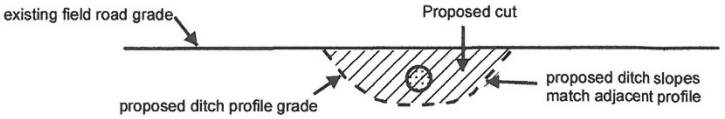
Restoration Plan
Detail Sheet Location 8



TYPICAL EXISTING SECTION LOOKING N



TYPICAL X-SECTION LOOKING E



1. Cut the road and remove the culvert.
3. Create ditch profile to match adjacent existing ditch profile.
4. Remove any excess material to borrow pond.

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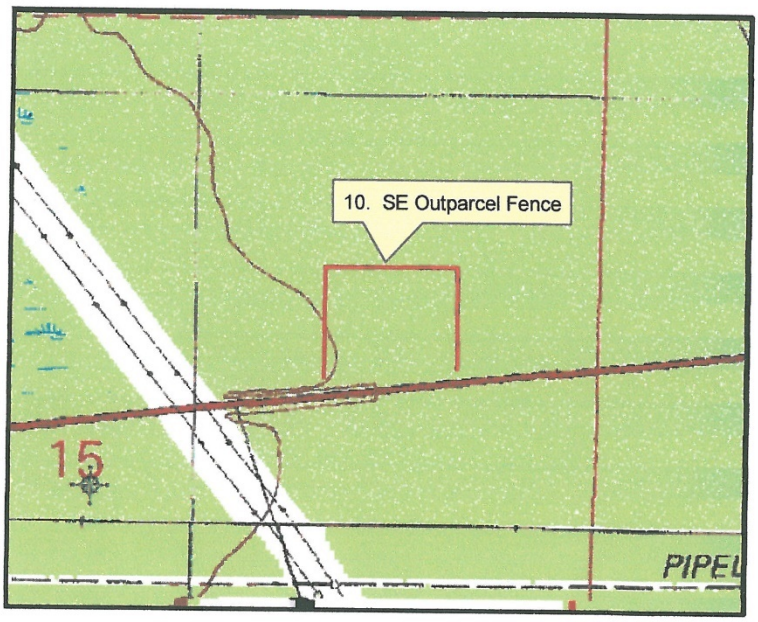
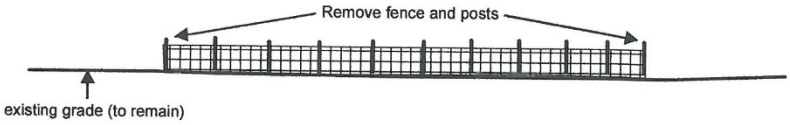
straightwayenvironmental@comcast.net

W.W. Gay Properties of Putnam County, LLC
Circle G Ranch
Restoration Plan
Detail Sheet Location 9



TYPICAL LONG SECTION LOOKING N or W



1. Remove fence and posts from designated area (and beyond as otherwise negotiated).
2. Remove fence materials from site.

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straightwayenvironmental@comcast.net

W.W. Gay Properties of Putnam County, LLC
Circle G Ranch
Restoration Plan
Detail Sheet Locations 5 and 6

APPENDIX K – MANAGEMENT PROCEDURES OF ARCHAEOLOGICAL AND HISTORICAL SITES

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.flheritage.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

APPENDIX L – PUTNAM MOSQUITO CONTROL DISTRICT LETTER

APPENDIX M – COMPREHENSIVE PLAN COMPLIANCE

PUTNAM COUNTY
PLANNING & DEVELOPMENT SERVICES

P. O. Box 1486
Palatka, FL 32178-1486
Fax: 386-329-1213
Email: pzb@putnam-fl.gov
Website: https://main.putnam-fl.com

Planning: 386-329-0491
Zoning: 386-329-0316
Building: 386-329-0307
Code Enforcement: 386-329-0317

March 1, 2024

Brent Bachelder
Land Resource Specialist
St. Johns River Water Management District
P.O. Box 1429
Palatka, FL 32178

Dear Mr. Bachelder,

On February 29, 2024, a representative of the St. Johns River Water Management District (SJRWMD) transmitted a proposed Land Management Plan (LMP) for the Rice Creek Conservation Area in Putnam County, FL for review by the County's Planning and Zoning Department. The LMP is required to be reviewed by the regulating jurisdiction for compliance with the adopted Comprehensive Plan to ensure consistency with goals, objectives, and policies of the County's growth management plan. Upon review, it was determined that the Rice Creek Conservation Area LMP is consistent with the current Putnam County Comprehensive Plan. During the review, staff ensured consistency with the goals, objectives, and policies found in the Future Land Use, Conservation, Recreation and Open Space, and Intergovernmental Coordination Elements of the Comprehensive Plan. The consistencies observed among the two documents demonstrates that the Rice Creak Conservation Area LMP is compliant with the Putnam County Comprehensive Plan.

Thank you for providing Putnam County with an opportunity to review the Land Management Plan, and thank you for your efforts in preserving some of Florida's most valuable resource. Please do not hesitate to contact the Putnam County Planning and Development Services Department regarding matters of compliance with our regulating documents. We look forward to the opportunity to maintain a relationship that fosters sustainable growth, conservation of natural resources, and stewardship of the land.

Sincerely,

Bryan Helms
Director of Development Services

APPENDIX N – FNAI REVIEW

From: Geoffrey Parks
To: Vinson, Hank
Cc: Brent Bachelder
Subject: RE: April 2024 ARC Management Plans
Date: Monday, March 4, 2024 11:57:57 AM

We appreciate the opportunity to review the draft management plan for Rice Creek Conservation Area. The plan is clear and well-written, and we believe it provides a solid foundation for management of the site's resources going forward. We ask that you consider the following suggestions, comments, and edits.

p. 17 - Table 2 and associated text: We recommend using "Natural communities and altered landcover types" rather than "natural and altered communities". This change is also recommended for the title and caption of Figure 10 (p.30).

p. 23 - We suggest modifying the last sentence in the mesic flatwoods description to add the highlighted text, as follows: "management activities in natural and restoration mesic flatwoods should include…continued reintroduction of longleaf pine and wiregrass."

p. 26 - description of the developed area is somewhat confusing. Is the residence "located on the Nine Mile Swamp tract" or was it removed?

p. 31 - we recommend edits to the third paragraph as follows (suggested deletions are struck through and suggested additions are highlighted):
"As is common throughout Florida, a variety — totaling 43 species — of non-native ~~invasive~~ plants can be found along roads, ditches and otherwise disturbed areas throughout the Property (Table 3). A majority of non-native ~~invasive~~ plants on the Property are ruderal species with little impact on intact natural communities. The District relies on the Florida Invasive Species Council (FISC) for the categorization of invasive plant species. Of the non-native ~~invasive~~ plants on the Property, 15 are designated as FISC category I or II invasives."

p. 31 - Table 3. We suggest that you consider using common names consistent with the FISC list (e.g. use "coral ardisia" rather than "scratchthroat")

p. 32. - Although many species tracked by FNAI are not listed at the state or federal level, these species are generally as rare as (sometimes more rare than) listed species. For that reason we recommend

- including a list or table of FNAI-tracked species in the text rather than only in Appendix F, and
- Including the G- and S- ranks for listed species in Table 4 (where applicable).

P. 32 - The following listed species are listed in Appendix F and should also be included in Table 4:

- *Lobelia cardinalis*
- *Ctenium floridanum*
- *Habenaria nivea*

P. 43 - We are concerned that the Condition Class scores as defined by the District are not stringent

enough to encourage optimal management of frequently-burned communities. As an example, mesic flatwoods' natural fire return interval is considered to be 2-5 years, but the majority of fires likely occurred at intervals of 3 years or shorter. A mesic flatwoods stand burned repeatedly at 4-5 year intervals for a long period would be unlikely to provide high quality habitat for rare and imperiled flatwoods species, but would still be considered Condition Class 1 under the District's scoring system. We recommend including a statement that "for natural communities such as sandhill and flatwoods that require frequent fire, burning only often enough to meet Condition Class 1 is a *minimum* benchmark for adequate management; optimal management of these communities requires most fires to be at the shorter end of FNAI's recommended fire return interval."

p. 47 - FISC is erroneously called "FISP" here (The acronym is correct elsewhere).

Appendix F - we recommend the following edits:

- *Ctenium floridanum* is DACS-E.
- *Habenaria nivea* is DACS-T.
- *Lobelia cardinalis* is DACS-T.
- Eastern ratsnake is listed twice in the table.
- Downy woodpecker is listed twice in the table. "eastern downy woodpecker" can be deleted.
- Northern waterthrush is listed twice. The current/correct genus is Parkesia.
- The S2 rank of Louisiana waterthrush only applies to breeding occurrences of this species (it is a common migrant in spring and fall). We recommend removing the G- and S-Ranks for this species unless the District has documentation of it breeding at Rice Creek CA.
- Bachman's sparrow is ranked G3/S3.
- Yellow-rumped warbler should only be listed once, probably as yellow-rumped warbler (myrtle).
- Yellow-throated warbler is listed twice in the table.
- If yellow palm warbler and western palm warbler are listed separately in the table, palm warbler should be deleted.
- House wren is listed twice in the table.

Please do not hesitate to contact me with any questions.
Sincerely,
Geoff Parks

Geoffrey R. Parks
Florida Natural Areas Inventory
1018 Thomasville Rd. 200-C
Tallahassee, FL 32303
(352) 262-1916 (cell)

FNAI – Science for Conservation

Florida Resources and Environmental Analysis Center at Florida State University

APPENDIX O – FWC REVIEW

Rice Creek Conservation Area
Management Plan Review
Florida Fish and Wildlife Conservation Commission
Land Conservation and Planning
February 2024

The following are comments and suggested revisions prepared by the Florida Fish and Wildlife Conservation Commission (FWC), Division of Habitat and Species Conservation for the Rice Creek Conservation Area Management Plan, submitted by the St. Johns River Water Management District to the Acquisition and Restoration Council (ARC) for consideration at the April 2024 ARC meeting.

Overall, we find this management plan to be well-written, comprehensive, and effective in facilitating the management of fish, wildlife, and their associated habitats on the Rice Creek Conservation Area.

1. **Listed Species (Page 32):** We suggest changing the scientific name of the Florida sandhill crane from *Grus canadensis pratensis* to *Antigone canadensis pratensis* in accordance with the Florida Endangered and Threatened Species List.

2. **Listed Species (Page 32):** We recommend the use of management guidelines in the FWC's published Species Action Plans for the management of imperiled and locally important bird species listed on Page 32. The FWC Species Action Plans provide beneficial resource guidelines for habitat management and monitoring of the respective species. For your reference, the FWC Species Action Plans can be accessed here: FWC Species Action Plans.

3. **Public Access and Recreational Opportunities (Pages 47-48):** We encourage the expansion of hunting opportunities to include additional portions of the Rice Creek Conservation Area as mentioned on Page 48.

4. **Resource Management Goals and Objectives: Listed Species Management (Page 63):** We encourage staff to conduct surveys for the Southeastern American kestrel in the suitable pine stands, as there could be breeding activity there, according to eBird. Additionally, we recommend reviewing the Species Conservation Measures and Permitting Guidelines to determine the recommended survey windows as well as notable habitat metrics for management purposes of the Southeastern American kestrel and wading bird species on the property.

5. **Resource Management Goals and Objectives: Listed Species Management (Page 63):** We suggest conducting surveys for the State Threatened Black Creek crayfish near the north end of Rice Creek Conservation Area, due to the area's significance in protecting the headwaters of Rice Creek and helping to conserve wildlife species downstream.

6. **Resource Management Goals and Objectives: Listed Species Management (Page 63):** We recommend noting and maintaining occurrences of hydric hammock within the river floodplain, due to its importance for species like the Duke's Skipper, among others.

7. **Resource Management Goals and Objectives: Listed Species Management (Page 63):** We encourage the continuation of monitoring and surveying for listed species, and for area staff to document and report any new occurrences of listed species to the FWC for our records.

gopher tortoises are found on the area, we have the following recommendations for anagement actions:

8. **Natural Communities: Sandhill (Page 21):** We recommend the density of habitat, if to be managed for gopher tortoises, to be in the range of 250-400 trees per acre to allow for open habitat and adequate sunlight to reach the ground.

9. **Natural Communities: Utility Corridor (Page 27):** Due to gopher tortoises naturally gravitating towards this type of habitat, if they are present, we recommend implementing measures to minimize impacts of mowers on burrow (e.g., 10-foot buffers).

10. **Forest Resources (Page 33):** We encourage deleting the word "species" from FWC Gopher Tortoise "Species" Management Plan, as it is not included in the actual title of the management plan.

11. **Listed Species (Page 46):** We suggest changing the citation "FWC 2020" to "FWC 2023", as the new Guidelines went into effect in April of 2023.

12. **References (Page 76):** In accordance with the citation change above, we recommend changing the year of the reference to the Gopher Tortoise Permitting Guidelines from 2020 to 2023.

13. **Appendix H: Fire Management Plan (Pages 153 to 164)**: The Gopher Tortoise Management Plan references the Florida Natural Areas Inventory recommended burn rotation of 1-3 years rather than 4 years for mesic flatwoods.

Thank you for the opportunity to review and comment on the Rice Creek Conservation Area Management Plan. Please direct any questions regarding this document to:

Elizabeth Norregaard
Land Conservation Planner
FWC Land Conservation & Planning Program
Phone: (850) 487-9767
Email: Ann.Norregaard@MyFWC.com

cc:

Christina Omran
Senior Conservation Planner
FWC Land Conservation & Planning Program
Phone: (850) 487-9102
Email: Christina.Omran@MyFWC.com

Larame Ferry
Administrator
FWC Land Conservation & Planning Program
Phone: (850) 487-9185
Email: Larame.Ferry@MyFWC.com