LAKE MONROE CONSERVATION AREA

LAND MANAGEMENT PLAN

SEMINOLE AND VOLUSIA COUNTY, FLORIDA

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

OCTOBER 13, 2023

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

October 13, 2023

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

RE: Lake Monroe Conservation Area – Lease No. 3803

Dear Mr. Kinslow,

On **October 13, 2023**, the Acquisition and Restoration Council (ARC) recommended approval of the **Lake Monroe 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 **Lake Monroe Conservation Area** management plan. The next management plan update is due October 13, 2033.

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,

Deborah Burr Digitally signed by Deborah Burr Date: 2023.10.13 13:41:48 -04'00'

Deborah Burr
Office of Environmental Services
Division of State Lands

ACQUISITION AND RESTORATION COUNCIL DRAFT
OCTOBER 13, 2023

LAND MANAGEMENT PLAN EXECUTIVE SUMMARY

LEAD AGENCY: St. Johns River Water Management District (District)
COMMON NAME OF THE PROPERTY: Lake Monroe Conservation Area (LMCA or the Property)
LOCATION: Seminole and Volusia counties
ACREAGE TOTAL: 7,514 acres
ACREAGE BREAKDOWN:

Natural Community	Acres	Natural Community	Acres
Floodplain marsh	4,057	Dome swamp	14
Hydric hammock	1,335	Sandhill	8
Scrubby flatwoods	505		
Floodplain swamp	479	**Altered Land**	**Acres**
Open water, riverine	446	Pasture-semi improved	137
Mesic flatwoods	269	Pasture-improved	30
Wet flatwoods	96	Succession hardwoods	6
Depression marsh	63	Ruderal	2
Basin marsh	42	Developed	1
Basin swamp	23	Impoundment	1

LEASE/MANAGEMENT AGREEMENT NO.: Amendment 1 of Board of Trustees Lease #3803 leasing to the District approximately 1,126 acres of sovereign lands on the Property

USE: Single:
Multiple: X

Management Responsibilities:

Agency	Responsibilities
District	Lead Manager
Department of Environment Protection (FDEP)/Trustees	Sovereign Submerged Land Lease Holder

DESIGNATED LAND USE: Conservation
SUBLEASES: Subleases include two revenue generating cattle leases one of which covers a portion of the Sovereign Submerged Land Lease.
ENCUMBRANCES: Two utility easements, one access easement and one Florida Department of Transportation (FDOT) fence maintenance easement.
TYPES OF ACQUISITION: Fee simple using Ad Valorem, FDOT mitigation parcel donations and funds, and Save Our Rivers bond funds
UNIQUE FEATURES: Over seven miles of St. Johns River frontage. Natural communities include floodplain marsh, hydric hammock, scrubby flatwoods, floodplain swamp, mesic flatwoods, wet flatwoods, depression marsh, basin marsh, basin swamp, dome swamp, and sandhill. Home to populations of the threatened Florida scrub jay and endangered Rugel's false paw-paw.
CULTURAL AND HISTORICAL RESOURCES: 16 documented cultural sites within the Property.

MANAGEMENT NEEDS: Habitat restoration and enhancement, threatened and endangered species management, exotic and invasive species management, public access, and recreation management.

ACQUISITION NEEDS/ACREAGE: Approximately 746 acres surrounding LMCA have been identified as potential acquisitions. If neighboring parcels become available which provide additional protection to Lake Monroe or the St. Johns River or allow for restoration of impacted land, they will be evaluated for acquisition by District staff.

SURPLUS LANDS/ACREAGE: There are no parcels identified for surplus.

PUBLIC INVOLVEMENT: Management Advisory Group meeting and Public Hearing.

DO NOT WRITE BELOW THIS LINE (FOR DIVISION OF STATE LANDS USE ONLY)

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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	1
2	The land acquisition program, if any, under which the property was acquired.	18-2.018 & 18-2.021	3
3	Degree of title interest held by the Board, including reservations and encumbrances such as leases.	18-2.021	5, 6, 7
4	The legal description and acreage of the property.	18-2.018 & 18-2.021	1
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	2, 6
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	35
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	54, 55
8	Identification of adjacent land uses that conflict with the planned use of the property, if any.	18-2.021	10
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	34
10	Proximity of property to other significant State, local or federal land or water resources.	18-2.021	8, 23

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	1, 34, 56
12	A description of past and existing uses, including any unauthorized uses of the property.	18-2.018 & 18-2.021	34, 35
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	35
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	1, 5, 62
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	33, 53, 59, Appendix K
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	62

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	1, 50, 57
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	34, 65
19	Letter of compliance from the local government stating that the LMP is in compliance with the Local Government Comprehensive Plan.	BOT requirement	Appendix C
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	23, 53, 56
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	5, 22, 33, 65
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	22, 53
23	A statement regarding incompatible use in reference to Ch. 253.034(10).	253.034(10)	5, 34

*The following taken from subsection 253.034(10), Florida Statutes, 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	10, 36, Appendixes D &E
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	Appendix E

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	Appendix D
27	Summary of comments and concerns expressed by the advisory group for parcels over 160 acres	18-2.021	Appendix 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	Appendix E
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	Appendix I
30	Summary of comments and concerns expressed by the management review team, if required by Section 259.036, F.S.	18-2.021	Appendix I
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	Appendix I

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	10, 13, Appendix F
33	Insert FNAI based natural community maps when available.	ARC consensus	21
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	22, 23
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	1, 34
36	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding beaches and dunes.	18-2.021	33
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	33
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	22
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	22, 42

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	42
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	33, 53, 59
42	Habitat Restoration and Improvement	259.032 & 253.034	35, 56
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.	↓	35, 56-61
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.		56-59
42-C.	The associated measurable objectives to achieve the goals.		56-59
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.*		56-59, Appendix J
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.		60, 66
43	***Quantitative data description of the land regarding an inventory of forest and other natural resources and associated acreage. *See footnote.*	253.034	14, 22, 35
44	Sustainable Forest Management, including implementation of prescribed fire management		22, 38, 53, 56
44-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		35, 38, 53, 56
44-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		56-59
44-C.	Measurable objectives (see requirement for #42-C).		56
44-D.	Related activities (see requirement for #42-D).		56, Appendix J
44-E.	Budgets (see requirement for #42-E).	18-2.021, 253.034 & 259.032 ↓	60, 66, 67
45	Imperiled species, habitat maintenance, enhancement, restoration or population restoration	259.032 & 253.034	22, 42, 57
45-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	42, 57
45-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		57
45-C.	Measurable objectives (see requirement for #42-C).		57
45-D.	Related activities (see requirement for #42-D).		22, 42, 57
45-E.	Budgets (see requirement for #42-E).		60, 66, 67
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	47

45-G	Economic feasibility of establishing a gopher tortoise recipient site, including the initial cost, recurring management costs and the revenue projections.	259.105	47
46	***Quantitative data description of the land regarding an inventory of exotic and invasive plants and associated acreage. *See footnote.*	253.034	49, 58
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	Appendix L
48	Exotic and invasive species maintenance and control	259.032 & 253.034	49, 58
48-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	49, 58
48-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		49, 58
48-C.	Measurable objectives (see requirement for #42-C).		58
48-D.	Related activities (see requirement for #42-D).		58
48-E.	Budgets (see requirement for #42-E).		60, 66

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	23
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	23
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	14, 23
52	***Quantitative description of the land regarding an inventory of hydrological features and associated acreage. *See footnote.*	253.034	23
53	Hydrological Preservation and Restoration	259.032 & 253.034	53
53-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	35, 53
53-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		53, 58
53-C.	Measurable objectives (see requirement for #42-C).		58
53-D.	Related activities (see requirement for #42-D).		58
53-E.	Budgets (see requirement for #42-E).		60, 66

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	33, 53, 59, Appendix K
55	***Quantitative data description of the land regarding an inventory of significant land, cultural or historical features and associated acreage.	253.034	33, 53, 59
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	33, 53, 59
57	Cultural and Historical Resources	259.032 & 253.034	33, 53, 59, Appendix K
57-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	33, 53, 59
57-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		54, 59
57-C.	Measurable objectives (see requirement for #42-C).		59
57-D.	Related activities (see requirement for #42-D).		59
57-E.	Budgets (see requirement for #42-E).		60, 66

**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	50, 53, 58
59	Capital Facilities and Infrastructure	259.032 & 253.034	53, 58
59-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	53, 58
59-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		58
59-C.	Measurable objectives (see requirement for #42-C).		58
59-D.	Related activities (see requirement for #42-D).		53, 58
59-E.	Budgets (see requirement for #42-E).		60, 66
60	*** Quantitative data description of the land regarding an inventory of recreational facilities and associated acreage.	253.034	50, 57
61	Public Access and Recreational Opportunities	259.032 & 253.034	1, 50, 57
61-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	50, 57
61-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		57
61-C.	Measurable objectives (see requirement for #42-C).		57
61-D.	Related activities (see requirement for #42-D).		57
61-E.	Budgets (see requirement for #42-E).		60, 66

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	v
63	Place the Executive Summary at the front of the LMP. Include a physical description of the land.	ARC and 253.034	iii
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	62
65	Key management activities necessary to achieve the desired outcomes regarding other appropriate resource management.	259.032	56, 60
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	56, 60, 66
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	56, 60, 66
68	A statement of gross income generated, net income and expenses.	18-2.018	56, 60, 66

*** = 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.

Contents

Tables

Figures

1. Introduction and General Information

The Lake Monroe Conservation Area (LMCA or Property) comprises approximately 7,514 acres mostly in Volusia County, with portion of the Property located in Seminole County. Many natural communities can be found on LMCA, with a majority of the Property consisting of floodplain marsh associated with Lake Monroe and the St. Johns River (Figure 1). These natural areas provide valuable floodplain water storage and treatment and important habitat for a diverse assemblage of plants and animals. Recreational opportunities include hiking, bicycling, horseback riding, photography, fishing, hunting, boating, paddling, and wildlife viewing.

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 LMCA each year including prescribed burning, habitat restoration and enhancement, 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 LMCA over the next ten years.

1.1 Location

The Property lies within portions of Sections 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 34, 35, 36 of Township 19 South, Range 31 East; Sections 19, 30, 31 of Township 19 South Range 32 East and Section 1 of Township 20 South, Range 31 East. The Property is located within the Middle St. Johns River Basin and lies almost entirely within Volusia County with a portion located in Seminole County.

The Property is located approximately four miles northeast of the City of Sanford and one mile south of the town of Osteen, on the eastern shore of Lake Monroe. State Road (SR) 415 bisects the Property, dividing it into two tracts. The Kratzert tract is located west of SR 415; the Brickyard Slough tract is located to the east of SR 415. Access to the Kratzert tract is via a parking area on Reed Ellis Road which leads to a 1.4-mile multi-use loop trail as well as two seasonally open parking areas for hunter access to the Lake Monroe Wildlife Management Area (WMA). Access to the Brickyard Slough tract is via the Volusia County managed Beck Ranch Park on SR 415 which leads to 7.6 miles of multi-use trails.

Figure 1: Lake Monroe Conservation Area Aerial Imagery

1.2 Acquisition

Acquisition of Lake Monroe Conservation Area began in 1987, and currently consists of three parcels totaling 7,452 deeded acres (Figure 2). All acreage in this section is derived from deed and parcel information. Since the 2012 land management plan, the District received 77 acres from the Florida Department of Transportation (FDOT) as a mitigation donation for the widening of SR 415 and SR 46 bridge improvements over Lake Jesup.

There was a mitigation bank located on the Beck Ranch/Brickyard Slough parcel; however, the bank was dissolved with all remaining credits released back to the District on June 4, 2012 (Appendix A). The Brickyard Slough parcel is no longer encumbered by this mitigation bank. At the time the mitigation bank was dissolved, the District assumed management of the mitigation bank area, which will be managed in accordance with this plan and will be funded by the perpetual management funds received by the District for the mitigation bank.

The three parcels that currently comprise the Property are listed below.

Osteen Ranch (Kratzert Tract) – 1986-014-P1 (3,248 Acres)

This parcel was cooperatively purchased by the District and Volusia County on December 29, 1987. On April 9, 1997, the District acquired Volusia County's 50% interest in the Osteen Ranch; this acquisition was accomplished through an exchange where the District conveyed 270 aces of the Beck's Ranch parcel to the County for an active recreational site. The District utilized Save Our Rivers funding to accomplish this acquisition, including mineral rights, with at total District cost of $1,575,000.

Beck Ranch (Brickyard Slough Tract) – 1990-025-P1 (4,127 Acres)

This parcel was acquired on February 14, 1995, utilizing Ad Valorem and FDOT funds for a total District cost of $4,653,143.72. The original acquisition consisted of 4,411 acres. An access easement from Lemon Bluff Road to the northern boundary of the Brickyard Slough Tract was acquired as part of this transaction. This easement is for management access only and does not facilitate public access. In 1997, 270 acres was conveyed to Volusia County as referenced in the Kratzert Tract/Osteen Ranch description above.

In July 2007, FDOT gave the District approximately 77 acres that were added to the Lake Monroe and Lake Jesup Conservation Area in exchange for 15 acres of the LMCA for FDOT's the widening of SR 415 as well as wetland impacts incurred by the SR 46 bridge replacement project. This exchange was finalized in 2021 (see parcel below).

Lake Jesup SR 46 Bridge Improvement Mitigation Donation – 2020-028-P1 (77 Acres)

This parcel was donated to the District by the FDOT on April 19, 2021, as mitigation for wetland impacts resulting from the widening of SR 415 and the replacement of the SR 46 bridge. There were no District costs associated with this donation.

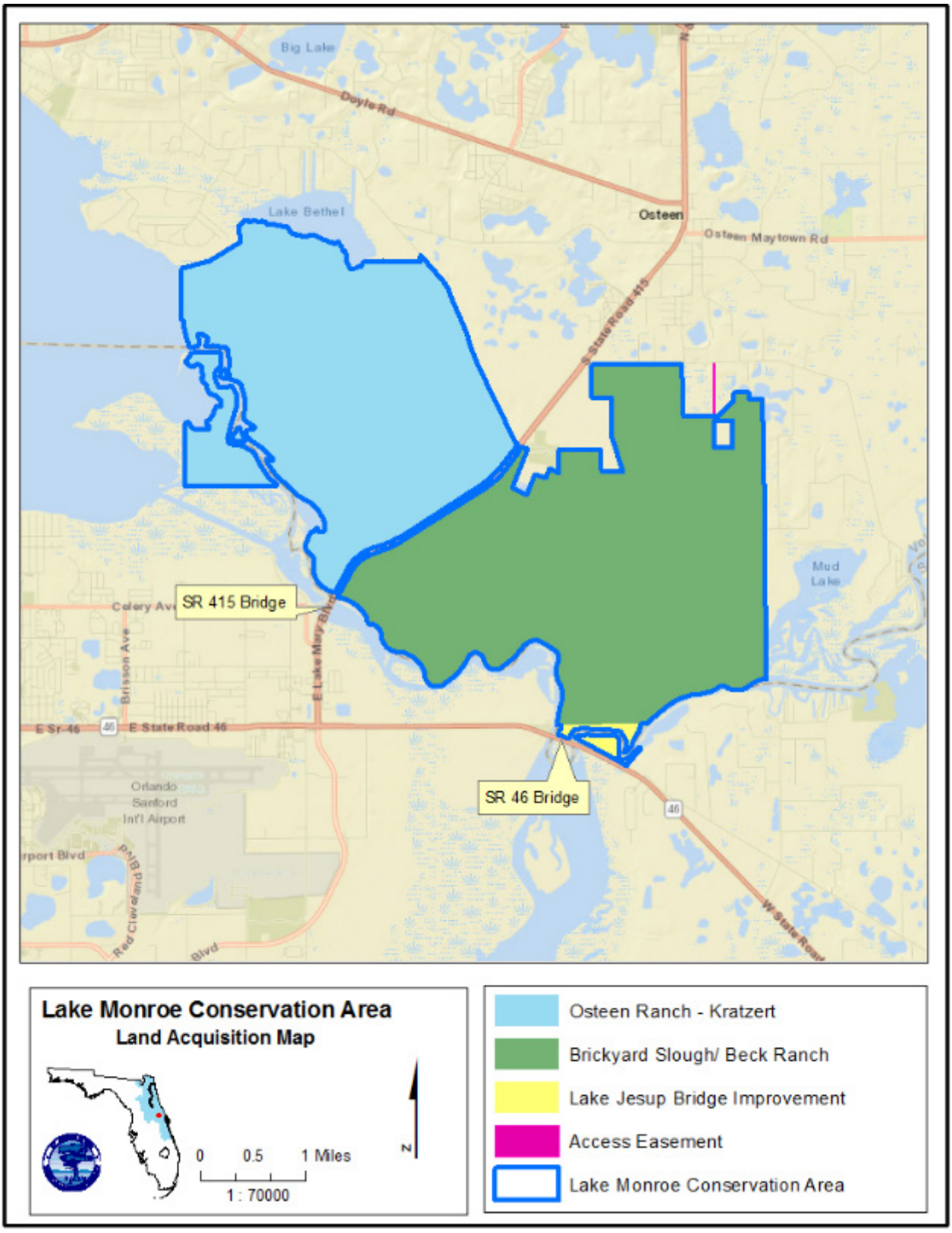

Figure 2: Lake Monroe Conservation Area Acquisition History

1.3 Title Interest and Encumbrances

All three parcels of the Property are owned 100% full fee by the District. An Amendment to a Board of Trustees of the Internal Improvement Trust Fund (Trustees) Intergovernmental Agreement (Lease #3803) was signed in 2008 between the Trustees and the District, leasing approximately 1,126 acres of the sovereign land on the Kratzert tract to the District (Appendix B) to aid in the establishment of a WMA on that tract. While the amendment is geographically disjunct from the parent lease, its establishment is important for the operation of the WMA and the protection of the water resources on the Property. It allows the District and the Florida Fish and Wildlife Conservation Commission (FWC) to enforce rules specific to the Lake Monroe WMA as well as prohibiting the use of all-terrain vehicles, swamp buggies, and tracked vehicles on the WMA. The impacts of these vehicles are not compatible with the Property's purpose of acquisition and could impact the water quality of the area. By having this lease amendment in place, the approximate sovereign lands shown on Figure 3, are now the responsibility of the District. The areas waterward of the conservation line, also shown of Figure 3, are considered sovereign land, but are not included in the Lease area. These areas can be hunted under statewide regulations. The conservation line location is based on the approximate location of the ordinary high-water mark, which generally follows the three foot contour elevation line (NAVD88).

Leases on the Property include two revenue generating cattle leases (Figure 4). The lease payment for the cattle leases can be paid in cash or by in-kind services on the Property. These in-kind services include trail and road mowing and trimming, wildland fuel reduction mowing, fence repair, and invasive species management. There is not an active apiary lease currently on the Property, though a future lease on the Property would be allowed as it conforms with the purpose of acquisition and management of LMCA.

Easements include two utility, one access and one right-of-way maintenance.

The mitigation bank that encumbered a portion of the Brickyard Slough tract has been dissolved with remaining credits released back to the District on June 4, 2012 (Appendix A).

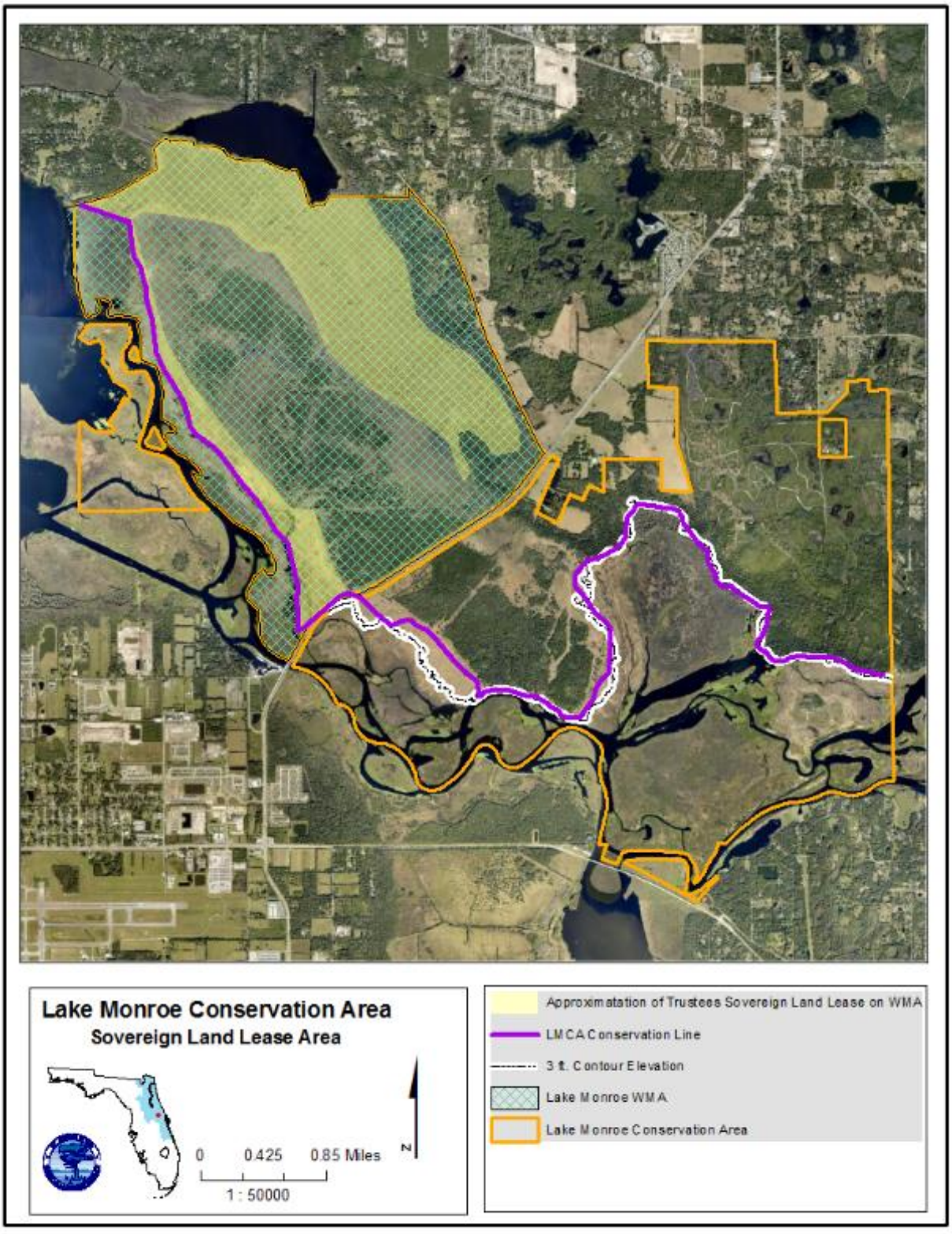

Figure 3: Sovereign Land Lease Area

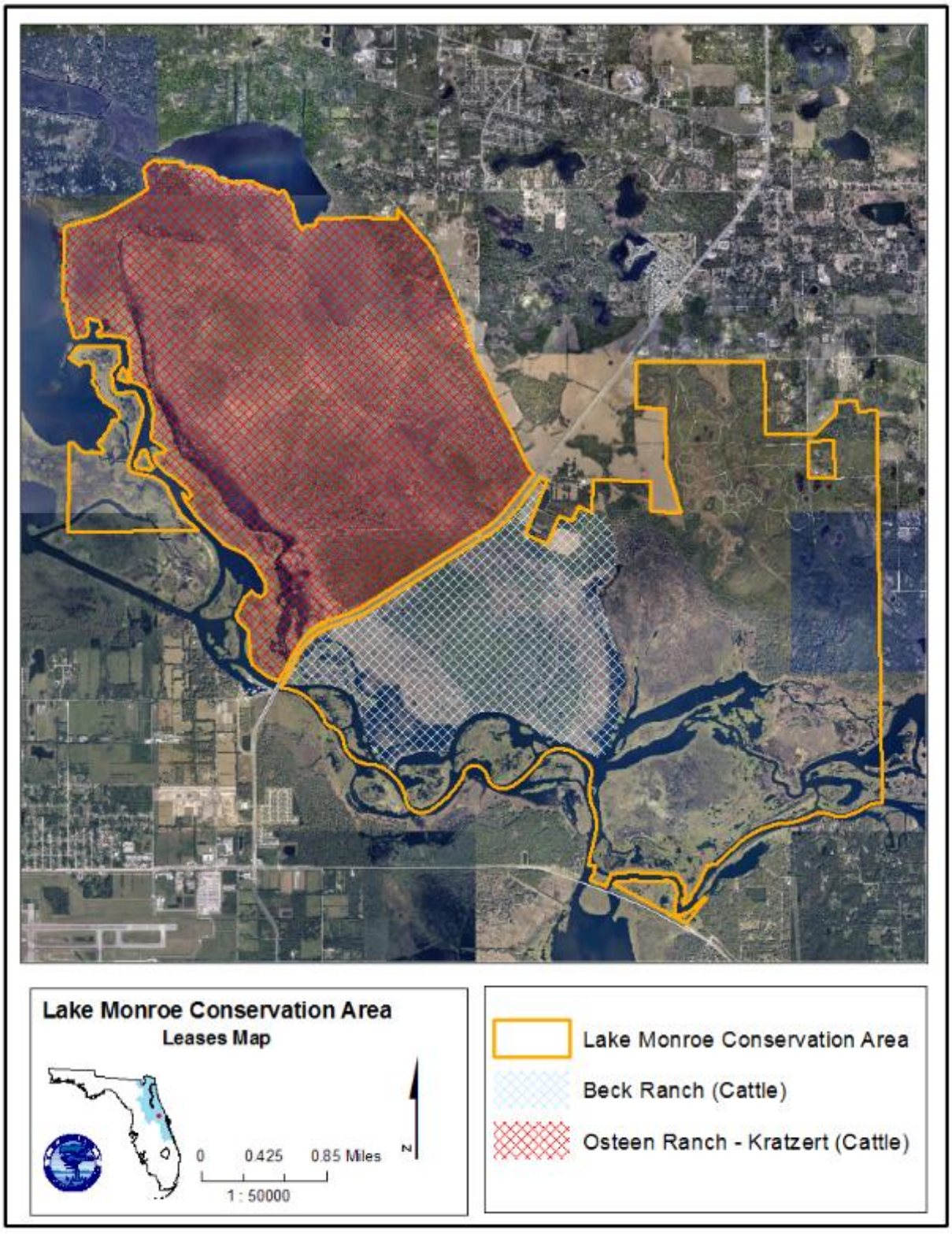

Figure 4 Lake Monroe Conservation Aera Cattle Leases

1.4 Proximity to Other Public Lands

The Lake Monroe Conservation Area is a significant acquisition providing linkage within a broad network of publicly owned lands and conservation easements in the Middle St. Johns River Basin. Table 1 lists nearby conservations areas and Figure 5 illustrates the regional significance of the Property.

Table 1: Proximate conservation areas

Lead Manager	**Conservation Area**
Conservation Florida	D-Ranch Preserve
District	Lake Jesup Conservation Area
District	Palm Bluff Conservation Area
Florida Department of Environmental Protection	Lower Wekiva River Preserve State Park
Florida Forest Service	Little-Big Econ State Forest
Miami Corporation	Farmton-Volusia Greenkey Conservation Easement
Seminole County	Spring Hammock Preserve
Swallowtail, LLC	Farmton-Brevard Conservation Easement
Volusia County	Beck Ranch Park
Volusia County	Deep Creek Preserve
Volusia County	Gemini Springs County Park and Gemini Addition

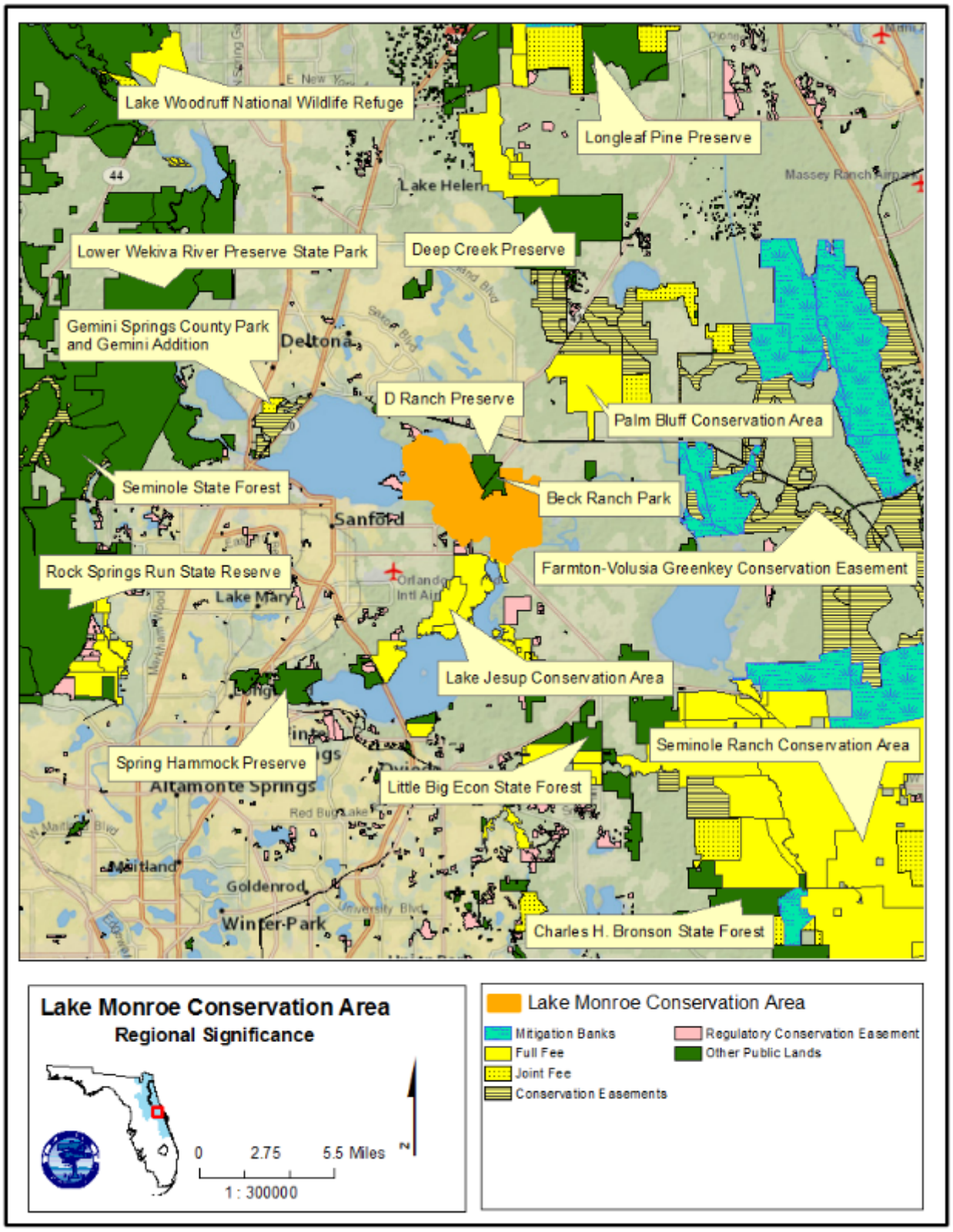

Figure 5: Lake Monroe Conservation Area Regional Significance (4/2023)

1.5 Adjacent Land Uses

Current land use and zoning classifications for properties located in Volusia County which surround the Property include Agriculture Resource, Environmental Systems Corridor, Low Impact Urban, Recreation, Rural and Urban Low Density. The future land use designations include Agriculture Resource, Cluster Residential, Environmental Systems Corridor, Low Impact Urban, Rural, Rural Estate, Transitional Residential, and Urban Low Density.

There are no land uses that conflict with the planned use of the Property as shown in documentation provided by Volusia county (Appendix B).

1.6 Public Involvement

This plan was prepared with input from the LMCA Management Advisory Group (MAG). The LMCA MAG met on April 27, 2023, at the Osteen Civic Center, 165 New Smyrna Blvd, Osteen, FL. A summary of that meeting is in Appendix C.

A noticed public meeting was also held on April 27, 2023, at the Osteen Civic Center, 165 New Smyrna Blvd, Osteen, FL (Appendix D). The objective of the public meeting was to receive public input regarding the draft management plan.

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 considering this management plan update. This will be an additional forum for the public to provide input to the plan.

2. Natural and Cultural Resources

2.1 Physiography

a. Physiography/Mineral Resources

   There are no known outstanding mineral resources on the Property. The District retains mineral rights to the Property.

b. Topography
   The highest elevations occur on the northeastern portion of the Property. Most of the Property is low lying floodplain (Figure 6).

c. Soils
   The U.S. Department of Agriculture Natural Resources Conservation Service recognizes 25 different soil series within the Property. A soils map is contained in Figure 7. Myakka fine sands is the predominant soil in the higher elevation. Bluff

sandy clay loam and Terra Ceia muck are the predominant soil types for the floodplain areas.

Appendix E contains soil descriptions from the Volusia and Seminole County Soil Surveys.

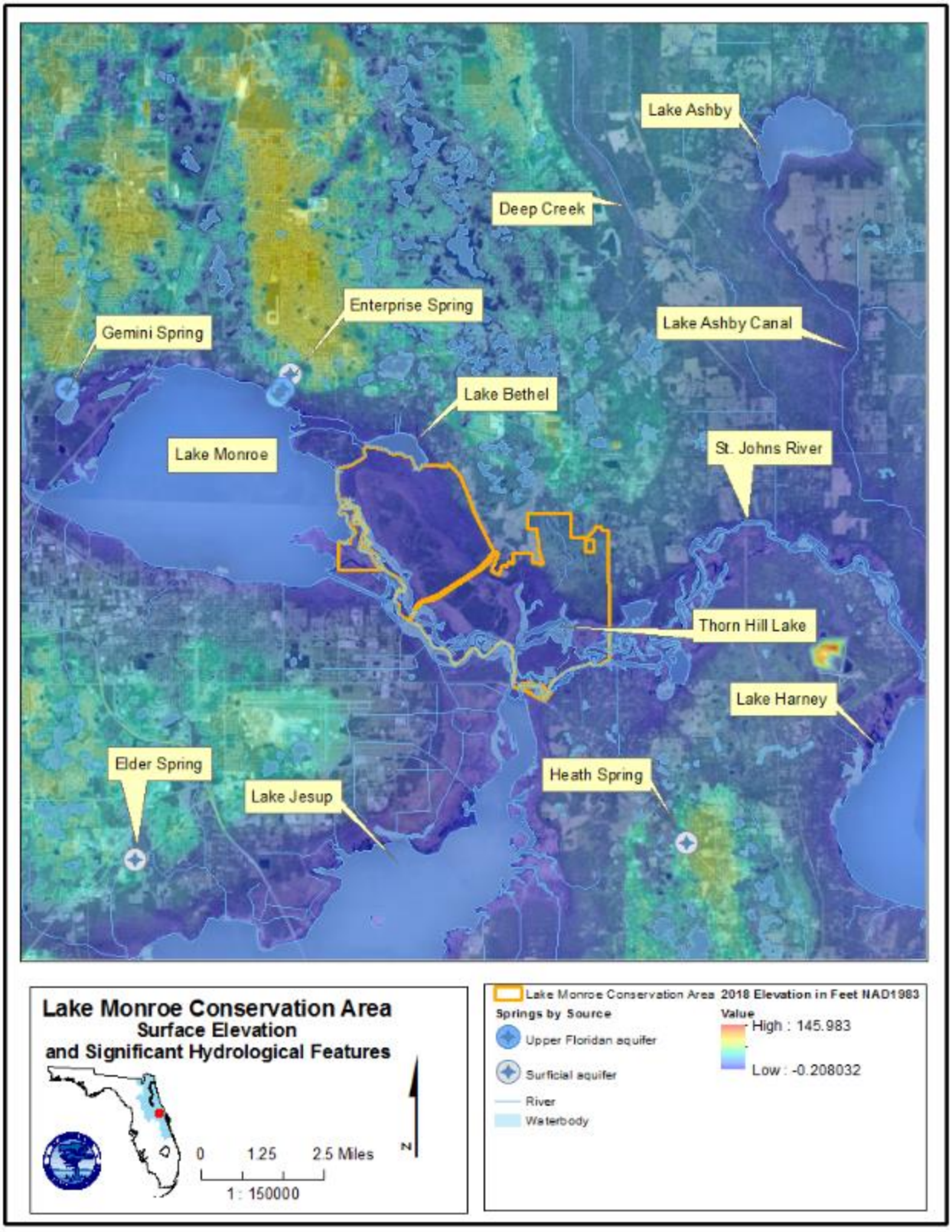

Figure 6: Lake Monroe Conservation Area Topography

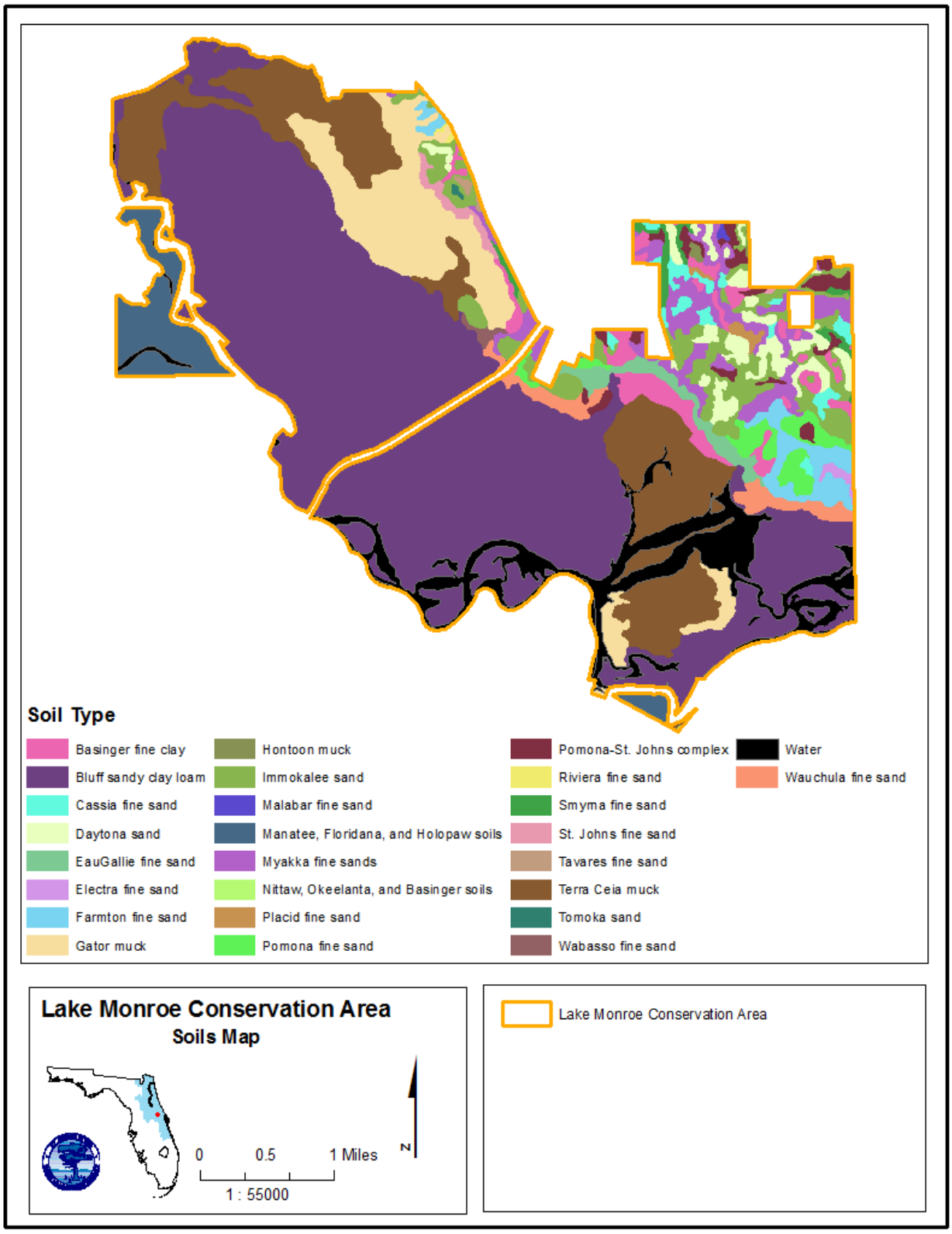

Figure 7: Lake Monroe Conservation Area Soils

2.2 Natural Communities

The 7,514 acres that comprise the LMCA consist primarily of floodplain marsh as well as a diverse array of other natural communities (Figure 8). Information relative to the natural communities within the Property is derived from several sources including personal observations of District staff. Additionally, the general natural community descriptions are characterized using descriptions published in the Florida Natural Areas Inventory's (FNAI) Guide to the Natural Communities of Florida (2010). Each natural community found on the Property is described below in order of acreage from largest to smallest.

Interpretation of U.S. Department of Agriculture (USDA) 1940 black and white aerial photographs indicate that the primary communities within LMCA prior to conversion to ranching included floodplain marsh, floodplain swamp, basin swamp, and hydric hammock in the lower elevations. At higher elevations, historic natural communities included a mosaic of scrubby flatwoods, mesic flatwoods, and wet flatwoods with numerous embedded isolated wetlands.

Currently, the lower elevations appear similar to the historic imagery, although the coverage of hydric hammock appears to have increased, likely a result of prolonged fire exclusion. Since the 1940s, significant change is evident in the uplands, particularly on the clearing of upland for the conversion to pasture. The net effect of these activities is an overall decrease in coverage of basin marsh, scrubby flatwoods, mesic flatwoods, and wet flatwoods.

a. Floodplain marsh (4,057 acres)

Floodplain marshes occur within river floodplains, often extending from just below the headwaters to the tidally influenced portions of river mouths. Soils are often sand with some organics over sand and may be saturated throughout the year. The maintenance of these systems is directly influenced by river flooding. The relatively flat topography and subsequent slow drainage results in extended hydroperiods, with most areas being inundated for between 120-350 days each year.

Floodplain marsh communities are typically herbaceous communities, however, vegetational changes that may include woody or shrub species within floodplain marshes coincide with transitions from high to low marsh. While most floodplain marshes are freshwater, saltwater may influence the systems depending on proximity to river mouths or in areas of ground water upwelling that is saline. Vegetation is also influenced by salinity. Fire is another important factor in the shaping and maintenance of the floodplain marsh systems. Frequent fires limit shrub invasion and the characteristic sand cordgrass (*Spartina bakeri*) re-sprouts readily post-fire.

Sand cordgrass dominates the floodplain marshes within areas of coastal plain willow (*Salix caroliniana*), wax myrtle (*Myrica serifera*) and other shrub species occurring in areas of higher elevation, hydrologic disturbance, and/or fire exclusion.

b. Hydric hammock (1,335 acres)

Soils that support hydric hammock communities are generally poorly drained and may be acidic to slightly alkaline, with little organic matter. While hydric hammocks may often

have limestone at or near the surface, no outcropping is known to occur within the LMCA. Hydric hammocks are well-developed hardwood and/or palm forests with a variable understory. The closed canopy may include a variety of species, such as cabbage palm (*Sabal palmetto*), live oak (*Quercus virginiana*), water oak (*Q. nigra*), red cedar (*Juniperus virginiana*), and loblolly pine (*Pinus taeda*), all of which are present within LMCA.

The hydric hammock communities within LMCA are scattered across the Property and are generally located in areas of slightly higher elevations than the surrounding floodplain swamps and marshes, typically along the 5-foot (NAVD88) elevation contours. These areas are largely in good condition. Fire is not a primary mechanism of disturbance; however, these communities do occasionally burn in conjunction with surrounding pyric plant communities.

c. Scrubby flatwoods (505 acres)

Scrubby flatwoods communities generally occur on moderately well drained, sandy soils. This community type occurs on slight rises within mesic flatwoods and in broad transitional areas. Standing water is uncommon in scrubby flatwoods as the depth to the water table is generally greater than adjacent mesic flatwoods.

Scrubby flatwoods have a stratified appearance and are characterized as an open canopy forest of widely scattered pine trees with a sparse shrubby understory and numerous areas of barren white sand. The vegetation in these ecotonal areas is a combination of mesic flatwoods and scrub species. Canopies of the scrubby flatwoods in central Florida may include longleaf (*P. palustris)* or slash pine (*P. elliottii)*. Shrub layers will often include xeric oaks, saw palmetto (*Serenoa repens)* and various Ericaceous plants. Groundcover, while generally sparse, may include wiregrass (*Aristida stricta)*.

Scrubby flatwoods communities within LMCA are generally intact; however, most areas have been subject to restorative management activities such as pine harvesting, hydrologic restoration and various mechanical treatments.

Fire is an integral component in the perpetuation of this community type. The open areas of bare sand, sparse groundcover vegetation and coverage of largely non-pyric oak leaf litter typical of most scrubby flatwoods results in a fire return interval of between 5 and 15 years. Examples of scrubby flatwoods with a higher herbaceous or saw palmetto component may burn more frequently. The presence and distribution of certain plants within the scrubby flatwoods at LMCA indicates the possible presence of other natural communities (sandhill, scrub). As fire management is implemented within these areas, the extent of other xeric habitats will be refined.

d. Floodplain swamp (479 acres)

Floodplain swamp communities typically occur on flooded soils along stream channels and within river floodplains. The floodplain swamp communities within LMCA are associated with Lake Monroe and the St. Johns River.

Soils that support floodplain swamp communities are variable, but may include a mixture of sand, organic, and alluvial material. Peat soils may be present in floodplain swamps associated with smaller streams and branches or in areas of low stream velocity. The most important physical factor associated with the shaping and maintenance of the floodplain swamp is the hydroperiod. Extended periods of inundation, which may last for most of the year, are common in the floodplain swamp environment. Alterations to the hydrology within the floodplain swamp, particularly a reduction in the duration of inundation periods may have damaging consequences to the system and associated flora and fauna. Since this community type is maintained by hydrologic regimes, it is not fire dependent.

The functionality of floodplain swamps across the LMCA is largely intact. Typical of the floodplain swamp system, the examples of this community type within the Property include a closed-canopy forest of hydrophytic, buttressed trees including bald cypress (*Taxodium distichum*) and water tupelo (*Nyssa aquatica*).

e. Riverine - open water (446 acres)

Approximately seven miles of the St. Johns River is adjacent or surrounds the Property. This also includes Thornhill Lake and Hickory Slough which are connected oxbows of the St. Johns River. This section of the river is located at the upriver extent of measurable tidal influence. In addition, as this section of the river seasonally reaches an elevation equal to sea level (0 ft NAVD88), ongoing sea level rise will affect the Property. The public's ownership of the Property provides resilience benefits that include adaptation to sea level rise and the migration of wetland communities onto higher elevations.

f. Mesic Flatwoods (269 acres)

Soils that support mesic flatwoods communities are generally poorly drained, acidic, and sandy soils deposited on ancient, shallow seabeds. Many flatwoods communities have a clay hardpan. Hardpan soils become saturated during the rainy season causing standing water at the surface. During dry periods, the hardpan layer prevents low groundwater from rising, creating dry, droughty conditions. The presence of the hardpan translates to extreme seasonal fluctuations in the amount of water available to support plant life. These seasonal hydroperiods are essential in the maintenance of the flatwoods system.

Intact or well-maintained mesic flatwoods typically have a layered appearance, with a distinct, high, discontinuous canopy, low shrub layer, and diverse herbaceous layer. The canopy densities are variable and may include (depending on location) longleaf pine, slash pine, loblolly pine, or pond pine (*P. serotina*). The shrub layer may include a variety of species, or be dominated by, species such as saw palmetto, gallberry (*Ilex glabra*), and numerous other members of the Ericaceae family. The herbaceous coverage may be dominated by wiregrass, however species abundance and diversity is often dictated by the openness of both shrub and canopy layers.

The mesic flatwoods communities within LMCA vary in levels of disturbance. The

examples of mesic flatwoods within the Brickyard Slough tract are largely in good condition with site appropriate species compositions and assemblages. The areas identified as mesic flatwoods along the northeastern portions of the Kratzert tract are highly disturbed areas that were historically cleared and utilized in cattle ranching activities. In an effort to enhance these areas, the District, in 1995, planted longleaf pine and wiregrass.

In addition to seasonal hydroperiods, fire is an important physical factor associated with the shaping and maintenance of this community type. Natural fire return intervals in mesic flatwoods are approximately every two to four years. Fires in well-maintained mesic flatwoods tend to burn quickly and at relatively low temperatures. In areas of prolonged fire exclusion, altered hydrology, or hardwood encroachment, higher soil and fuel moistures may require more extreme conditions to facilitate a fire, causing fires to be more catastrophic in nature. Pre-fire mechanical or chemical treatments will be employed to create favorable fuel conditions to reintroduce fire.

g. Wet Flatwoods (96 acres)

Soils that support wet flatwoods are generally very poorly drained sandy soils that may have a mucky texture in the upper horizons. Wet flatwoods occur as ecotonal areas between the drier mesic flatwoods and wetter areas including swamps. They may also occur in broad, low flatlands embedded within these communities.

Well-maintained wet flatwoods exhibit a relatively open-canopy forest of scattered pine trees (longleaf, loblolly, slash, or pond) or cabbage palms with either a sparse or absent midstory and a dense groundcover of grasses, herbs, and low shrubs.

Understory species of the sub canopy and shrub layers may include sweet bay (*Magnolia virginiana),* loblolly bay (*Gordonia lasianthus*), and saw palmetto. The groundcover layer may include species such as wiregrass, blue maidencane (*Amphicarpum muehlenbergianum*), and numerous hydrophytic species. The variation in structure and composition may be attributed to subtle edaphic differences as well as hydrologic and fire regimes.

The wet flatwoods community is fire dependent with return intervals ranging from one to three years in grassy systems and five to seven years in shrubbier systems.

h. Depression Marsh (63 acres)

Depression marsh communities typically occur embedded within a matrix of pyric plant communities including flatwoods. The depression marsh communities within the Property occur within the flatwoods, improved pastures, and abandoned fields. Many are altered from the past management activities including cattle ranching. Alterations include hydrologic changes and soils disturbances from ditching to drain pasture areas.

i. Basin Marsh (42 acres)

Basin marshes are herbaceous or shrubby freshwater wetlands in large irregularly shaped basins. These marshes typically develop in large solution depressions that were formerly

shallow lakes and may be located within non-pyrogenic plant communities. Plant species compositions can be divided into submersed, floating-leaved, emergent, and grassy zones.

Seasonal hydroperiods and longer-term fluctuations are essential to the maintenance of this natural community as is frequent fire. The fire return interval for basin marshes is dependent on the hydrology of the marsh and the exposure to fire from surrounding communities.

j. Basin Swamp (23 acres)

Basin swamps are large irregularly shaped basins that are thought to have developed in oxbows of former rivers or in ancient coastal swales and lagoons that existed during higher sea levels. Soils that support basin swamp communities are acidic, nutrient-poor peats often overlying a clay lens or other impervious layer. This clay lens or impervious layer may cause a perched water table above that of the adjacent uplands, causing standing water for most of the year. While basin swamps are not associated with rivers, they may contain streams and sloughs that flow during periods of high water.

An example of a basin swamp within the Property is located in the northern portion of the Brickyard Slough tract and is dominated by cypress. Basin swamps have a typical hydroperiod of approximately 200-300 days and though infrequent, fire is essential for the maintenance of these natural communities. Fire return intervals in basin swamps are variable, but necessary to restrict peat accumulation and the expansion of hardwoods into adjacent communities. The edges of basin swamps may be exposed to frequent fire, often burning in concert with surrounding natural communities.

k. Dome Swamp (14 acres)

Dome swamp communities typically occur embedded within well-maintained pyric plant communities such as flatwoods. The dome swamp communities within LMCA occur within the flatwoods, improved pastures, and abandoned fields.

Dome swamps are typically found on flat terraces, where they develop when the overlying sand has slumped into a depression in the limestone underlayment. Soils that support dome swamp communities are variable but may include a layer of peat that thickens towards the center. The peat layer is typically underlain with acidic sands or marl and then limestone or a clay lens. An important physical factor associated with the shaping and maintenance of the dome swamp is the hydroperiod. Water levels in dome swamps fluctuate seasonally with rainfall. Normal dome swamp hydroperiods range from 180 – 270 days per year.

Typical of the dome swamp system, the examples of this community type within the Property include a dome shaped profile created by the presence of smaller trees growing in the shallow waters of the outer edge with the large trees growing in the deeper center. The canopy of hydrophytic trees includes pond cypress (*Taxodium ascendens*) and water tupelo. Herbaceous components of dome swamps within the conservation area include Carolina redroot (*Lachnanthes caroliana*), smartweed (*Polgonum densiflorum*), and

various grasses, sedges, and rushes.

Without frequent fire, cypress may become less dominant, being replaced by hardwood or bay species and may exhibit an increase in peat accumulation. Fire frequency within these communities is greatest around the edges. The longer hydroperiods within the center of most dome swamps will restrict the advance of most fires under normal conditions. The fire return interval for dome swamps may range from 3 to 5 years along the outer edges and may be as great as 100 to 150 years in the center.

l. Sandhill (8 acres)

Sandhills occur on crests and slopes of rolling hills and ridges with steep or gentle topography. Soils are deep, marine-deposited, often-yellowish sands that are well drained and largely infertile. The soils that support sandhills within the LMCA include highly permeable fine sands of the Tavares series. Tavares soils have a strong association with sandhills.

Sandhills are characterized as a forest of widely spaced pine trees with a sparse understory of deciduous oaks and a dense groundcover of grasses and herbs on rolling hills of sand. The most typical associations are dominated by longleaf pine, turkey oak (*Quercus laevis*), and wiregrass.

The sandhill plant community is a fire climax community. Fire is a dominant factor in the ecology of this community and frequent fires are necessary to reduce hardwood competition and to perpetuate pines and grasses. Fire return intervals within sandhill communities range from one to three years. In addition to fire frequency, intensity and season are important fire characteristics that greatly influence the species structure and composition within sandhills. Optimally, sandhills are maintained through frequent, low-intensity, growing season fires.

The sandhills within LMCA occur on the eastern portions of the Kratzert tract along Reed Ellis Road. These areas are highly disturbed, having been cleared prior to public acquisition and utilized for cattle ranching, with only remnant examples of native species such as turkey oak, skyblue lupine (*Lupinus difusus*), and prickly pear (*Opuntia humifusa*) remaining. Since acquisition, the District has planted these areas in longleaf pine and wiregrass.

Altered Land Types (177 acres)

Altered land types within LMCA include semi-improved pasture, improved pasture, developed, successional hardwood forest abandoned pasture, an artificial pond, and a spoil site.

Semi-improved pastures (137 acres) occur within the Brickyard Slough tract. These areas appear to have been partially cleared for use in cattle ranching operations. Many of these areas include bahiagrass (*Paspalum notatum*) with patches of remnant native vegetation

as well as some planted and naturally regenerating pine. These areas are managed in conjunction with the surrounding natural communities as well as being included in the cattle lease.

Improved pastures (30 acres) occur primarily on the Brickyard Slough tract. These areas occur within cattle grazing lease area and are maintained for grazing.

Successional hardwood forests (6 acres) occur around ruderal sites on the Kratzert tract as well as at a northern portion of the Brickyard Slough tract.

The developed and ruderal areas (3 acres) are primarily those areas maintained for public access and parking areas.

An artificial impoundment pond (1 acre) occurs in the southern portion of the Brickyard Slough side of LMCA. Fill from this site was likely utilized to construct portions of the road network.

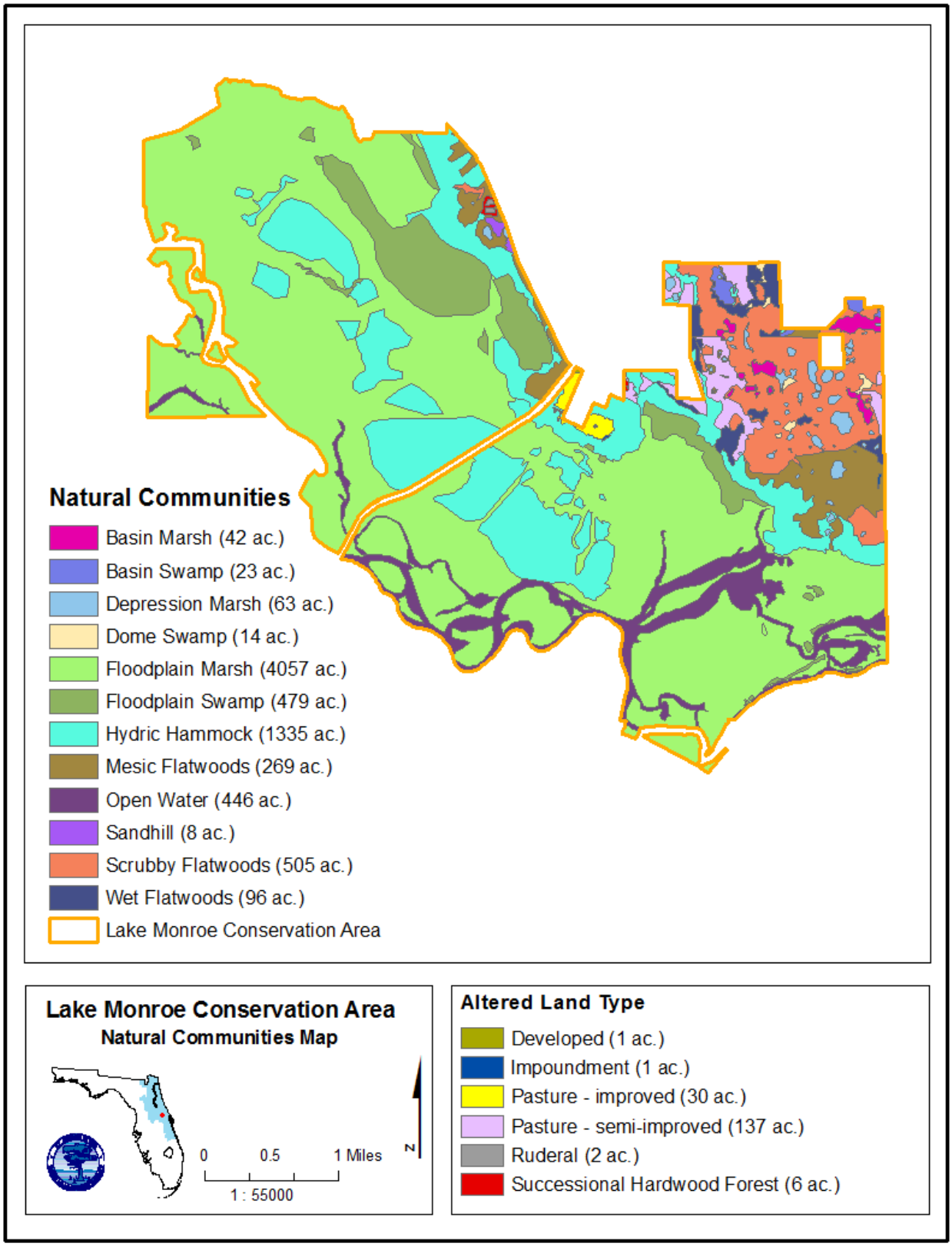

Figure 8: Lake Monroe Conservation Area Natural Communities

2.3 Plant and Animal Species

LMCA has a diverse assemblage of natural communities providing significant habitat for a variety of floral and faunal species. Bald eagles (*Haliaeetus leucocephalus*) are known to have nested within the Property as recently as 2022. There are several active and inactive nests near the Property as well (Figure 14). The scrubby flatwoods in the northeastern portion of the Brickyard Slough tract are home to multiple Federally threatened Florida scrub-jay (*Aphelocoma coerulescens)* family groups. The Property provides habitat for the Florida black bear (*Ursus americanus floridanus*). Numerous species of wading birds occur in the wetland portions of the Property.

Plant, insect and animal lists are contained in Appendix G. Lists were compiled using observations gathered on site visits by District staff, FWC and FNAI species occurrence data as well as crowd-sourced biological data websites. The Property will be managed to improve natural community diversity and quality, resulting in diverse wildlife habitat.

2.4 Listed Species

To date, 38 listed species have been recorded on the Property, including Rugel's false pawpaw *(Asimina rugelii*), Florida scrub-jay, wood stork, Gopher tortoise (*Gopherus polyphemus*), and indigo snake (*Drymarchon couperi*). There are two commercially exploited species which occur on the Property as well, which are saw palmetto (*Serenoa repens*) and cinnamon fern (*Osmunda cinnamomea).* Appendix H contains a list of listed species recorded on the Property. Rather than manage for a single species or a small suite of species, it is the goal of the District to manage the natural communities within the Property for optimal health and biodiversity. This includes varying the timing and intensity of prescribed fire from year to year.

The majority of the Kratzert tract lies within the core foraging area for a nesting colony of the Federally threatened wood stork (*Mycteria americana*). The rookery is documented 14 miles northwest of the northwestern Kratzert boundary (USFWS, 2019) and the Property is within the foraging area radii limits established for wood stork rookeries.

A population of Federally endangered Rugel's false pawpaw is also found on the Property. Rugel's false pawpaw is a rare plant, "endemic to Volusia County, with 33 known populations" (USFWS, 2017). This low shrub species tends to flower prolifically after fire; without fire, over time, the plants will decline and eventually die. The District will continue to monitor this population and may work to expand this species to other parts of the Property where the requisite burning is more likely to occur. All the plants that are found on the Property have been introduced. These plants were collected from sites that were subject to development impacts.

2.5 Forest Resources

Section 253.036, F.S, 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." Due to the low overall acreage of forest resources on the Property, timber management will be a component of management but not a principal management tool.

A detailed forest inventory has not been completed for the Property as the timber resources encompassed within the Property are insufficient in size to warrant an inventory. Any potential forest resource work on the Property will be restorative in nature and is designed to aid in the promotion of species diversity and overall natural community health and vigor.

There are no planned forest management activities anticipated during the scope of this plan though 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.

The District will abide by Florida Silviculture Best Management Practices (BMPs) and Florida Forestry Wildlife BMPs for State Imperiled Species when conducting any forest resource activities.

2.6 Native Landscapes

The native landscapes at the Property include floodplain marsh, hydric hammock, scrubby flatwoods, floodplain swamp, riverine, mesic flatwoods, wet flatwoods, depression marsh, basin marsh, basin swamp, dome swamp, sandhill. They are all described in more detail in the Natural Communities section (Section 2.2).

2.7 Water Resources

This section describes the surface and ground water within the Property

a) Surface Water

The Property does not include any Outstanding Florida Water Bodies and is not located within an Aquatic Preserve or an Area of Critical State Concern (section 380.05, F.S.). Over seven miles of the Property's boundary is the St. Johns River. The area surrounding the Property is primarily agriculture, pasture and low density residential.

The majority of the Property is located within the Lake Monroe Planning Unit of the Middle St. Johns River Basin. This planning unit covers 149 square miles. An approximately 700-acre eastern portion of the Property is included in the Deep Creek, Middle St. Johns River Planning Unit. The Middle St. Johns River Basin includes the Econlockhatchee River and the Wekiva River, an Outstanding Florida Water (OFW), an Aquatic Preserve, and a National Wild and Scenic River. Lakes Harney and Monroe, which formed because of the natural widening of the St. Johns River, and Lake Jesup, are also located within the basin. The bottom elevation of the Middle St. Johns River is below sea level and thus affected by forces of the ocean, including tides. While the tidal

amplitude is minimal, the River adjacent to the Property will reverse its flow at times, especially in response to nor'easter storms. The combination of reverse flows and tropical storms can lead to rapid changes in water elevation in the Middle St. Johns as documented for Lake Monroe in Figure 9. The nine-foot range in water elevation along this reach of the river amplifies the value of the floodplain conserved by the Property and adjacent public conservation lands. These floodplain lands accept and store large volumes of water during tropical events and are an important component of the District's flood protection mission.

As climate changes affect the surface waters of Florida, the wetlands on the Property, in particular the floodplain marsh along the St. Johns River, are of great importance to mitigate these effects. The ecology of floodplain marshes allows for long periods of inundation without deleterious effects to its ecology. Due to this, the Property provides inherent resilience to the Middle St. Johns River Basin for flood protection and from the effects of climate change that can be expanded with additional land acquisition of floodplain near the Property and in the basin.

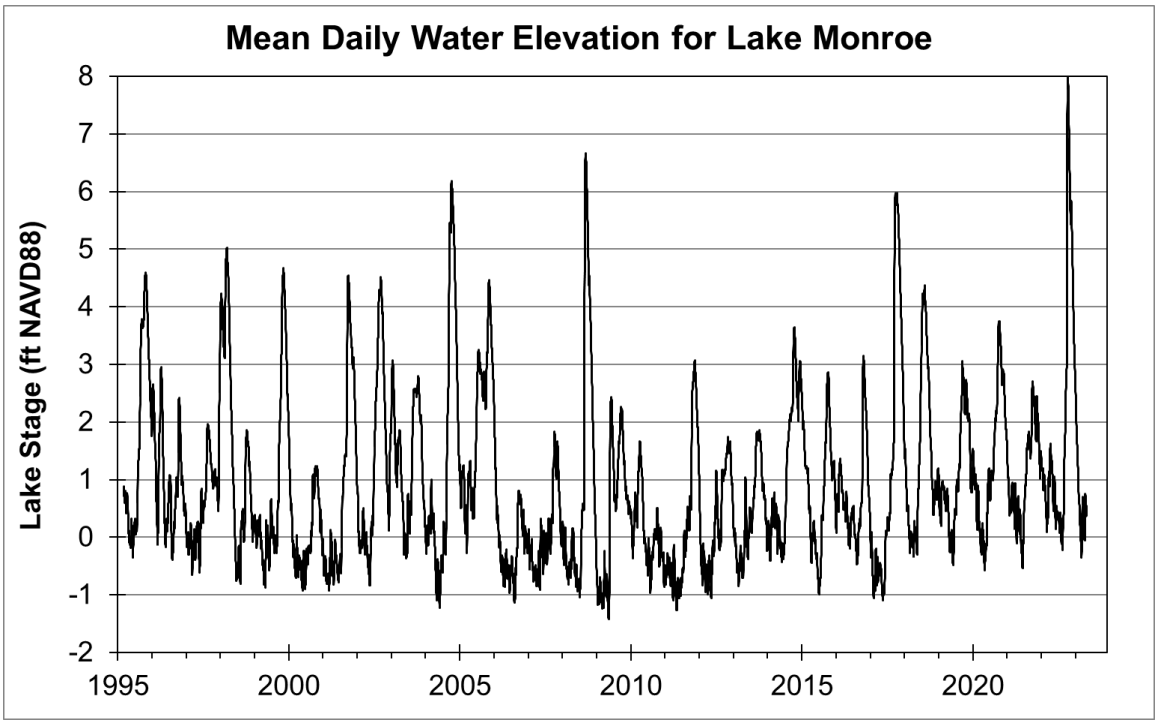

Figure 9: Mean Daily Water Elevation for Lake Monroe

Water Quality

The Lake Monroe Planning Unit is heavily developed and is in a region with continued high growth potential. The significant development and historical land uses in the area have resulted in deleterious impacts to the wetlands and waterways within the basin. Phosphorus in runoff from lawn and farm chemicals, historical inputs of untreated

stormwater runoff prior to regulation, and wastewater plant discharges have resulted in the decline of the lake (SJRWMD, 2023).

There are several Section 303(d) impaired waterbodies within Middle St. Johns River Basin. Impairments include nutrient loading in the form of nitrogen, phosphorus and chlorophyll-a as well low dissolved oxygen conditions. In 2009 the Florida Department of Environmental Protection (FDEP) adopted a nutrient Total Maximum Daily Load (TMDL) for the Middle St. Johns Basin, including lakes Harney and Monroe and the St. Johns River which connects them. This TMDL specifically focuses on the total nitrogen (TN) and total phosphorus (TP) loads in the watershed. In 2012 FDEP adopted a Basin Management Action Plan (BMAP) to address the impairments outlined in the Middle St. Johns TMDL. BMAP implementation is a long-term process with TMDL evaluations conducted on five-year intervals over a 15-year time frame. An important consideration for the restoration of waters in this basin is that the majority of the loading to the impaired waterbodies comes from sources outside the watershed. Approximately 96.4% of the TN loading and 95% of the TP loading enters the impaired waterbodies from the Upper St. Johns River, Econlockhatchee River, and Lake Jesup basins. Therefore, implementing projects in the watershed alone will not achieve the TMDLs; reductions from the upstream sources must occur before water quality standards can be met in the impaired waterbodies of the middle St. Johns River Basin (FDEP, 2012). The most common action to achieve TMDL nutrient reductions are the implementation of best management practices (BMP's) for agricultural non-point sources of pollution as well as BMP's for urban storm water projects. Three urban storm water projects are proximate to the Property, all involving storm water treatment associated with SR 415. The two cattle leases on the Property are obligated to follow and sign a Notice of Intent to Implement BMPs for Florida Cow/Calf operations as stipulated in the lease. In addition, the Property's floodplain wetlands role in attenuating nutrients provide a significant benefit to addressing the basin's water quality impairment. Of the 116 projects identified in the BMAP, 76 have been completed by 2021. For additional information on the BMAP access FDEP's Lake Harney, Lake Monroe, Middle St. Johns River and Smith Canal Basin Management Action Plan story map (FDEP, 2021)

In order to track water quality, the District monitors surface water quality at over 200 long-term sampling stations at rivers, streams, lakes, canals, and estuaries throughout the 18-county service area. Water quality status is an indication of the condition of a water body. The District's 2022 Status and Trends Report is a 15-year assessment of data from January 1, 2007 to December 31, 2021. These trends show whether a water quality parameter is increasing or decreasing over time. (SJRWMD, 2022b https://www.sjrwmd.com/data/water-quality/#status-trends).

Basic water chemistry data are collected at three surface water sites connected to the Property's watershed:

(1) Lake Monroe Center, located west of the upstream of the Property;

(2) SJR at State Rd. 415, located on the St Johns River south of the Property;

(3) SJR at Mid E Barge Canal, located on the St Johns River south of the Property (Figure 10).

Water chemistry data are collected monthly at these three sites. Field data including water temperature, pH, specific conductivity, and dissolved oxygen (DO) were collected, as well as grab samples analyzed for nutrients, minerals, and metals. Water chemistry parameters discussed in this section include total nitrogen (nitrogen), total phosphorus (phosphorus), specific conductivity, dissolved oxygen (DO), hydrogen ion potential (pH), total suspended solids (TSS) and chlorophyll-*a* (Chl-*a*).

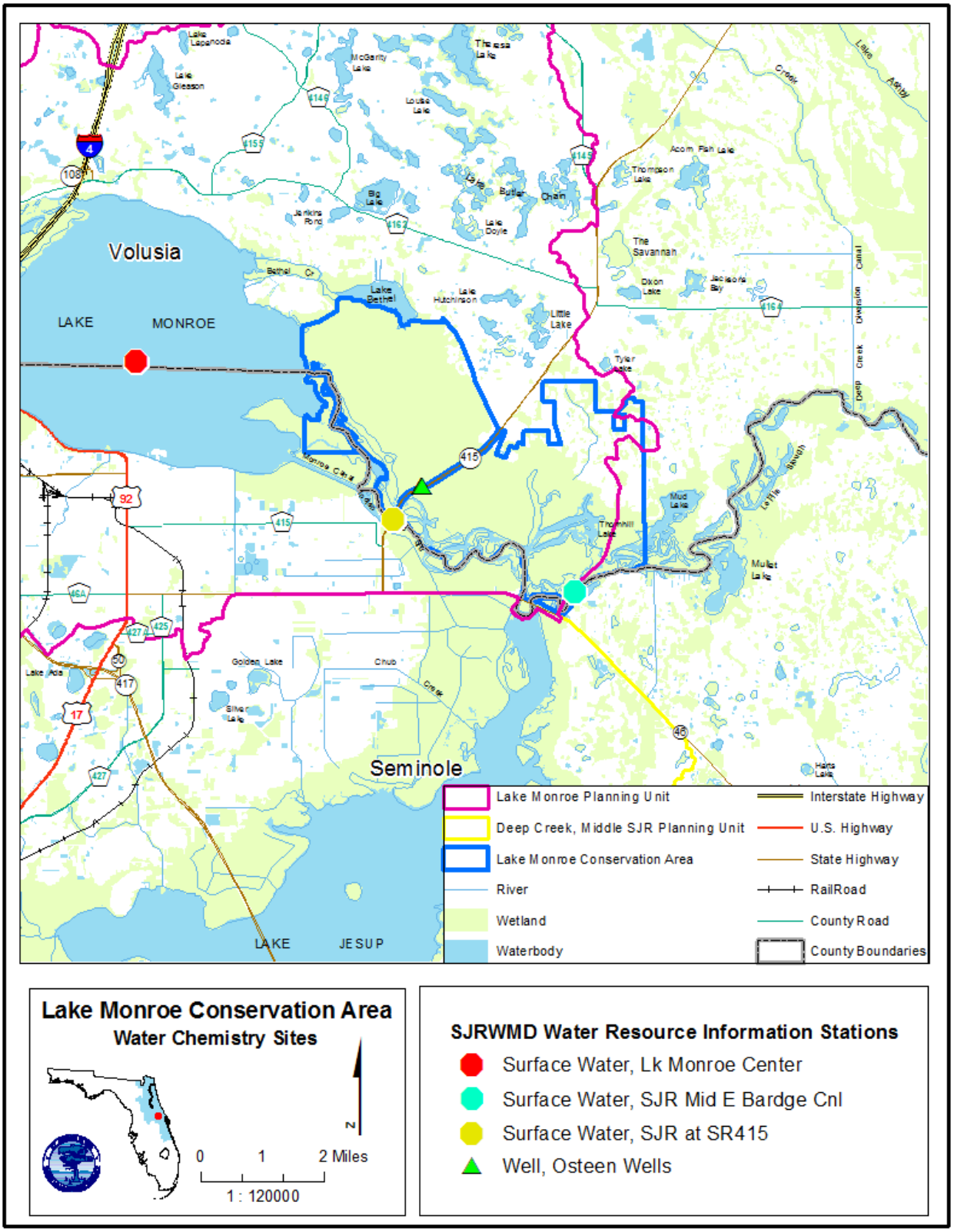

Figure 10: Lake Monroe Conservation Area Water Chemistry Sites

The following parameters are discussed in relative terms for the past 15-year period as described in the 2022 Status and Trends Report.

Lake Monroe Center (LMAC)

Phosphorus and pH are in the mid-range and stable. Nitrogen is in the high range and decreasing at 2.1% per year. Specific conductivity is in the mid-range and decreasing at 2.5% per year. DO is in the high range and increasing at 1.1% per year. Chl-a is in the high range and decreasing 2.6% per year. TSS is in the mid-range and decreasing at 7.3% per year.

SJR at SR 415 (SJR-415)

Phosphorus is in the mid-range and decreasing 1.9% per year. Nitrogen is in the high range and decreasing at 2% per year. Chl-a is in the mid-range and stable. DO is in the mid-range and decreasing at 1.2%. Specific conductivity is in the mid-range and is decreasing at 2.2% per year. pH is in the mid-range and stable. TSS is in the mid-range and decreasing at 6.4% per year.

SJR at Mid E Barge Canal (OW-SJR-1)

Phosphorus is in the mid-range and decreasing 1.2% per year. Nitrogen is in the mid-range and decreasing at 1.6% per year. Chl-a is in the low range and decreasing at 5.2% per year. DO and pH are in the mid-range and stable. Specific conductivity is in the mid-range and is decreasing at 2.3% per year. TSS is in the low range and decreasing at 8.3% per year.

Overall monitoring, at these three stations, indicates that median TP was above (34-40%) the 0.068 mg/L TMDL target in at LMAC and SJR-415, and 7% above the target at OW-SJR-1 (Table 2). These differences could be explained by LMC and SJR-415 being downstream of the Lake Jesup outlet thus receiving additional inputs. Median TN was above the 1.18 mg/L TMDL for all sites, ranging from to 12% to 29% over the target. Conversely, DO remained above 5.0 mg/L, meeting or exceeding the state water quality standard. The median Chl-*a* measure does not exceed the 20 µg/L FDEP standard for assessing nutrient impairment in streams and rivers. Likewise, median TSS is showing a downward trend, which indicates an improvement in water clarity.

Table 2 shows median water quality trends values in the stations mentioned above. Arrow color indicates whether median values for the last five years are low, medium, or high relative to each other and not a specific water quality standard. Green = low range value, light blue = mid-range value, and dark blue = high-range value. Arrow direction shows trends for each parameter as decreasing (⬇), increasing (⬆), or stable (➡).

Table 2: Lake Monroe Conservation Area Surrounding Water Quality Trends

Station	TP (mg L^{-1})	TN (mg L^{-1})	Chl-a (µg L^{-1})	DO (mg L^{-1})	TSS (mg L^{-1})
LMAC	0.091 ➡	1.457 ⬇	18.577 ⬇	7.64 ⬆	4.00 ⬇
SJR-415	0.095 ⬇	1.520 ⬇	9.365 ➡	5.91 ⬇	4.60 ⬇
OW-SJR-1	0.073 ⬇	1.316 ⬇	1.495 ⬇	6.80 ➡	2.00 ⬇

b) Ground Water

The District maintains active groundwater monitoring wells within the Property, which are identified as SJ0821 (surficial aquifer system (SAS)) and SJ0801 (Upper Floridan Aquifer (UFA)) also known as the Osteen Wells. Historic water levels of the past ten years for both sites are depicted in Figure 11. Both the SAS and the UFA water levels are plotted together to show the relative elevations (NAVD 1988) of the water levels in each aquifer. The water elevations are higher in the SAS than in the UFA at the Property. These water level elevations indicate downward flow from the SAS towards the UFA. Negative values shown on the SAS indicate water table levels above the benchmark elevation established at the time of the well's construction and can relate to periods of drought conditions.

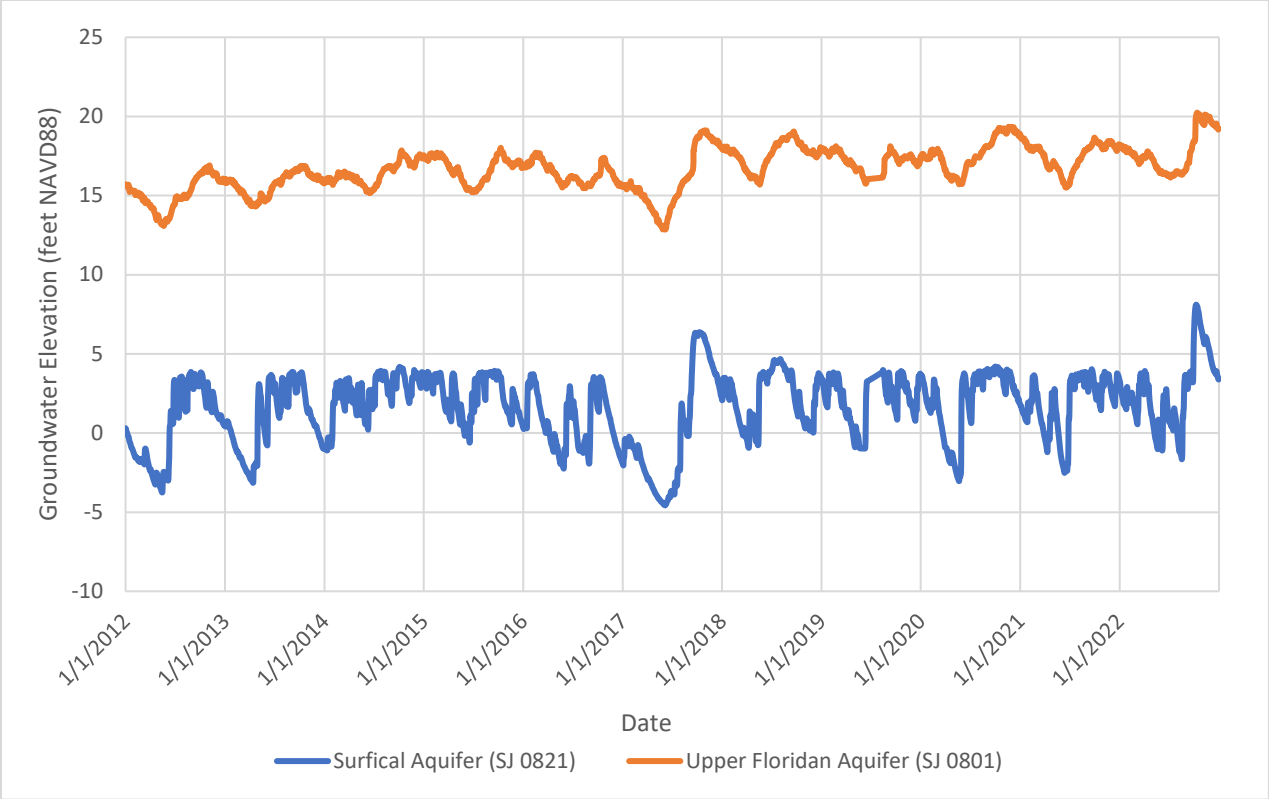

Figure 11: Lake Monroe Conservation Area Groundwater Observation Well Site SJ 0801 & SJ 0821

c) Geomorphology

The Property lies within the Upper St. Johns River Valley Province of the Eastern Barrier Island Sequence District (Figure 12; Williams et al, 2022). The Barrier Island Sequence District occurs along and inland from the Atlantic Coast of Florida. Pliocene-Pleistocene and Holocene coastal processes formed extensive barrier islands, beaches, lagoons, embayments, and shallow water marine terraces. The estuarine coastlines consist of tidal marshes in the north, gradually changing to mangrove swamps to the south. The reaches of the St. Johns River Valley that are north and south of the St. Johns River Offset Province (Lakes District) were once lagoons or embayments. Wetlands are commonly coast-parallel in the swales between the ridges of the strand plains and tidal marshes or mangrove swamps landward of the barrier islands. Inland, there are broad, relatively flat provinces that are Pliocene-Pleistocene marine terraces.

The Upper St. Johns River Valley Province follows a low elevation drainage system that was an ancient embayment or lagoon between the Atlantic Coastal Complex Province to the east and the strand plain of the eastern Osceola Plain Province to the west. The main stem of the northward flowing drainage system, the Upper St. Johns River, consists of a

large wetland complex through which the river meanders. The southern part of the province includes the headwaters of the St. Johns River in extensive wetlands and lakes, whereas the northern part of the province includes a distinct channel and several large lakes. Most of the Upper St. Johns River Valley Province is very flat with riverine floodplains, wetlands, and lakes. The southern part of the province is slightly higher in elevation and lacks a distinct channel and the fluvial landforms that are present in the northern part of the province. Elevations in the Upper St. Johns River Valley Province generally range from six feet to 36 feet NAVD88 based on datums established at Trident Pier in Port Canaveral, FL. The median elevation is approximately 21 feet NAVD88. The boundary between the Upper St. Johns River Valley Province and the St. Johns River Offset Province (Lakes District) is placed at the outfall of Lake Monroe. The boundary with the DeLand Ridge Province (Lakes District) is at the toe of the slope of the ridge. The northern part of the boundary with the Atlantic Coastal Complex Province includes the low area currently drained by Deep and Cow creeks. This area appears to be part of the Pleistocene embayment that was once occupied by the St. Johns River prior to the change of flow into the St. Johns River Offset Province. This part of the boundary is the drainage divide between flow to the south into the Upper St. Johns River Province, and to the north where wetlands and swale-induced drainages in the Atlantic Coastal Complex Province drain northward. The eastern boundary with the Atlantic Coastal Complex Province follows the change from coastal ridges to the east and the wetland and river complex to the west. The boundary between the Upper St. Johns River Valley Province and the Allapattah Flats Province to the south is based upon the slight increase in elevation in the Allapattah Flats Province and where surface water is no longer distinctly draining into the St. Johns River. The boundary of the Upper St. Johns River Valley Province with the Osceola Plain Province is placed at the toe of a distinct shoreline escarpment where elevations increase onto the Osceola Plain Province to the west. The Geneva Hill Province is a distinct hill that is enclosed within the Upper St. Johns River Province. The boundary with the Geneva Hill Province is at the slope change at the base of the ridge. The province boundary with the Orlando Ridge Province (Lakes District) to the northwest is based on the change in slope on the flank of the ridge.

The St. Johns River's mean stage at LMCA is approximately 0.3 feet above NAVD88 sea level (USGS/SJRWMD, Lake Jesup Outlet). This makes the Property and the surrounding area vulnerable to sea level rise as well as flooding events. Though its acquisition, the Property provides resilience to sea level rise and flooding events due to the protection of the St. Johns River's floodplain. The Property's floodplain retains these flood waters, limiting public safety impacts along the river.

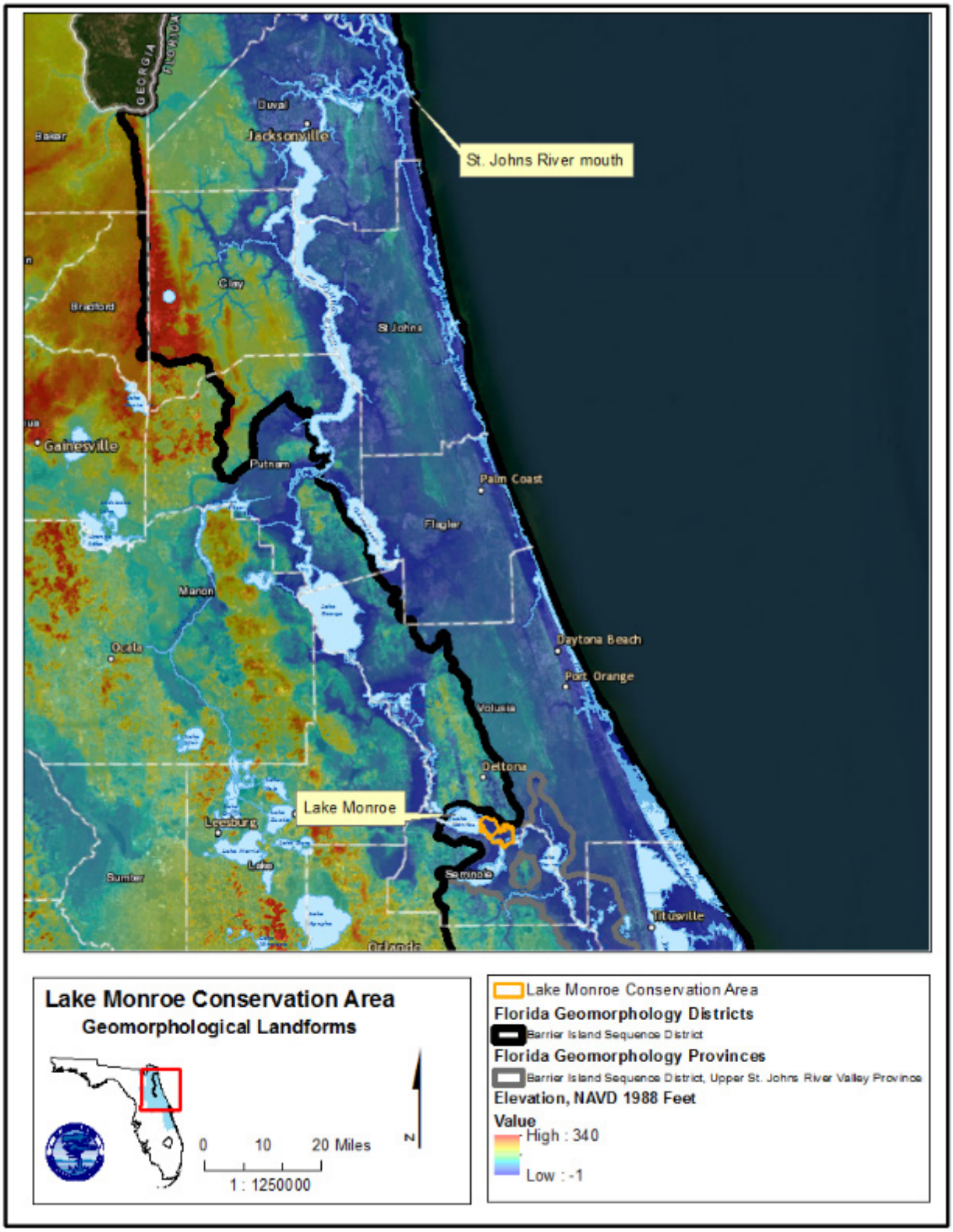

Figure 12: Florida Geomorphological Landforms

2.8 Beaches and Dunes

There are no beaches or dunes within the Property.

2.9 Mineral Resources

There are no known mineral resources within the Property. The District retains the mineral rights to the property.

2.10 Cultural Resources

There are 16 documented Florida Master Sites and two historic resource groups resource located on the Property. These sites are identified as a burial mounds, prehistoric campsites, farmsteads and a historic road. These sites are detailed in Table 3. Currently, there are no known sites listed in the National Register of Historic Places on LMCA, thought the Thornhill Mound site and the Beck Rach resource group are eligible. The District will consult with the 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 these sites 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 these sites will also be reported to the DHR and appropriate law enforcement agencies. Florida Public Archaeology Network (FPAN) was consulted on the conservation of the sites due to their sensitive location. The location of the sites is not identified on public maps.

Table 3: Historic Sites on LMCA

Site ID	Site Name	Site Type	Eligibility for listing on the National Register of Historic Places (NRHP)
VO00058	Thornhill Lake Mound 1	Prehistoric burial mound(s)	Eligible for NRHP
VO00059	Thornhill Lake Mound 2	Prehistoric burial mound(s)	Eligible for NRHP
VO00060	Thornhill Lake Midden	Campsite (prehistoric)	Eligible for NRHP
VO00446	Beck Slope	Not recorded	Not Evaluated by Recorder
VO00447	Thornhill Lake	Not recorded	Not Evaluated by Recorder
VO07218	Thornhill Lake Canoe	Log Boat - Historic or Prehistoric	Not Evaluated by Recorder
VO07302	Historic Site I	Campsite (prehistoric)	Ineligible for NRHP
VO08284	Mother's Day	Campsite	Ineligible for NRHP

	Lithic Scatter	(prehistoric)	
VO08285	Thornhill Prairie Site	Campsite (prehistoric)	Ineligible for NRHP
VO08286	Brickyard Slough Midden	Habitation (prehistoric)	Ineligible for NRHP
VO08287	Thornhill Marsh Midden	Campsite (prehistoric)	Eligible for NRHP
VO08288	Twin Pygmy Rattler Midden	Habitation (prehistoric)	Ineligible for NRHP
VO08289	Hickory Slough Midden	Campsite (prehistoric)	Ineligible for NRHP
VO08290	Nix Farmstead	Farmstead	Ineligible for NRHP
VO08291	Lowe Farmstead	Farmstead	Ineligible for NRHP
VO08319	Kratzert Logging Road	Historic road segment	Ineligible for NRHP
VO07656	Ft. Kingsbury to Smyrna Rd.	Liner Resource	Ineligible for NRHP
VO09200	Beck Ranch Resource Group	Mixed District	Eligible for NRHP

2.11 Scenic Resources

The well-preserved floodplain marsh community associated with Lake Monroe and the St. Johns River at the Property provide for significant scenic resources in an area surrounded by agriculture and development.

3. Uses of the Property

3.1 Previous Use and Development

The Property has seen use and habitation since prehistoric times. There are 16 recorded cultural sites on the Property. More recent past use of the Property includes cattle ranching and hunt clubs.

3.2 Purpose for Acquisition

The acquisition of the parcels that comprise the LMCA provide for the protection of important water resources and ecological functions. These acquisitions are consistent with the goals of the Middle St. Johns River Basin projects set forth in the District's Land Acquisition and Management Five Year Plan, and the District's Water Management Plan, which were in place during the acquisition of the parcels that now comprise LMCA. These goals are to preserve the natural floodplain for flood protection, maintain natural hydrologic regimes and water quality, and to restore, maintain, and protect native natural communities and biodiversity. As sea levels rise, the Property's purpose as a natural flood protection tool

will become even more important as flood waters will be retained on the Property's floodplain marshes and other wetlands. In addition, the District aims to provide opportunities for recreation where compatible with the above listed goals as well as protect archaeological and cultural resources.

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 Property is managed under the multiple-use concept. Cattle and apiary leases, timber harvesting and wildland fuels treatments as part of natural community management and restoration activities can be done in a manner that does not interfere with the primary purpose of conservation. Extraction of mineral resources is incompatible with the conservation purpose of the Property.

Recreation opportunities are afforded at the Property by the development of nearly nine miles of multiuse trails throughout the Property, two primitive campsites on the Brickyard Slough tract and hunting on the Kratzert tract administered by the FWC as the Lake Monroe Wildlife Management Area.

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.

3.4 Surplus Acreage

Pursuant to section 373.139, F.S., the District may explore and pursue the surplus of portions of its land. The District's interest in surplusing land may arise from a variety of considerations, including but not limited to:

- The property purchased as part of a larger acquisition and the surplus portion is not needed for District purposes but was included to complete the larger acquisition.
- Original project for which the property was purchased was ultimately not built.
- The property is part of a patchwork of conservation ownership, managed by another agency or local government and the surplus is to transfer the ownership to the entity managing the property for conservation purposes.
- Actions by adjacent owners which lower the property's conservation values or increase management costs.

When surplussing a property, the District commonly retains a conservation easement over the property and/or the deed contains a reverter clause. This provides for the future conservation of the property and the ability for the District to regain fee ownership if conservation or preservation is threatened in the future.

Any surplus of District-owned 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, which requires two thirds vote (§ 373.089, F.S.).

There are no surplus lands identified, nor has any surplus action take place, on land leased to the District 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 Property. The general goals guiding management of the Property include:

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

4.1 Land Management Review (Management Review Team)

The District has conducted one Management Review Team (MRT) since the 2012 land management plan update which occurred on April 26, 2023. The consensus for the MRT was that the Property is being managed for the purposes for which it was acquired, it is being managed in accordance with its approved management plans, and the current management plans provide sufficient protection to the Property's natural and cultural resources. The results of the 2023 MRT, as well as the land manager's response, are contained in Appendix H.

4.2 Habitat Restoration and Improvement

Beginning in the 1940s the Brickyard Slough portion of the Property received impacts from hydrological disturbance in the form of ditches as well as clearing for pasture conversion. The net effect of these activities is an overall decrease in coverage of basin marsh, scrubby flatwoods, mesic flatwoods, and wet flatwoods. As part of the mitigation bank improvements, several ditches were plugged, and water control structures were installed to slow the movement of water on the Property to mimic historic rates of water retention on the Property. These eight water control structures consist of flashboard riser structures which control flow into culverts (Figure 13). Boards are added to slow water flow or removed to increase flow. The current operation schedule of these structures is the risers are fully installed at all times of the year and completely removed as part of emergency preparations for tropical systems that will affect the Property. Boards are reinstalled after tropical system impacts have receded. All eight structures were inspected in 2022 and all but two need maintenance, mostly the removal of muck and silt against the riser boards. This maintenance will be conducted within the scope of this plan.

Other habitat restoration and improvement activities include the application of prescribed fire, mechanical vegetation treatments and invasive species treatments.

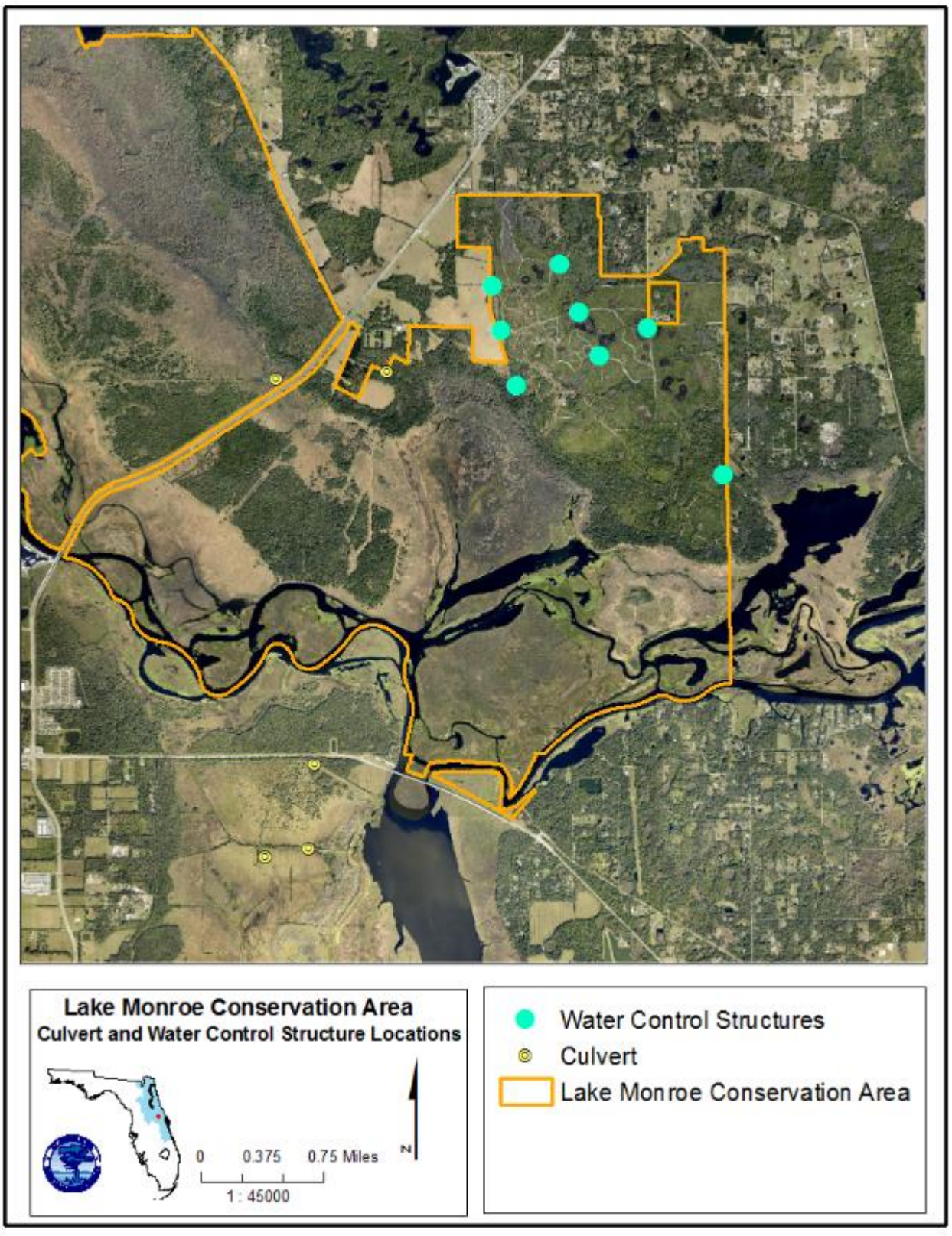

Figure 13: Culverts and Water Control Structures

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 amelioration of native pyric natural communities and dependent wildlife. Additionally, the application of fire aids in the reduction of fuels and decreases the potential for catastrophic and damaging wildfires. All the upland natural communities within the Property are (or historically were) fire adapted, making prescribed fire an important tool for use in the restoration and maintenance of natural communities on LMCA.

From 2012 to 2022, District staff have applied prescribed fire to 965 acres within the Property. Table 3 describes the prescribed fire history at the Property since 2012. Figure 14 depicts the fire management units (FMU) and the year which prescribed fire was applied to each unit since 2012.

There are approximately 1,244 acres of fire-maintained natural communities within the Property (17% of the conservation area). For the 11 FMU's that are classified as flatwoods and marsh natural communities, a four-year maximum fire return interval has been established. For the eight FMU's that are classified as scrub dominant natural communities, an eight-year fire return interval has been established. For flatwoods and marsh natural communities the annual burn goal is 104 acres, which is half the ecological objective of that natural community on the Property at 208 acres annually. For the eight FMU's that are classified as scrub dominant natural communities, the annual burn goal is 26 acres, which is half the ecological objective of that natural community on the Property at 52 acres annually. For the entire Property, the annual burn goal is 130 acres. For FMU's which have two or more burns applied to them within the past ten years, timing of future prescribed fires should focus on growing/lightning season (April-August) application but not exclude any opportunity to conduct a prescribed fire during our typical prescribed fire season of December to August.

Portions of the Property's floodplain marshes/hydric hammocks associated with the St. Johns River which were included in the Property's fire management goals from the 2012 Land Management Plan, will now be excluded from future fire management goals. These areas removed from the goals total 1,940 acres. These systems are maintained principally by river flooding as well as cattle grazing. These disturbances reduce woody herbaceous encroachment, primarily from Carolina willow (*Silix caroliniana*) and wax myrtle (*Myrica cerifera*). In addition, these natural communities' expanse, limited access and location to limiting factors described below are considerations in the removal of these acres from the Property's fire management goals.

Limiting factors narrowing the window of opportunity for the application of prescribed fire on portions of the Property is the proximity to critical smoke sensitive areas. These areas include the town of Osteen, the City of Deltona, numerous unincorporated residential areas, SR 415, Reed Ellis Road, Lemon Bluff Road, SR 46, numerous surface streets, the Sanford, International Airport, and the down drainage effects of Lake Monroe and Thorn Hill Lake. Additionally, prescribed fire within the Florida scrub jay habitat area should, in some cases,

be applied outside of nesting season and with appropriate rotations and unit selections to avoid manipulating more than 50% of a territory at once. Prescribed fire activities in this area will also be coordinated with any mechanical or chemical treatments to maintain optimal habitat conditions.

A system of condition class measures was originally developed by The Nature Conservancy (TNC) and the U.S. Forest Service in 2003 as an effort to assess ecosystem health. It was designed as Fire Regime Condition Class (FRCC) and 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 burn zone is assigned a condition class score based upon the most recent disturbance and the fire frequency recommended for that natural community by FNAI. As an example, if FNAI recommends a fire return interval of 3-5 years, a natural community that has benefited from disturbance in the past 5 years is in condition class 1. If it has been more than 5 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. The District staff will make annual condition class assessments and incorporate them into annual burn planning and work planning processes. In 2022, the condition class distribution of the Property's habitats was 40% Condition Class 1; 22% Condition Class 2; and 38% Condition Class 3. No areas within the Property fell within Condition Class 4 (Figure 15).

All implementation of prescribed fire within the Property will be conducted in accordance with the District's Fire Management Plan, the Property's Fire Management Plan (Appendix J), and the annual burn plan for the Property.

Table 4: Prescribed Fire History

FMU_#	Acres	Fire History
2511	64	6/15/2015; 2/18/2020
25110	34	1/22/2013
25111	43	6/17/2015; 2/13/2020
25113	129	11/14/2014; 5/14/2021
25114	27	4/2/2014
25118	34	4/2/2014
2512	60	3/21/2012
25121	21	12/13/2022
2513	23	7/10/2013
2516	53	11/12/2014; 12/13/2022
25116	20	1/6/2021
2517	76	7/9/2013
2518	92	3/5/2021

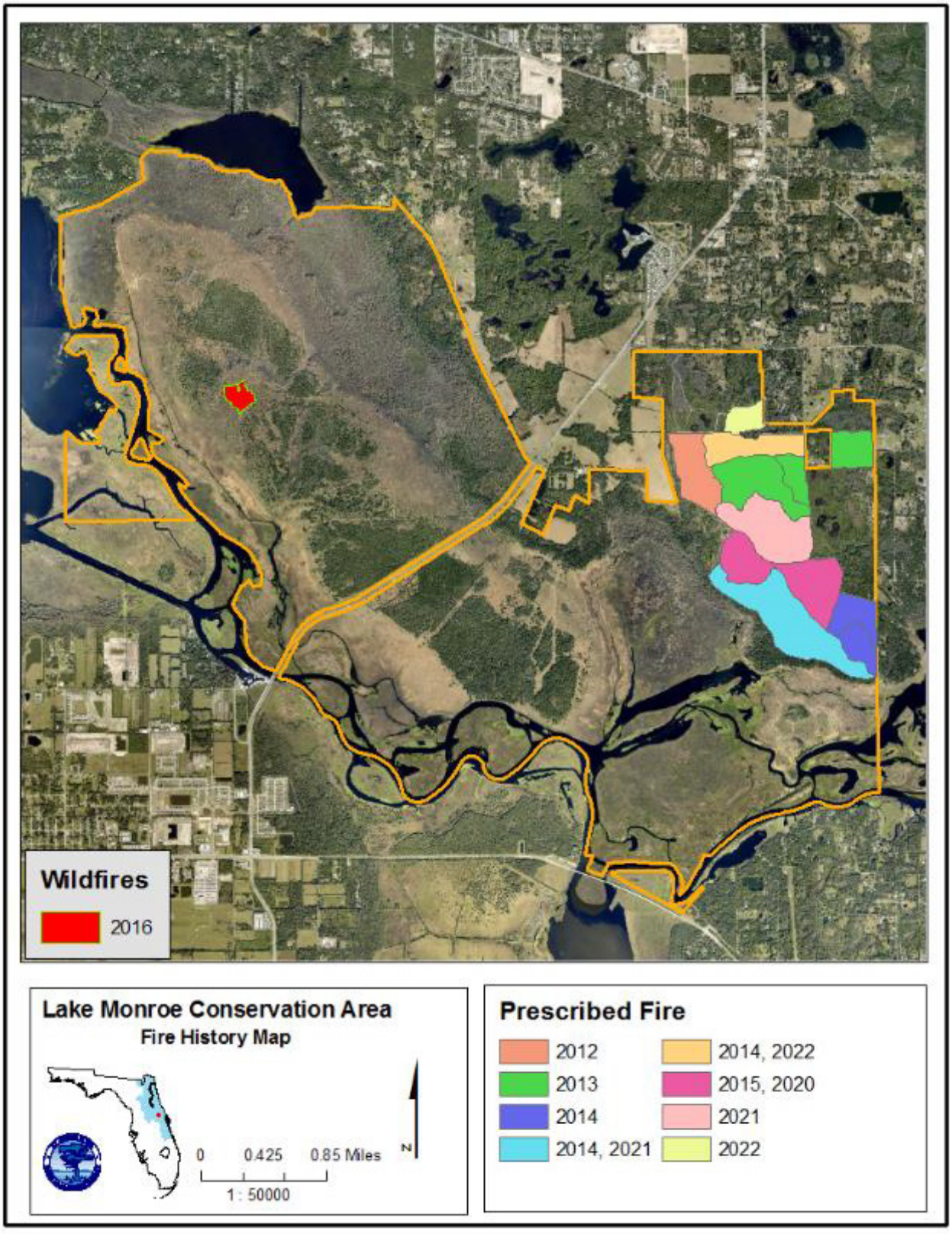

Figure 14: Lake Monroe Conservation Area Fire Management Units

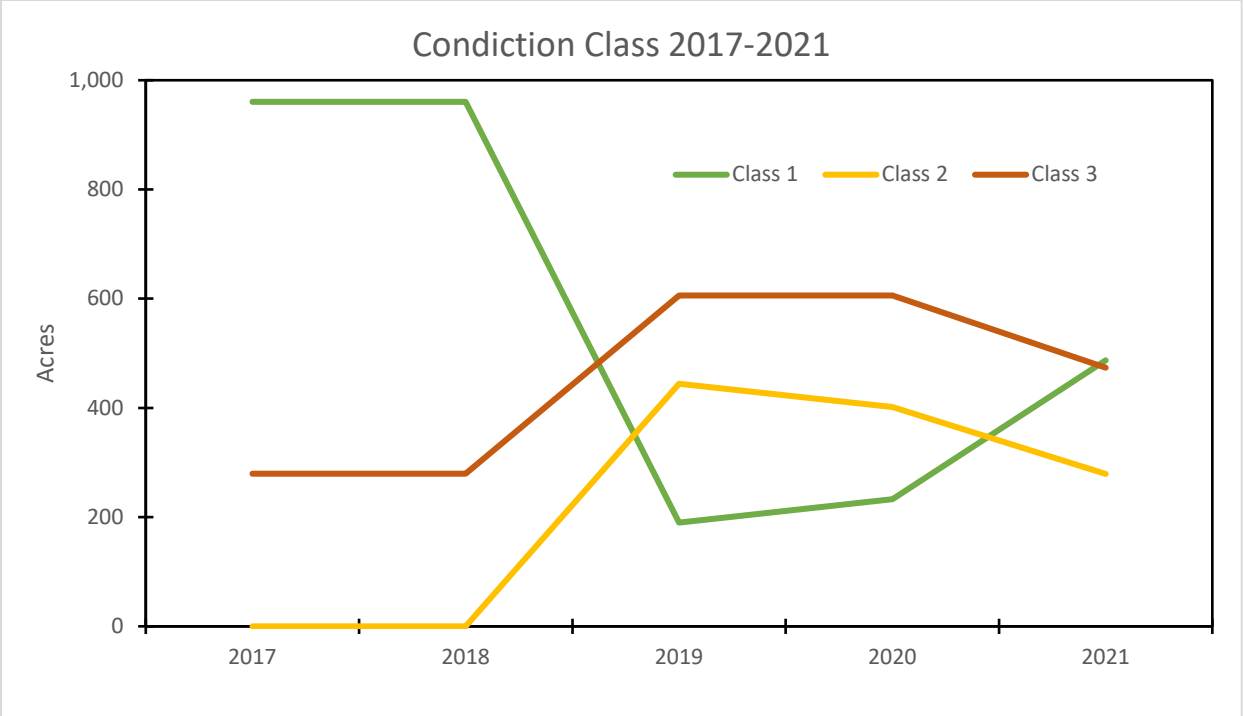

Figure 15: Lake Monroe Conservation Area Condition Class Report for years 2017-2022

4.4 Listed and FNAI-Tracked Species

The Property has a diverse assemblage of natural communities providing significant habitat for a variety of floral and faunal species (Figure 16). To date, 38 listed and tracked species have been recorded at the Property. A short discussion follows for the notable species documented on the Property. Appendix H contains a list of listed species recorded on the Property.

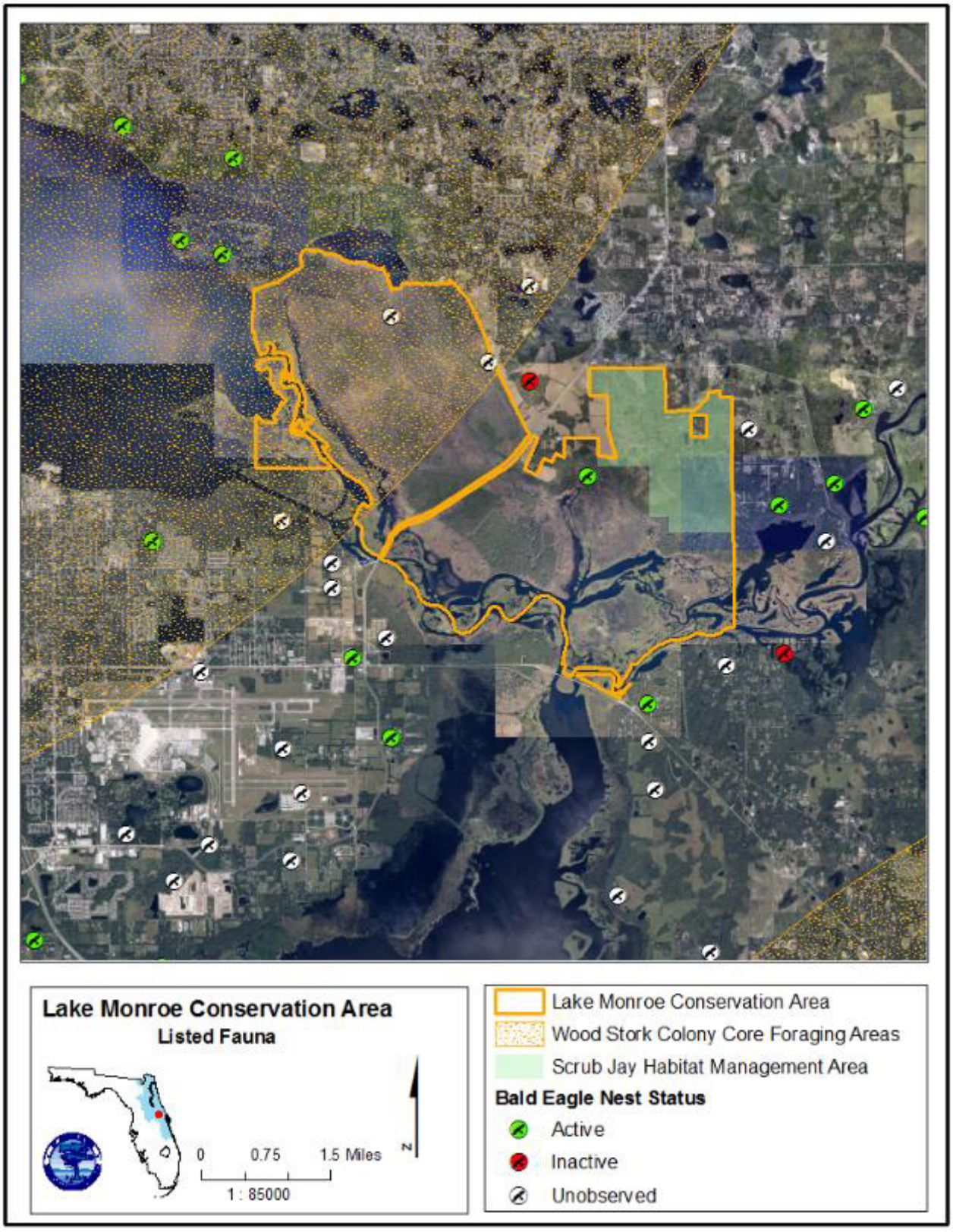

Figure 16: Lake Monroe Conservation Area Listed Fauna

Florida scrub jay

The Property supports a small population of Florida scrub jays (FSJ), a Federally threatened corvid and the only bird species endemic to Florida. Approximately 1,000 acres within the Brickyard Slough tract of the Property are identified for management as FSJ habitat (Figure 16). This area, once likely dominated by a mosaic of scrubby flatwoods, mesic flatwoods, and sandhill with embedded pockets of scrub and depression marshes now consists of scrubby and mesic flatwoods of varying condition, degraded sandhill, and improved and semi-improved pasture. Prior to public acquisition, the area was logged, portions of it cleared and utilized for cattle ranching and hunting.

To assess and better manage the onsite population of FSJs, the District conducts annual monitoring. Volunteers, under District supervision, using standardized protocol incorporated into TNC's JayWatch program conduct this monitoring. Volunteers document information relative to population and habitat conditions. The results of these monitoring efforts from 2008 to 2022 are shown on Figures 17 and 18.

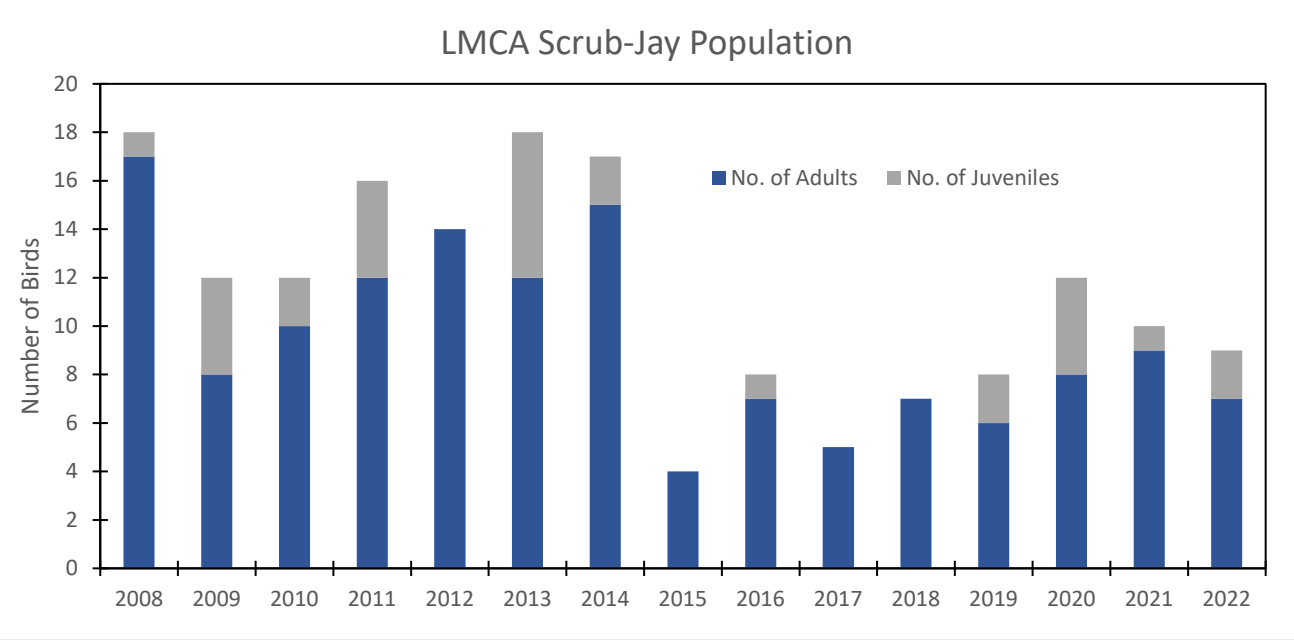

Figure 17: Lake Monroe Conservation Area Scrub Jay Population 2008-2022

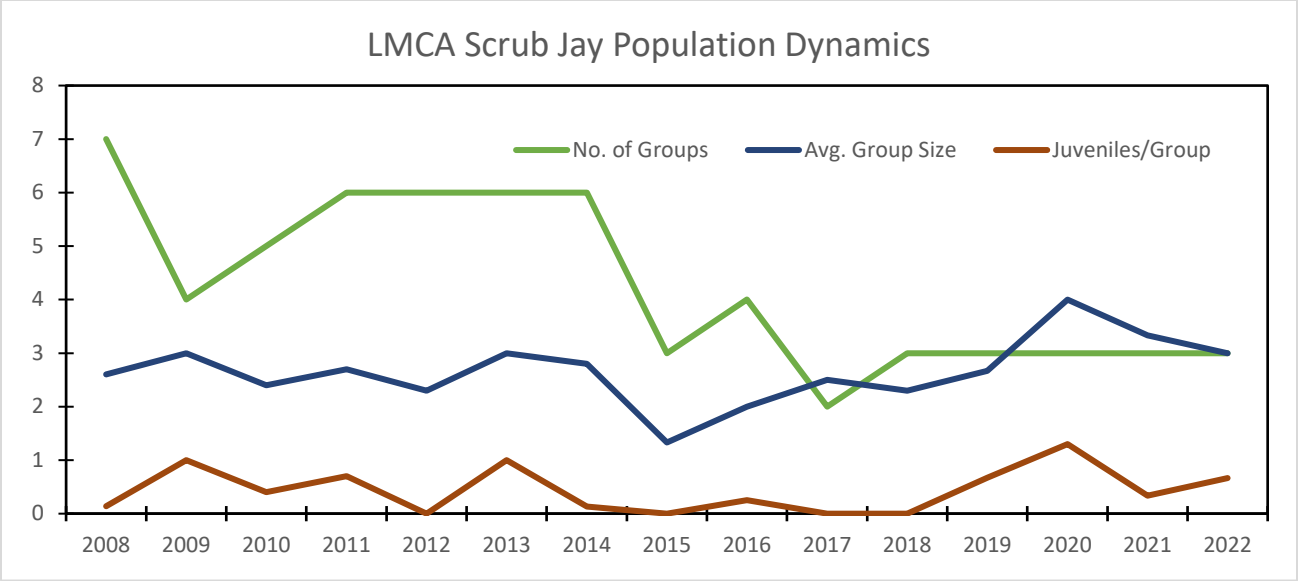

Figure 18: Lake Monroe Conservation Area Group Dynamics 2008-2022

Seven adult Florida Scrub-Jays were seen in 2022, located in three groups (Figure 19). Two juveniles were observed during the 2022 survey, a marked increase from 2021's survey. Only three of six known banded birds across all three groups were seen during the survey. Banding should continue as an important management tool used within the population, and conditioning efforts should be continued to increase the chance of banding success. Though numbers are up from the 2014 low, the population is still very low, possibly unsustainable. With further habitat improvements planned, any translocation opportunities should be evaluated (SJRWMD 2022a).

Recent FSJ habitat improvements include 20 acres of mulch mowing in 2020 which was then burned in January of 2021. A group is now utilizing this portion of the property as part of their habitat. 90 acres of core habitat were burned in March of 2021. In May of 2021, 130 acres of flatwoods were burned on the southern side of the property. Additionally, 74 acres of scrub and flatwoods, including a FMU with no recent burn history, in the northeast corner of the property were burned in December of 2022, just north of a FSJ group.

Continued use of prescribed fire, as well as mechanical and chemical treatments, will be used during the scope of this plan to maintain the needed sandy areas for FSJ caching and foraging (FNAI, 2001). Using a combination of prescribed fire, mechanical and targeted chemical treatments in a short (1.5 year) timeframe have proven successful at nearby Buck Lake Conservation Area for FSJ habitat structure management. Population monitoring under the JayWatch program will be continued within the scope of this plan.

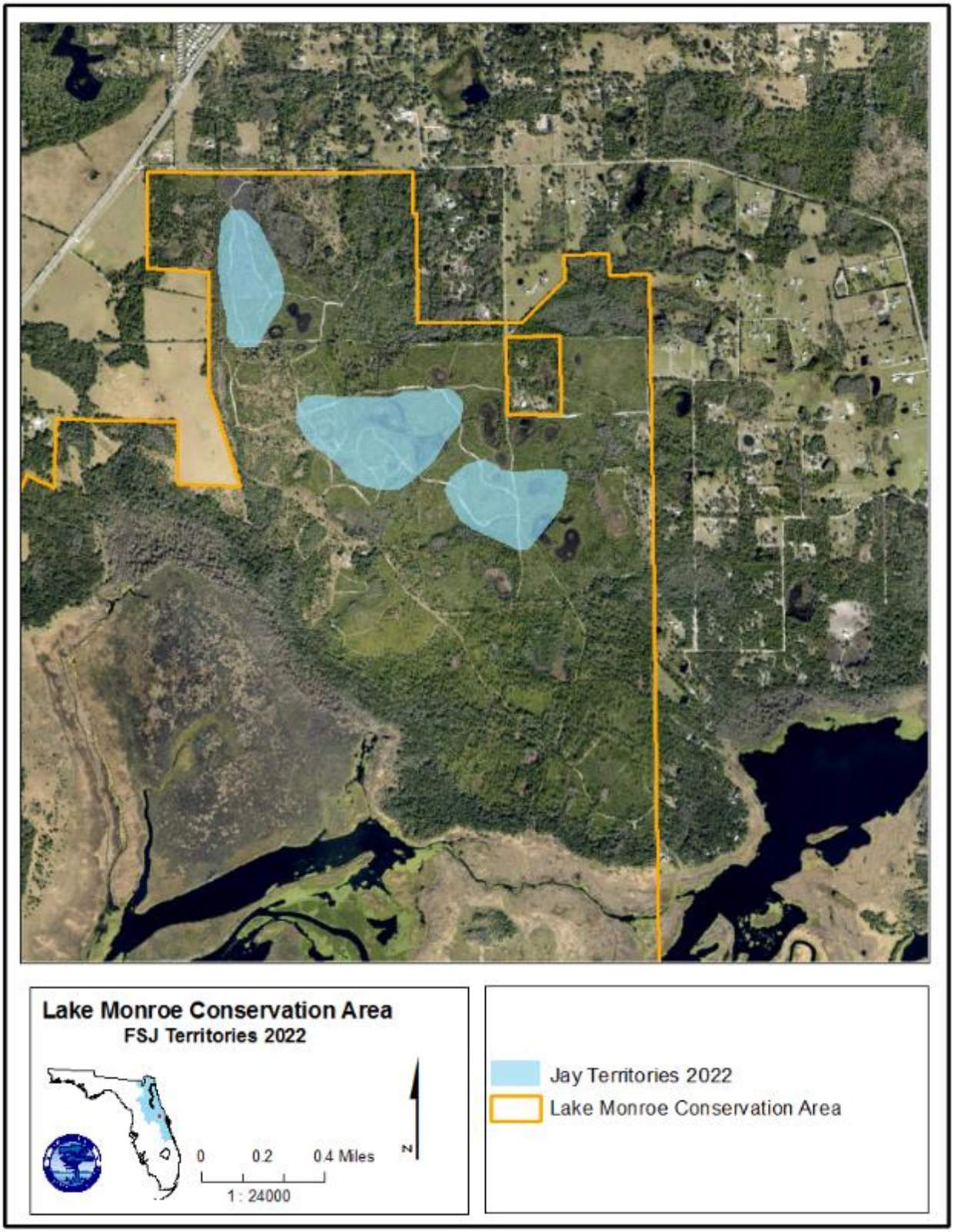

Figure 19: Florida Scrub Jay Territories

Gopher tortoise

The gopher tortoise (*Gopherus polyphemus*), a state threatened species, occurs within the Property. 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.

In May of 2022, FWC coordinated and FNAI conducted a full line transect distance sampling (LTDS) survey for gopher tortoises on the Property's suitable gopher tortoise habitat. The survey of 457 acres (6.1% of the property) of scrubby flatwoods, improved pasture, mesic flatwoods, rural open, and scrub documented a total of 129 burrows: 85 occupied and 44 unoccupied resulting in an occupancy rate of 65.9 percent.

Using FWC criteria, to be considered viable, a gopher tortoise population must contain ≥250 adult tortoises at a density of no less than approx. 0.16 tortoises/acre and encompass approx. 250 acres of contiguous suitable gopher tortoise habitat. The population should also contain an approximate male-female ratio of 1:1, show evidence of juvenile recruitment into the population, show variability in size classes; and the site must not have major constraints to tortoise movement. By far, the majority (88.2%) of the occupied burrows were adult burrows, although there is evidence of recruitment into the population. While no hatchlings were recorded, juveniles and subadults were found to comprise 2.3% and 9.4% of the population, respectively. The FNAI LTDS survey for Lake Monroe Conservation Area estimated a population size of 832 (609 - 1,137, 95% confidence interval, CV 15.7%) gopher tortoises and a density of 1.8 tortoises per acre. This meets all the criteria for a viable population (FNAI, 2022). In addition, five gopher frogs (*Lithobates capito*) were observed during the sampling effort.

The Property is not suitable as a gopher tortoise recipient site. This is not because it is in conflict with the Property's conservation management purpose but rather because it does not contain contiguous suitable soil types, as defined by drainage class, greater than 40 acres (Figure 20) to provide adequate habitat following FWC's Gopher Tortoise Permitting Guidelines (FWC 2020). Additionally, with the Property's gopher tortoise population at a viable status, as determined by the above-described survey effort, enrolling the Property as a recipient site could alter the population dynamics on-site.

Management activities within the pine flatwoods and scrub communities of the Property will focus on maintaining natural fire return intervals using prescribed fire as well as limiting soil disturbance near burrows (FNAI, 2001). The use of fire surrogates to aid in the future application of prescribed fire will benefit the gopher tortoise and its commensal species.

While the cattle lease that encompasses a portion of the Brickyard Slough tract where the studied gopher tortoise population occurs, much of the population does not interact with the lease boundary. The lease's stocking rate is 12 acres per animal unit, double the FWC recommended 6 acres per animal unit to reduce the possibility of trampling of gopher tortoise burrows and nests (FWC 2020).

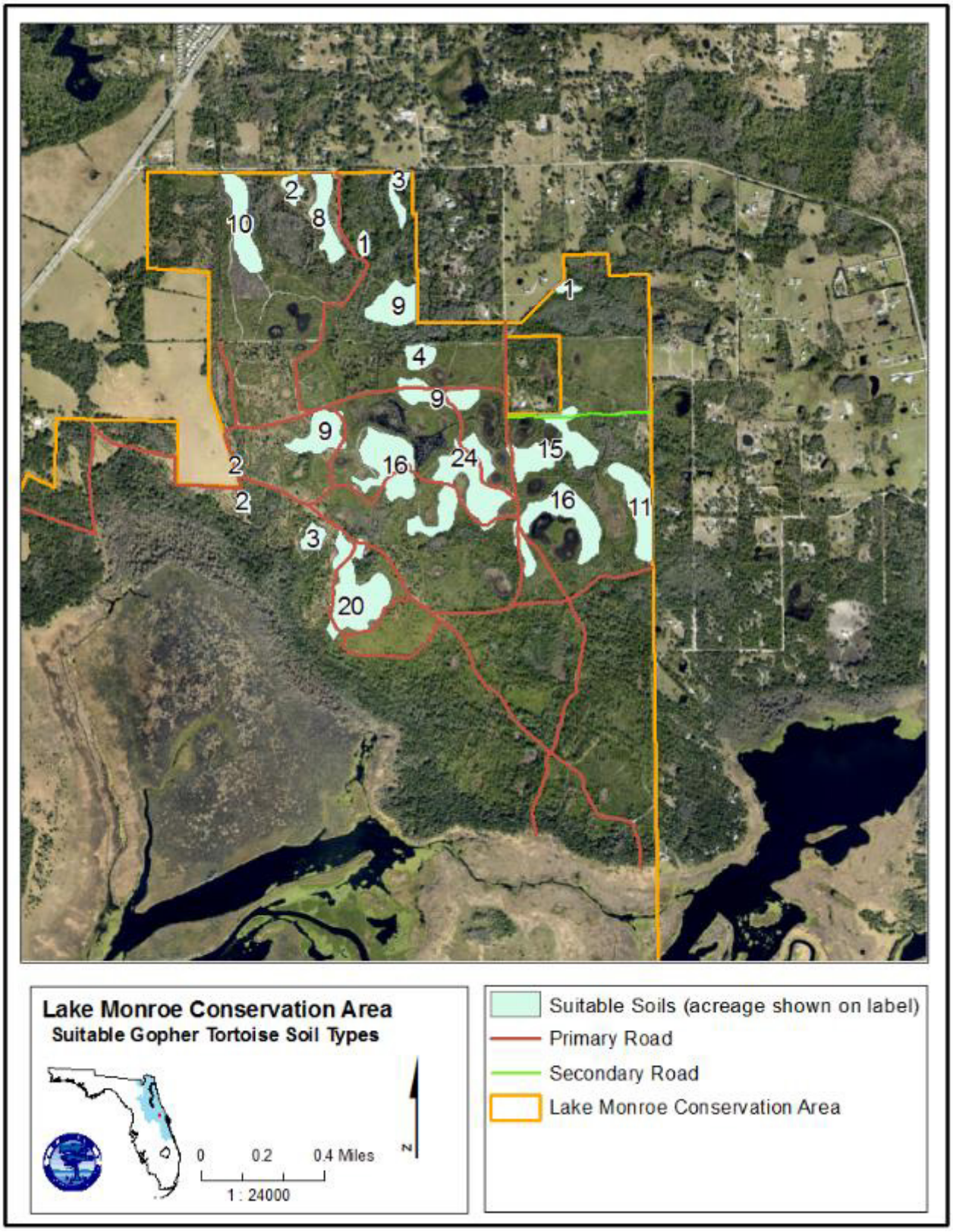

Figure 20: Suitable Gopher Tortoise Soil Types and Their Acreage

Wood stork

The wood stork (*Mycteria americana*) is a Federally threatened species that occurs within the Property. This large wading bird forages in the verity of wetlands found on the Property. The conservation of these wetlands through acquisition and hydrologic restoration efforts provides opportunities for the wood stork to continue to recover in central Florida (FNAI, 2001). Currently, there are no wood stork nesting colonies found on the Property, though the Kratzert tract is within a core foraging area.

Rugel's false pawpaw

The Property is also home to a population of Federally endangered Rugel's false pawpaw. Rugel's false pawpaw is a rare plant, "endemic to Volusia County, with 33 known populations" This low shrub species tends to flower prolifically after fire; without fire, over time, the plants will decline and eventually die (USFWS, 2018).

All the plants that are found on the Property have been introduced. These plants were collected from sites that were subject to development impacts. Introductions began on the Kratzert tract in 1994. Additional plants were introduced in 2004 to the Kratzert tract and in 2012 to the Brickyard Slough tract. These sites were surveyed in 2017 with an estimated population of 32 individual plants from the three populations on the Property (USFWS, 2018).

Management practices to benefit this species that the District will conduct focus on growing season prescribed fire and minimizing soil disturbance (FNAI, 2000). Survey efforts will partner with the Pawpaw chapter of the Florida Native Plant Society, who undertook the planting efforts. Surveys will occur shortly after prescribed fires that affect the planting sites.

4.5 Exotic and Invasive Species Management and Control

District staff perform periodic surveys on the Property to identify and manage populations of invasive plant species. Populations identified include Chinese tallow (*Triadica sebifera*), cogongrass (*Imperata cylindrica*), and Brazilian pepper (*Schinus terebinthifolia*). Invasive species control is necessary to inhibit the continued proliferation of invasive plants and integral in the maintenance and restoration of natural plant communities. District staff use a variety of techniques including fire, mechanical, biological and chemical treatments in combination with the property's seasonal inundation. Herbicide is applied per label rates using the most appropriate method of application for the target species.

While it is unlikely that the District will entirely eradicate invasive plants within the Property, maintaining or achieving maintenance control of such species is targeted within the scope of this plan. Since 2012, District staff and contractors have treated 1,557 acres of invasive vegetation within the Property (acres treated include acres that have received multiple treatments). Most of these treatments focus on Chinese tallow. The average annual treatment acreage for the past five years is 155, which includes a 1,167-acre aerial treatment for Chinese tallow. Removing this aerial treatment from the average results in an annual average treatment acreage of 39, which will be the goal for this planning period.

Invasive wildlife species known to occur within the Property include feral hogs (*Sus scrofa*), brown anoles (*Anolis sagrei*), and nine-banded armadillos (*Dasypus novemcinctus*). The District currently utilizes feral hog removal agents through a Special Use Authorization (SUA) process to assist in the control of feral hogs. The District keeps records of hog removal from the Property. From 2012 to 2022, 578 hogs have been removed.

4.6 Public Access and Recreational Opportunities

Hiking, biking, fishing, horseback riding, photography and wildlife viewing are allowed uses on the Property. There are two primitive campsites on the Property, both located on the Brickyard Slough tract. One campsite is a drive-in, reservable site with access via Lemon Bluff Rd.; the other is hike-in/boat-in, first come, first serve site located on the St. Johns River.

Four public parking areas serve as recreation access points on the Property. An access point on Reed Ellis Rd. connects to a 1.4-mile multiuse loop trail traversing the uplands within Kratzert tract. An access point on SR. 415, through Volusia County managed Back Ranch Park, connects to 7.6 miles of multiuse trails within the Brickyard Slough tract (Figure 21). Maintenance of the trails, access points and campsites are accomplished by District contractors with staff oversight. Illegal dumping issues are often handled by staff.

Boating and paddling opportunities are available on Lake Monroe and the St. Johns River; however, there are no boat launches located on the Property.

The Kratzert Tract is a FWC WMA known as the Lake Monroe WMA (Figure 22). It is a walk-in only site with access via Reed Ellis Rd. or from Lake Monroe via watercraft. Two additional parking areas, aside from the parking area for the multiuse loop trial, are located on the Kratzert tract to aid walk in access for the WMA. These parking areas are opened during hunting season but may be left open outside of the season at the discretion of District staff. No quota permit is required for this WMA, though a management area permit is required. WMA specific hunts include deer, small game, and wild turkey. Statewide rules apply to migratory bird and frogging with a management area permit. Trapping is prohibited. For specific dates and maps, access FWC's website (https://myfwc.com/hunting/regulations/).

Additional hunting opportunities are available waterward of the posted conservation line on the Property. This line, also shown on Figure 22, represents the approximate location of the ordinary high-water mark and where hunting is allowed under statewide regulations reflecting sovereign ownership. This line is maintained and reposted on, at minimum, a biannual interval.

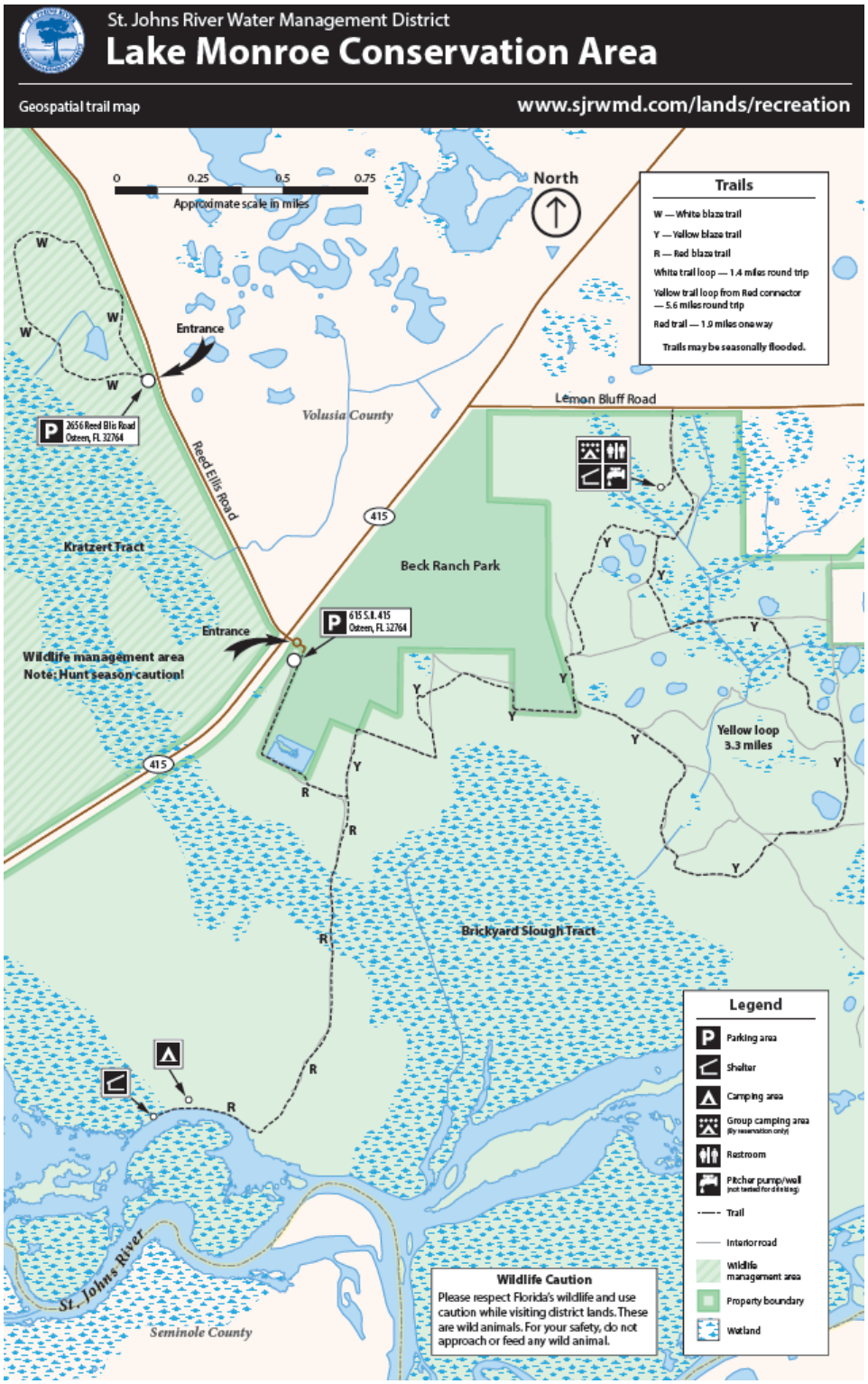

Figure 21: Recreational Amenities

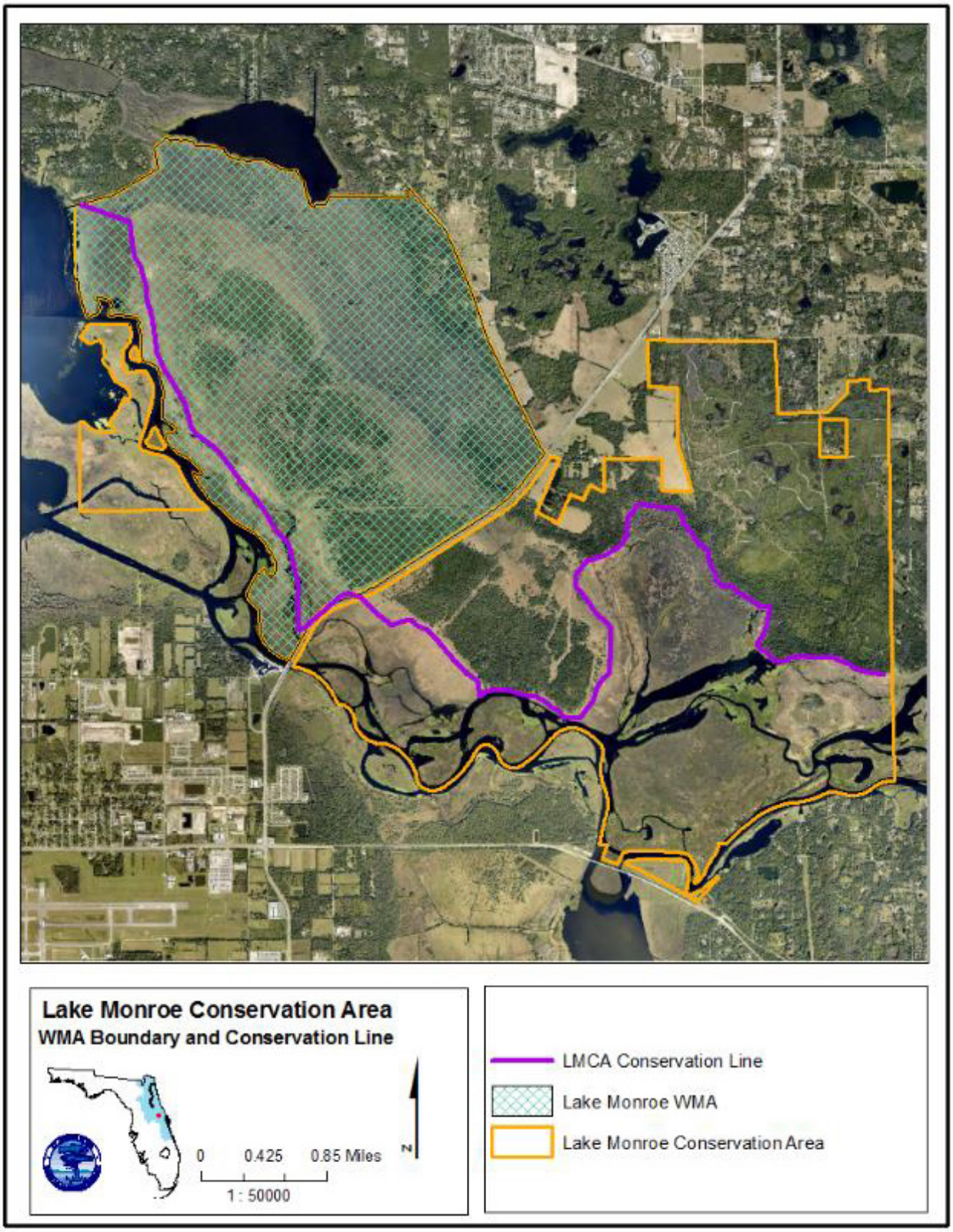

Figure 22: Lake Monroe Wildlife Management Area

4.7 Hydrological Preservation and Restoration

The acquisitions that comprise the Property provide for significant hydrological preservation by protecting over seven miles St. Johns River frontage, nearly a mile of Lake Monroe frontage and Thorn Hill Lake in its entirety. In addition, as this section of the St. Johns River seasonally reaches an elevation equal to sea level, ongoing sea level rise will affect the Property. The public's ownership of the Property provides resilience benefits.

4.8 Forest Resource Management

A detailed forest inventory has not been completed for the Property as the timber resources within the Property are insufficient in size to warrant an inventory. Any potential forest resource work on the Property will be restorative in nature and designed to aid in the promotion of species diversity and overall natural community health and vigor. Any forest management action will be undertaken after consultation with the District forester.

4.9 Cultural Resources

There are 16 documented Florida Master Sites and two historic resource groups located on the Property. These sites are identified as burial mounds, prehistoric campsites, farmsteads and a historic roads. Several of these sites were monitored by District staff and staff from the Florida Public Archelogy Network in April 2023.

The District will consult with the DHR before taking actions that may adversely affect archeological or historical resources. If District staff discover 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 location of the sites is not identified on public maps. 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 facilities on the Property include four unpaved parking lots, two primitive campsites, one of which has an open shelter structure, one weather shelter, seven groundwater monitoring wells located at a single monitoring site and numerous access gates. These all are maintained by District staff and contractors.

There are 13 miles of land management access roads on the Property. These roads are not open to public vehicles, except a short access road for the primitive campsite off Lemon Bluff Rd. The current cattle lessees provide mowing for these roads as needed.

The weather shelter located on the Brickyard Slough tract (Figure 21) may need repair or replacement within the scope of this plan. There is not a set schedule for replacement but rather repair or replacement will be as needed. In addition, when the structure is deemed in need of

replacement, the District is considering moving it north of its current location, away from the nearby cultural resource site.

4.11 Optimal Boundary

Approximately 700 acres surrounding the Property have been identified as potential acquisitions (Figure 23). If neighboring parcels become available which increase continuity between the Property and Lake Jesup Conservation Area to the south, provide additional protection to Lake Monroe or the St. Johns River, or allow for restoration of impacted land, they will be evaluated for acquisition by District staff.

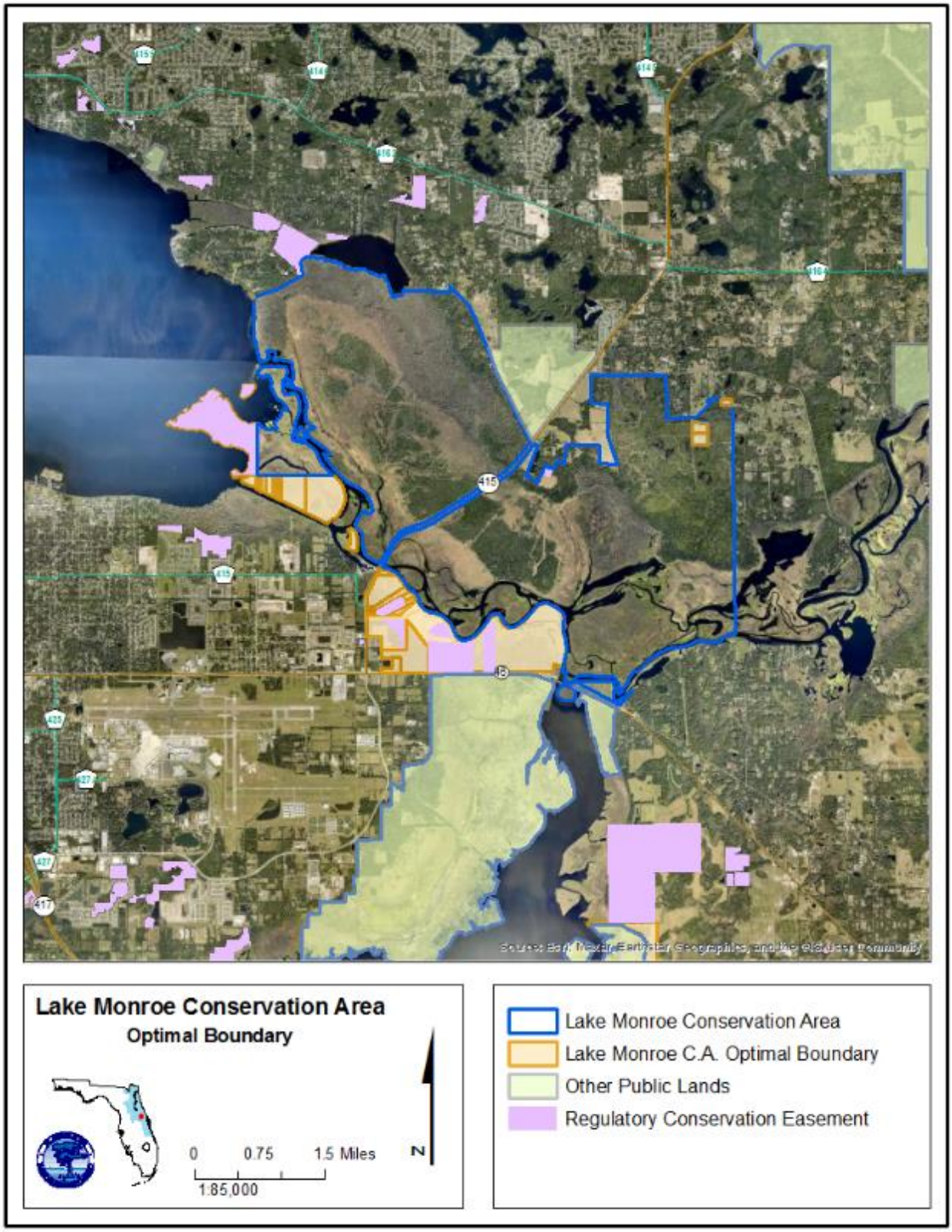

Figure 23: Lake Monroe Conservation Area Optimal Boundary

4.12 Research Opportunities

The District has in place an SUA process (rule 40C-9.360, F.A.C.) for research projects and other uses. To obtain an SUA, the applicant must provide reasonable assurance that the proposed use is consistent with the Land Management Plan and will not harm the natural and cultural resources of the Property. There are currently six active research SUAs on the Property.

4.13 Soil Conservation

The Property provides significant soil and water resource protection benefits. These include flood protection to the surrounding area and water quality protection for Lake Monroe and the St. Johns River.

The District will follow all soil erosion and silvicultural best management practices on the Property.

4.14 Cooperating Agencies

The District is the lead agency for the primary management of the Property. The WMA is administered by FWC with input from the District.

The District cooperates with the DHR regarding the management of cultural resources.

The District cooperates with FWC regarding the management of wildlife resources and law enforcement.

4.15 Arthropod Control Plan

The Property falls within the Volusia County Mosquito Control District. An Arthropod Control Plan has not been developed for the Property with the Mosquito Control District, though the Property is included within the Volusia County Mosquito Control District wide operating plan for public safety (Appendix L).

5. Resource Management Goals and Objectives

The resource management goals described below are meant to be broad statements aimed at achieving desired future outcomes at the Property. The stated time period for short term goals is less than two years and for long term goals is up to ten years. There are both short- and long-term goals in this plan.

5.1 Habitat Restoration and Improvement

Goal: Maintain, improve, or restore natural communities.

Short Term

a. Conduct at least 130 acres of prescribed fire annually.
b. Continue vegetation and fire management strategies to improve Florida Scrub Jay habitat.

Long Term

a. Maintain 831 acres of fire-adapted flatwoods natural communities within a 2 to 4-year fire return interval.
b. Maintain 413 acres of fire-adapted scrub natural communities within an 8-10-year fire return interval.
c. Conduct habitat/natural community improvement, utilizing mechanical methods or herbicides in pine flatwoods and scrub to increase the number of acres managed annually by the most natural and cost-effective means, prescribed fire.

5.2 Listed Species Management

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

Short Term

a. Continue to make vegetative and fire management decisions that will help the Rugels false paw-paw and other listed plant species populations thrive.
b. Continue to make vegetative and fire management decisions that will help the Florida Scrub Jay population maintain stability or increase.
c. Continue to make vegetative and fire management decisions that will help the gopher tortoise population maintain stability.

Long Term

a. Monitor for population changes in listed animal and plant species utilizing District staff and volunteers such as the Florida Native Plant Society.
b. Contract with FNAI to conduct natural community and imperiled species, including wading bird surveys, mapping updates before the next land management plan update.

5.3 Public Access and Recreational Opportunities

Goal: Provide public access and recreational opportunities.

Short Term-None

Long Term

a. Continue to maintain public access and recreational opportunities.

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-None

Long Term

a. To maintain and enhance natural hydrological functions, install and maintain low water crossings and culverts as appropriate.

5.5 Exotic and Invasive Species Maintenance and Control

Goal: Remove invasive plants and animals and conduct needed maintenance control.

Short Term

a. Plan to treat at least 39 acres of invasive plants annually.

Long Term

a. Maintain a database on locations of invasive plant species.
b. Treat invasive plant and/or exotic species, as they are located to prevent further infestation.
c. Monitor Property wide trends of invasive species population size.
d. Continue to monitor the feral hog population and maintain SUAs for the feral hog trapping program.

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-None

Long Term

a. Maintain the existing parking area/kiosk.
b. Maintain the approximately 13 miles of roads.
c. Maintain, improve, or repair the nine miles of District maintained trails.
d. Maintain, repair, or replace the weather and camp shelters on the Brickyard Slough tract.

5.7 Cultural Resources

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

Short Term-None

Long Term

a. Annually monitor, protect, and preserve the 16 documented sites in accordance with DHR procedures.
b. Ensure all known sites are recorded in the DHR Master Site file.
c. Work with the DHR and the FPAN to document any new sites and train additional staff in Archaeological Resource Monitoring

5.8 Research Opportunities

Goal: Explore and pursue cooperative research opportunities.

Short Term-None

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.

Short Term-None

Long Term

a. Ensure activities that occur on the Property are reported at the annual Recreational Public Meeting and provide the public an opportunity for comment.
b. Convene a MRT every 5 years to ensure the land management plan is being followed.

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

GOAL 5.1	Maintain, improve, or restore natural communities	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Conduct at least 130 acres of prescribed fire annually	Acres burned	ST	Included in Objectives B& C	Included in Objectives B& C
Objective B	Maintain 831 acres of fire-adapted flatwoods natural communities within a 2 to 4-year burn return interval	Acres burned	LT	$15,900	$159,000
Objective C	Maintain 413 acres of fire-adapted scrub natural communities within an 8 to 10-year burn return interval	Acres burned	LT	$4,000	$40,000
Objective D	Conduct habitat/natural community improvement in mesic flatwoods to increase the number of acres maintained by prescribed fire	Acres treated	LT	$8,000	$80,000
GOAL 5.2	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 vegetative and fire management decisions that will help the Rugels false paw paw and other listed plant species populations thrive.	Acres of suitable habitat	ST	-	-
Objective B	Continue to make vegetative and fire management decisions that will help the Florida Scrub Jay population maintain stability or increase.	Acres of suitable habitat	ST	-	-
Objective C	Continue to make vegetative and fire management decisions that will help the gopher tortoise population maintain stability.	Acres of suitable habitat	ST	-	-
Objective D	Monitor for population changes in listed animal and plant species utilizing District staff and volunteers such as the Florida Native Plant Society.	Populations monitored	LT	$1,800	$18,000
Objective E	Contract with FNAI to conduct natural community and imperiled species, including wading bird surveys, mapping updates before the next land management plan update.	Contract completed	LT	-	$12,000
GOAL 5.3	Provide public access and recreational opportunities.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Continue to maintain public access and recreational opportunities.	Sites maintained	LT	-	-
GOAL 5.4	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	Install and maintain low water crossings and culverts as appropriate.	Features installed and/or maintained	LT	$2,000	$20,000
GOAL 5.5	Remove invasive plants and animals and conduct needed maintenance/control	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Plan to treat at least 39 acres of invasive plants annually.	Acres treated	ST	Included in Objective C	Included in Objective C
Objective B	Maintain a database on any locations of invasive exotic plant species	Database maintained	LT	-	-
Objective C	Treat invasive exotic plant species and prevent further infestations	Acres treated	LT	$4,000	$40,000

Objective D	Monitor the Property wide trends of invasive species population size.	Change in acres treated	LT	-	-
Objective E	Continue to monitor the hog population and institute control measures on feral hogs, where needed using Special Use Authorizations	Number of hogs removed	LT	-	-
GOAL 5.6	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	Maintain existing parking areas and kiosks	Facilities maintained	LT	$100	$1,000
Objective B	Maintain the approximately 13 miles of roads.	Miles maintained	LT	$300	$3,000
Objective C	Maintain, improve, or repair 9 miles of District maintained trails.	Trails maintained	LT	$2,000	$20,000
Objective D	Maintain, repair, or replace the weather and camp shelters on the Brickyard Slough tract.	Facilities maintained	LT	$1,000	$10,000
GOAL 5.7	Protect, preserve, and maintain the cultural resources of the Preserve.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Annually monitor, protect, and preserve the 16 documented site in accordance with DHR procedures.	Sites protected and monitored	LT	-	-
Objective B	Ensure all known sites are recorded in the DHR Master Site file.	All sites recorded	LT	-	-
Objective C	Work with the DHR and the FPAN to document any new sites and train additional staff in Archaeological Resource Monitoring	Site protected	LT	-	-
GOAL 5.8	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 5.9	Provide information to the public regarding management activities, particularly prescribed burns.	**MEASURE**	**PLANNING PERIOD**	**ESTIMATED COST (per year)**	**ESTIMATED COST (10 year)**
Objective A	Ensure activities that occur on the Property are reported at the annual Recreational Public Meeting and provide the public an opportunity for comment.	Number of Recreational Public Meeting completed	LT	-	$1,000
Objective B	Convene a MRT every 5 years to ensure the land management plan is being followed	Number of Management Review Teams completed	LT	-	$1,000
ESTIMATED COST TOTALS				$39,100	$405,000

7. Resource Management Challenges and Strategies

The greatest resource management challenge at the Property is the extent and persistence of invasive species on site as well as ability to apply prescribed fire consistently.

Due to past cultural practices as well as climate change, invasive species have established a foothold despite repeated management efforts. The District will continue to focus on manage of invasive species as well as develop a restoration plan for the most heavily infested areas. In addition to dedicated invasive plant management District staff, regional land management are now involved with invasive species herbicide applications. This expansion of responsibilities should reduce the existing populations as well as provide greater early detection, rapid response capabilities.

Smoke management from prescribed fires is a challenge at the Property, as it is throughout Florida. Despite the Property's rural setting, its proximity to the Sanford International Airport, the City of Sanford, the City of Deltona and several State Roads create a very narrow smokeshed. This results in the need to scale down the size of the burns which may increase the fire return intervals due to limited annual burn days. Fire surrogates will be used to reduce fuel structure and aid in maintaining the optimal fire and disturbance regime for the natural communities on the Property. However, the surrogates to prescribed fire are significantly more expensive per acre.

Additionally, land management personnel have to cover multiple counties, conservation areas and duties. In response, in 2023 the District is adding additional positions to help ensure the District lands are providing the desired benefits and are being maintained in accordance with their land management plans.

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

The District contracts and oversees private vendors to accomplish fuels management, invasive species control and recreation maintenance. FWC is a management partner for the Lake Monroe WMA.

9. Accomplished Objectives from 2012 Management Plans

Resource Management Goals and Objectives	Progress
WATER RESOURCE PROTECTION	
Conduct maintenance and incidental or emergency repair of water resource structures as necessary.	100%, on-going
Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	100%, on-going
Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	100%, on-going
Repair or replace structure #78 to improve condition and functionality of this water structure.	100%, repaired 2013 & 2023

Repair or replace structure #85 to improve condition and functionality of this water structure.	100%, repaired 2013
FLORA AND FAUNA	
Collect species occurrence data and incorporate into the land management biological database.	100%, on-going
Adhere to the Wood Stork habitat management guidelines established by USFWS.	100%, on-going
Adhere to the USFWS National Bald Eagle Management Guidelines as well as locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	100%, on-going
Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	100%, as needed
Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the recovery of FSJ populations.	100%, on-going
Conduct annual FSJ banding activities.	100%, as needed
Conduct annual JayWatch monitoring efforts.	100%, on-going
Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	100%, on-going
Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	100%, on-going
Expand population of Rugel's false pawpaw from current location to other portions of the property.	0%, population is stable but not expanding to the point where transplanting is possible
NATURAL COMMUNITY MANAGEMENT	
Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	100%, on-going
Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	0%, project was never initiated
Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	100%, on-going
Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	100%, on-going
Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	100%, on-going

Maintain FSJ Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	100%, on-going; housed in a geodatabase
FIRE MANAGEMENT	
Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Conservation Area Fire Management Plan.	100%, on-going
Develop annual burn plans by September 1st.	100%, on-going
Conduct semi-annual fireline maintenance.	100%, on-going
EXOTIC SPECIES	
Document, report, and treat exotic species.	100%, on-going
Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	100%, on-going
Upload infestation data into land management database.	100%, on-going
Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	75%, on-going
CULTURAL RESOURCES	
Identify and report any new sites.	100%, on-going
ACCESS	
Maintain parking area, signs, kiosk, inclement weather shelter, campsites, gates, road, and trails.	100%, on-going
Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	100%, on-going
Maintain current information in recreation guide, trail guides, kiosk, and District website.	100%, on-going
Maintain portable restroom service contract.	100%, on going
Mow recreational trails and conduct trail blazing and trimming maintenance.	100%, on-going
ENVIRONMENTAL EDUCATION	
Continue to offer educational opportunities if possible and subject to staff and budget availability.	100%, on-going

SECURITY	
Coordinate with local law enforcement and FWC for security needs.	100%, on-going
Maintain contract with private security firm.	100%; contract terminated in 2023
Develop monthly, prioritized security needs and provide to contracted security firm.	100%; contract terminated in 2023
Conduct biennial boundary and conservation line posting maintenance.	100%, on-going
LAND ACQUISITION	
Evaluate adjacent properties and in-holdings for potential acquisition.	100%, as needed
Refine boundary and parcel data information and map layers.	100%, as needed
COOPERATIVE AGREEMENTS, LEASES, EASEMENTS, AND SPECIAL USE AUTHORIZATIONS	
Administer easements, agreements, leases, and SUAs	100%, on-going

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.

11. Revenue and Expenses

In an average year, the revenue generated by the Property is approximately $35,204 and the expenses, including District staff time, are approximately $49,112. Table 2 summarizes the projected expenses and revenue over the next ten years incurred by the District. In addition, the District estimates the value of the ecological goods and services provided by the approximately 6,000 acres of wetlands on the Property at over $36 million per year. These goods and services include flood protection, disturbance regulation, water supply, nutrient attenuation, carbon sequestration, habitat for sport and commercial species and recreation (Costanza et al. 1997).

Table 5: Projected Expenses and Revenue at Lake Monroe Conservation Area 2023-2033

PROJECTED EXPENSES

Activity	Unit	Total Expense Over 10 Years	Agency Responsibility
Invasive plant management	390 acres	$40,000	District
Prescribed Fire	1,300 acres	$199,000	District
Florida Scrub Jay monitoring	FSJ population areas	$18,000	District/JayWatch
Natural Community and Imperiled Species Mapping	Entire Property	$12,000	District/FNAI
Road Maintenance and Mowing	13 miles	$20,000	District
Hydrologic improvement/ maintenance	Culverts/low water crossings installed/ maintained	$20,000	District
Recreation Maintenance	9 trail miles/1 parking area/2 shelters	$14,000	District
Fuel Reduction Mowing	200 acres	$80,000	District
Public Outreach	Management Review Team	$2,000	District
Staff time	3,000 hours	$86,119	District
Total		**$491,119**	

PROJECTED REVENUE

Activity	Unit	Total Revenue Over 10 Years	Agency Responsibility
Brickyard Slough Tract Cattle Lease	Annual Lease Payment	$57,624 (2023-2028 lease expiration)	District
Kratzert Tract Cattle Lease	Annual Lease Payment	$128,000 (2023-2027 lease expiration)	District
Total		**$185,624**	

12. References

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U.S. Fish and Wildlife Service (USFWS). 2018. *Rugel's Pawpaw, 5-Year Review: Summary and Evaluation.*

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Appendix A – Lake Monroe Mitigation Bank Release Agreement

27441

SJRWMD: wmill on 9/10/2012 3:13:49 PM

CREDIT RELEASE AND MAINTENANCE ACCEPTANCE AGREEMENT BETWEEN THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT AND THE FLORIDA DEPARTMENT OF TRANSPORTATION FOR THE LAKE MONROE MITIGATION BANK

THIS AGREEMENT, made this 4 day of JUNE 2012, by and between the **State of Florida, Department of Transportation**, hereinafter referred to as the **"Department,"** and the **St. Johns River Water Management District**, hereinafter referred to as the **"District;"**

WITNESSETH:

WHEREAS, the District issued mitigation bank permit no. 4-127-23097-1 (Legacy No. 4-127-0284), hereinafter referred to as the **"Permit,"** to the **Department** for the project commonly known as Lake Monroe (Beck's Ranch) Mitigation Bank, hereinafter referred to as the **"Bank;"** and

WHEREAS, the **Permit** requires the **Department** to perform certain activities and pay certain maintenance funds to the **District** in order for the **District** to assume long-term operation and maintenance of the **Bank** and for the **District** to release credits the **Department** is entitled to under the **Permit**; and

WHEREAS, on April 13, 2007, the Department paid to the District the sum of Ninety-Nine Thousand Seven Hundred and no/100 dollars ($99,700.00) for the long-term maintenance of the **Bank,** hereinafter referred to as the **"Maintenance Fund;"** and

WHEREAS, the **Department** and **District** are in disagreement as to the activities the **Department** must perform and the total amount of maintenance funds the **Department** must pay under the **Permit**; and

WHEREAS, the **Department** and the **District** desire to settle the disagreement, liquidate the amount the **Department** must pay, confirm the **District's** assumption of maintenance and release the remaining credits under the **Permit**;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the **Department** and the **District** hereby agree as follows:

1. Additional to the **Maintenance Fund**, the **Department** shall pay to the **District** the sum of Twenty-Seven Thousand and no/100 dollars ($27,000.00) for the repair of culverts and berms located at the Bank.

2. Upon receipt of the payment amount set forth in paragraph 1, the District shall release 48.68 credits of the remaining 69.9 credits and make them immediately available for use by the **Department**.

3. The **Department** voluntarily surrenders the remaining 21.22 credits that the **District** has not released.

4. The **Department** voluntarily releases all interest in the **Maintenance Fund**.

5. Upon execution of this Agreement and receipt of the payment amount set forth in paragraph 1, the District shall be deemed to have accepted all operation and maintenance responsibility for the **Bank**, and the **Department** is forever released from any operation and/or maintenance responsibilities for the **Bank**.

IN WITNESS WHEREOF, the **Department** and the **District** have set their hands and seals the day and year first written.

Signatures Follow On Next Page

S:\RWMD\ wmuller 9/10/2012 5:13:49 PM

St. Johns River Water Management District

By: _____
Name: Mike Register
Title: Director,
Division of Regulatory Services

Reviewed:
_____
Assistant General Counsel

State of Florida, Department of Transportation

By: _____
Name: FRANK J. O'DEA, P.E.
Title: DIRECTOR-TRANSPORTATION DEVELOPMENT

Reviewed:
_____
Department Attorney

FW: Culvert repair for FDOT mitigation bank site FW: Lake Monroe Mitigation Bank - Final Signed Agreement

Leslie Svendsen
Sent: Tuesday, August 21, 2012 10:55 AM
To: Wendy Miller
Cc: William Bossuot; Steven R Miller; Peter Henn; Mary-Lou Pickles; Missy Licourt; Cristie Lee
Attachments: Lake_Monroe_Agreement.pdf (206 KB)

Wendy,

Can you please scan this agreement into CIS so it will assign a revenue contract number that we can use for the grant #? Since these funds are coming from FDOT, we can not record the $27,000 as Land Management Revenue, but instead will need to record to the FDOT funding source account 72-00-53-4530-0700-04000.

According to an email I received from Steve Miller, the culvert repair is going to occur next fiscal year and the work will be performed in-house plus materials. The expenditures will need to go to the correct funding source in fund 72. We can do an interfund transfer for the salary and benefits costs out of general fund, however we will need to know when the work is being performed.

Please let me know if you have any questions.

Thanks,
Leslie

From: Madeline Northcutt
Sent: Tuesday, June 19, 2012 5:59 PM
To: Wendy Miller
Cc: Cristie Lee; Leigh Rion
Subject: FW: Culvert repair for FDOT mitigation bank site FW: Lake Monroe Mitigation Bank - Final Signed Agreement

Wendy...here's the info Bill sent to me, FYI. Thanks.

Madeline

From: William Bossuot
Sent: Tuesday, June 19, 2012 5:31 PM
To: Madeline Northcutt
Cc: Cristie Lee
Subject: Culvert repair for FDOT mitigation bank site FW: Lake Monroe Mitigation Bank - Final Signed Agreement

Hello Madeline.

Your question made the rounds today and I believe we have an answer.

Lisa was correct, the communication was in reference to the Lake Monroe Mitigation Bank . The Lake Monroe Agreement attached to this email should (hopefully) give you all the needed background.

The $27,000. is for repairs needed to the bank infrastructure (culverts, berms, etc.) that will be undertaken by the District but paid for by the Department. Once these funds are brought into the budget they should be

directed to Cristie Lee for inclusion in the Division of Operations and Land Resources' budget.

I hope this explanation helps.

Bill

From: Michelle Reiber
Sent: Tuesday, June 19, 2012 3:19 PM
To: Peter Henn; Steven R Miller; William Bossuot; Gian Baslil
Cc: Kealey West; Reid Hilliard
Subject: FW: Lake Monroe Mitigation Bank - Final Signed Agreement

Pete, Steve, Bill, and Gian,
Here is the agreement I referenced in my previous email. Let me know if you have questions.

Reid,
I know you have not been completely in the loop on this once since it was primarily before your time. Please read the agreement to determine if we have what we need in order to complete the requested credit release. The total potential credits will also need to be adjusted on the ledger in accordance with the agreement. DOT has a need for the credits so they would like to have a release ASAP. Please inform Hannah when the ledger has been updated. Thank you and let me know if you have any questions.

Michelle

From: Hernandez, Hannah [mailto:Hannah.Hernandez@dot.myflorida.com]
Sent: Monday, June 04, 2012 2:05 PM
To: Michelle Reiber; Kealey West; Kenneth John
Cc: Muench, Patrick; Tonjes, Stephen
Subject: Lake Monroe Mitigation Bank - Final Signed Agreement

All,

Good afternoon; I have great news. I received the final signature this morning for the attached agreement. A big thank you to the SJRWMD staff for helping to finalize this agreement! Hard copy should be put in the mail by the end of the week along with the check (assuming it gets cut by Thursday - our fiscal department is working on that task right now).

Michelle,

I was planning on sending you a copy but was not sure if I needed to cc anyone else or send the actual check to an SJRWMD administrative staff member? Once SJRWMD receives the check - how soon can your group update the official ledger? I was hoping within a week or so - Last week I learned that we have an unanticipated immediate need for some of mitigation credits within Basin #18.

Thanks,

Hannah Hernandez

District Permit Coordinator

State of Florida - Department of Transportation

719 South Woodland Boulevard

DeLand, Florida 32720

Email: hannah.hernandez@dot.myflorida.com

Phone: 386-943-5601

Fax: 386-736-5302

Appendix B - Trustees Lease

(1) 3803 ✓

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND

OF THE STATE OF FLORIDA

LEASE AGREEMENT

Lease No. 3803

THIS LEASE AGREEMENT, made and entered into this 19th day of September, 1989, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT FUND OF THE STATE OF FLORIDA hereinafter referred to as "LESSOR", and the GOVERNING BOARD OF THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT, hereinafter referred to as "LESSEE."

LESSOR, for and in consideration of mutual covenants and agreements hereinafter contained, does hereby lease to said LESSEE, the lands described in paragraph 2 below, together with the improvements thereon, and 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, Department of Natural Resources.

2. DESCRIPTION OF PREMISES: The property subject to this lease, is situated in the County of Brevard, 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 Sept. 19, 1989 and ending on Sept. 18, 2039, 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 for resource based public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 253.023(11), Florida Statutes, and for the purpose of adding the leased premises to an existing Type II Wildlife Management Area Agreement with the Florida Game and Fresh Water Fish Commission along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph 8 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 conformity with this lease.

7. ASSIGNMENTS AND SUBLEASES: 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. However, notwithstanding the foregoing, nothing herein shall be construed to prevent LESSEE from adding the leased premises to the existing Type II Wildlife Management Area Agreement with the Game and Fish Commission.

8. MANAGEMENT PLAN: LESSEE shall prepare and submit a Management Plan for the leased premises in accordance with Chapters 18-2 and 18-4, Florida Administrative Code, within 12 months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands. 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. LESSEE shall provide LESSOR with an opportunity to participate in all phases of preparing and developing the Management Plan for the leased premises. The Management Plan shall be submitted to LESSOR in draft form for review and comments within ten months of the effective date of this lease. LESSEE shall give LESSOR reasonable notice of the application for and receipt of any state, federal or local permits as well as any public hearings or meetings relating to the development or use of the leased premises. LESSEE shall not proceed with development of said leased premises including, but not limited to, funding, permit applications, design or building contracts until the Management Plan required herein has been submitted and approved. Any financial commitments made by LESSEE which are not in compliance with the terms of this lease shall be done at LESSEE'S own risk. 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 at least every five (5) years. 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.

9. EASEMENTS: All easements including, but not limited to, utility easements are expressly prohibited without the prior written approval of LESSOR. Any easement not approved in writing by LESSOR shall be void and without legal effect.

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

11. 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 and removable improvements 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.

12. INSURANCE REQUIREMENTS: During the term of this lease LESSEE shall procure and maintain policies of fire, extended risk, and liability insurance coverage. The extended risk and fire insurance coverage shall be in an amount equal to the full insurable replacement value of any improvements or fixtures located on the leased premises. The liability insurance coverage shall be in amounts not less than $100,000.00 per occurrence and $200,000.00 per accident for personal injury, death, and property damage on the leased premises. Such policies of insurance shall name LESSOR, the State of Florida and LESSEE as co-insureds. LESSOR shall submit written evidence of having procured all insurance policies required herein prior to the effective date of this lease and

shall submit annually thereafter, written evidence of maintaining such insurance to the Bureau of Uplands Management, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399. LESSEE shall purchase all policies of insurance from a financially-responsible insurer duly authorized to do business in the State of Florida. Any certificate of self-insurance shall be issued or approved by the Insurance Commissioner, State of Florida. The certificate of self-insurance shall provide for casualty and liability coverage. LESSEE shall immediately notify LESSOR and the insurer of any erection or removal of any building or other improvement on the leased premises and any changes affecting the value of any improvements and shall request the insurer to make adequate changes in the coverage to reflect the change in value. LESSEE shall be financially responsible for any loss due to failure to obtain adequate insurance coverage, and the failure to maintain such policies or certificate in the amounts set forth shall constitute a breach of this lease.

13. INDEMNITY: LESSEE hereby covenants and agrees to investigate all claims of every nature at its own expense, and to indemnify, protect, defend, hold and save harmless the State of Florida and LESSOR from any and all claims, actions, lawsuits and demands of any kind or nature arising out of this lease to the extent provided by law.

14. 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 ad valorem taxes and drainage and special assessments or taxes of every kind an all mechanic's or materialman's liens which may be hereafter lawfully assessed and levied against the leased premises if any.

15. 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 or conditions, but the same shall continue in full force and effect, and no waiver of LESSOR of any 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.

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

17. 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.

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

19. MINERAL RIGHTS: This lease does not cover petroleum or petroleum products or minerals and does not give the right to LESSEE to drill for or develop the same.

20. 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 during the term of the lease. 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 the provisions of Chapter 119, Florida Statutes.

21. CONDITION OF PREMISES: LESSOR assumes no liability or obligation to LESSEE with reference to the conditions of the leased premises. The leased premises herein are leased by LESSOR to LESSEE in an "as is" condition, with LESSOR assuming no responsibility for the care, repair, maintenance or improvement of the leased premises for the benefit of LESSEE.

22. COMPLIANCE WITH LAWS: LESSOR 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.

23. NOTICE: 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 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: Department of Natural Resources
Division of State Lands
Bureau of Uplands Management
3900 Commonwealth Boulevard
Tallahassee, FL 32399

LESSEE: St. Johns River Water Management District
Director, Division of Land Acquisition
Highway 100 West
P. O. Box 1429
Palatka, FL 32178-1429

24. 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 (60) days of such notice. In the event LESSEE fails to remedy the breach to the satisfaction of LESSOR within sixty (60) 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 and attorneys' fees or maintain this lease in full force and effect and exercise all rights and remedies herein conferred upon LESSOR.

25. DAMAGE TO THE PREMISES: LESSEE agrees that it will not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises, any act which may result in damage or depreciation of value to the leased premises, or any part thereof. LESSEE shall not dispose of any contaminants including, but not limited to, hazardous or toxic substances, chemicals or other agents used or produced in LESSEE'S operations, on the leased premises or on any adjacent state land or in any manner not permitted by law.

26. 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, LESSEE shall give written notification to the Bureau of Uplands Management, Division of State Lands, Department of Natural Resources, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399 at least six (6) months prior to the release of any or all 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 the 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 termination or expiration of this lease, all 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 building on the leased premises shall be turned over to the Division. If the improvements do not meet all conditions as set forth in paragraphs 19 and 36 herein, LESSEE shall pay all costs necessary to meet the prescribed conditions.

27. BEST MANAGEMENT PRACTICES: LESSEE shall implement applicable Best Management Practices for all activities conducted under this lease in compliance with paragraph 18-2.004(1)(d), Florida Administrative Code, which have been selected, developed, or approved by LESSOR or other land managing agencies for the protection and enhancement of the leased premises.

28. 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 10D-54, Florida Administrative Code, for the purpose of obtaining a public lands arthropod control plan for such lands.

29. PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: Fee title to the leased premises is held by LESSOR. LESSEE shall not do or permit anything to be done with 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.

30. PARTIAL INVALIDITY: If any term, covenant, condition or provision of this lease shall be ruled by a court of competent jurisdiction, to be invalid, void, or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

31. 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 Department of State, Division of Historical Resources.

The Management Plan prepared pursuant to Chapters 18-2 and 18-4, Florida Administrative Code, shall be reviewed by the Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the archeological and historic sites and properties on the leased premises.

32. SOVEREIGNTY SUBMERGED LANDS: This lease does not authorize the use of any lands located waterward of the mean or ordinary high water line of any lake; river, stream, creek, bay, estuary, or other water body or the waters or the air space thereabove.

33. DUPLICATE ORIGINALS: This lease is executed in duplicate originals each of which shall be considered an original for all purposes.

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

35. MAINTENANCE OF IMPROVEMENTS: LESSEE shall maintain the real property contained within the leased premises and the improvements located thereon, in a state of good condition, working order and repair including, but not limited to, keeping the leased premises free of trash or litter, meeting all building and safety codes in the location situated, maintaining the planned improvements as set forth in the approved Management Plan and maintaining any and all existing roads, canals, ditches, culverts, risers and the like in as good condition as the same may be on the effective date of this lease provided, however, that any removal, closure, etc., of the above improvements shall be acceptable when the proposed activity is consistent with the goals of conservation, protection and enhancement of the natural and historical resources within the leased premises and with the approved Management Plan.

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

37. 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.

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

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

Virginia A. Curry
Witness

By: _____ (SEAL)
Director, Division of State Lands, Department of Natural Resources

Daniel T. Crabb
Witness

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 19th day of September, 1989, by Percy W. Mallison, Jr., as Director, Division of State Lands, Department of Natural Resources.

_____ (SEAL)
NOTARY PUBLIC

My Commission Expires:

Notary Public, State of Florida
My Commission Expires July 25, 1992

Approved as to Form and Legality

By: _____
DNR Attorney

GOVERNING BOARD OF THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

_____ (SEAL)
JOHN L. MINTON, Chairman

ATTEST:

_____ (SEAL)
HENRY DEAN, Assistant Secretary

"LESSEE"

STATE OF FLORIDA
COUNTY OF PUTNAM

The foregoing instrument was acknowledged before me this 15th day of August, 1989, by John L. Minton and Henry Dean, Chairman and Assistant Secretary, respectively, of the Governing Board of the St. Johns River Water Management District.

_____ (SEAL)
NOTARY PUBLIC

My Commission Expires:

Notary Public, State of Florida
My Commission Expires May 5, 1991

APPROVED AS TO FORM:

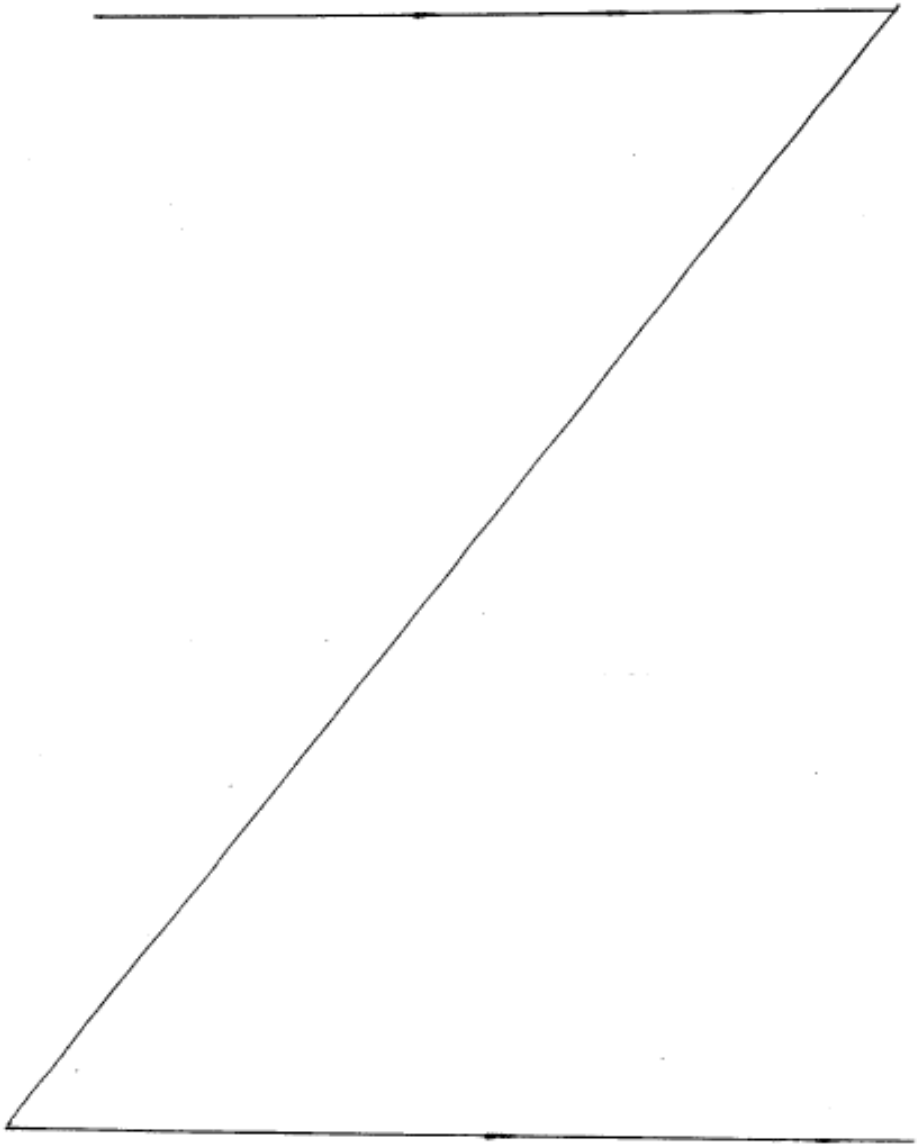
_____
JOHN W. WILLIAMS, Attorney
Office of Legal Services
S.J.R.W.M.D.

EXHIBIT A

LEGAL DESCRIPTION OF THE LEASED PREMISES

All those lands lying in Sections 6, 7, 18, 19 and 30, Township 27 South, Range 36 East, Brevard County, Florida.

Excepting therefrom any land lying below the ordinary high water line of Lake Washington.



Florida Department of
Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

September 16, 2008

Mr. J.B. Miller
Senior Land Resource Planner
Division of Land Management
St. Johns River Water Management District
4049 Reid Street
Palatka, FL 32178

RE: **Amendment No. 1 to Lease Number 3803**
Lake Washington & Lake Monroe

Dear Mr. Miller:

Enclosed is a fully executed original of Amendment No. 1 to Lease Number 3803 for your records. If you have any questions, please contact me at (850) 245-2720 extension 4752 or by emailing me at david.fewell@dep.state.fl.us.

Sincerely,

David Fewell
Land Acquisition Agent
Bureau of Public Land Administration
Division of State Lands

dlf/
Enclosures (Instrument)
Job # 15225

ATL1

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

AMENDMENT NUMBER *ONE* TO LEASE NUMBER *3803*
LAKE WASHINGTON AND LAKE MONROE

THIS LEASE AMENDMENT is entered into this 16th day of SEPTEMBER, 2008, by and 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";

W I T N E S S E T H

WHEREAS, LESSOR, by virtue of Section 253.03, Florida Statutes, holds title to certain lands and property for the use and benefit of the State of Florida; and

WHEREAS, on September 19, 1989, LESSOR and LESSEE entered into Lease Number *3803*; and

WHEREAS, LESSOR and LESSEE desire to amend the lease to add sovereign lands to the leased premises.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, the parties hereto agree as follows:

1. Lease Number *3803* is hereby amended to include sovereignty lands located in Volusia County, Florida, as set forth in Exhibit "A" attached hereto, and by reference made a part hereof.

2. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of the Lease Number *3803*, except as amended hereby, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE as of the date of this amendment.

3. It is understood and agreed by LESSOR and LESSEE that this Amendment Number *One* to Lease Number *3803* is hereby binding upon the parties hereto and their successors and assigns.

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

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

Witness

By: Gloria C. Barber (SEAL)
GLORIA C. BARBER, OPERATIONS AND MANAGEMENT CONSULTANT MANAGER, BUREAU OF PUBLIC LAND ADMINISTRATION, DIVISION OF STATE LANDS, STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Dave Fewell
Print/Type Witness Name

Witness

Judy Woodard
Print/Type Witness Name

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 16th day of September, 2008, by Gloria C. Barber, Operations and Management Consultant Manager, 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. She is personally known to me.

DAVID L FEWELL MY COMMISSION EXPIRES February 28, 2012 #DD 763208 NOTARY PUBLIC, STATE OF FLORIDA

Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

Approved as to Form and Legality

By: DEP Attorney

ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT

Witness

By: _____ (SEAL)
Kirby B. Green III, Executive Director
St. Johns River Water Management District

William J.B. Miller
Print/Type Witness Name

Witness

SHARON G. CARLIN
Print/Type Witness Name

"LESSEE"

STATE OF FLORIDA
COUNTY OF PUTNAM

The foregoing instrument was acknowledged before me this 5th day of September, 2008, by Kirby B. Green III as Executive Director, on behalf of the St. Johns River Water Management District. He/she is personally known to me or has produced _____ as identification.

_____
Notary Public, State of Florida

SHARON G. CARLIN
MY COMMISSION # DD 336830
EXPIRES: October 29, 2008
Bonded Thru Notary Public Underwriters

SHARON G. CARLIN
Print/Type Notary Name

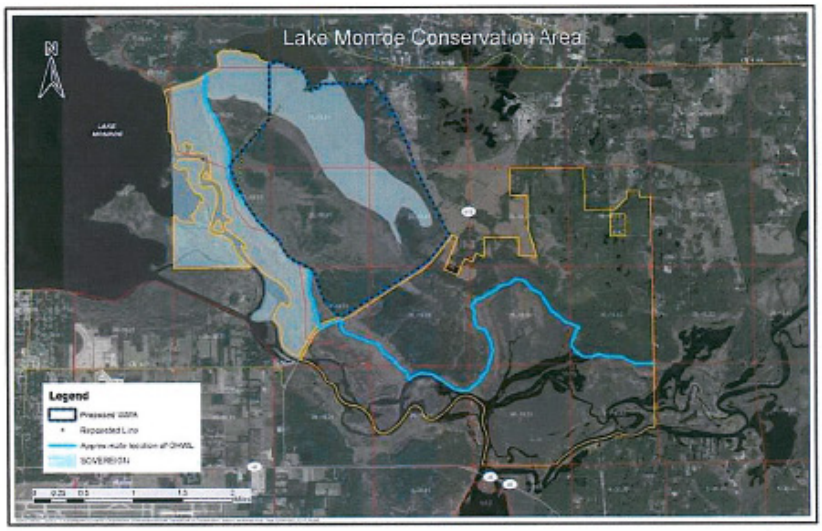
Commission Number: DD336830

Commission Expires: 10/29/08

Approved as to Form and Legality

By: _____
William Abrams, Asst. General Counsel
St. Johns River Water Management District

EXHIBIT "A"



Appendix **C – Land Use Consistency Letter**

From:	Patricia Smith
To:	Christopher Kinsley
Subject:	Lake Monroe Land Management Plan
Date:	Tuesday, May 2, 2023 3:42:30 PM
Attachments:	image001.png

Chris –

Please accept this email as confirmation that the Lake Monroe Conservation Area is zoned Conservation and has a future land use designation of Conservation. The facility is consistent with our zoning ordinance and our comprehensive plan.

Trish Smith, AICP
Planning Manager
Planning and Development Services
psmith@volusia.org
386.736.5959, x 12943

AICP CERTIFIED

Appendix D – Management Advisory Group Summary

On April 27, 2023, a meeting of the Lake Monroe Conservation Area Management Advisory Group (MAG) was convened at the Osteen Civic Center, 165 New Smyrna Rd. in Osteen, FL. The attendees and their affiliations are as follows: Justin Ellenberger, Florida Fish and Wildlife Conservation Commission (FWC); Donald King, Florida Forest Service (FFS); Mark Rizzo, Conservation Florida (CF); Kate Muldoon, Florida Native Plant Society, Paw Paw Chapter (FNPS); Heather Chasez, Florida Department of Transportation (FDOT); Kim Seidl, Florida Department of Environmental Protection (FDEP); Dean Gemeinhardt, Volusia County Land Management (VCLM). Danny Rollins of the Volusia County Council; Danny Tilton, cattle lessee; Jim Lefis, cattle lessee; as well as Gabbie Milch, Audubon Florida/Seminole Soil and Water Conservation District were invited but were unable to attend. After a presentation including the overview of the land management plan update and its goals and objectives, a roundtable discussion was held with the members of the MAG. A summary of their statements as well as District responses in italics during the roundtable discussion are as follows:

- FFS- Are there any new acreage goals for prescribed fire in the plan? *No, only 19 acres are not in rotation on the Conservation Area.*
- FWC-Would like to see continued use of mechanical treatments in conjunction with prescribed fire. *Noted. The District will continue this practice.*
- VCLM-The use of the cattle lessees for land management activities, particularly mechanical treatments, is commended. Continue and expand mechanical treatment of the hydric hammocks. *Noted.*
- FNPS-Would like to see expanded or improved bike paths and more public relations to increase use of the Property. *Improved bike paths are not a normal recreation amenity on District Conservation Areas. We will work on improved signage on SR 415.*
- FDEP-Appreciate wholistic view of management actions. Include any desired structure maintenance in land management plan, including but not limited to the potential to replace the inclement weather shelter. *Noted and will include. Consider also including operation schedule into land management plan as well.*
- FDOT-Appreciate the attention to detail in management as well as a recreation user. Glad that the District is continuing to monitor the Rugels Paw Paw. *Thank you!*
- CF- As a neighbor to the Conservation Area, please include D Ranch on maps depicting conservation lands. *Will update maps to include D-Ranch.*
- FFS-Second including any anticipated recreation maintenance or replacements in the land management plan. Will avoid needing to amend the plan if these events are needed. *Noted and will include.*
- FWC-Recommend continued monitoring for threatened and endangered species. Consider surveying for stripped newts. *We will contact an existing SUA holder that has done stripped newt surveys on some northern Conservation Areas to facilitate this.*
- VCLM-Any consideration given to water related uses; maybe a canoe launch? *There are no*

access roads on the Conservation Area that are suitable for public access. In addition, the seasonal changing water levels would make a canoe launch unusable for several months out of the year.

- FNPS- Are we thinking about climate change- need to address the issue in the land management plan, even briefly. *Believe it is mentioned in the plan, but we will ensure that it is. In addition, we will mention our resiliency efforts as an agency.*

- FDEP- Is the state lands lease addressed in the plan? *Yes, in Appendix B as well as in the body of the plan.*

- CF-Does the District conduct vegetation monitoring for habitat structure. *No specific monitoring projects, at this point. We have used drones for high resolution habitat imagery and filtered out areas of open sand to show potential acorn caching sites for Florida scrub jays. Possibly an intern or volunteer project as well.*

- FWC- Is the "cove" on the Brickyard Slough tract included in the sovereign submerged conservation line posting? *Asked for location clarification; it is.*

- VCLM- Is the Conservation Area slated to be a gopher tortoise recipient site? *No. There is not 40 acres of contiguous soil type as defined by FWC's gopher tortoise guidelines. In addition, the gopher tortoise population on the Property is healthy and stable and becoming a recipient site could change that balance.*

- FNPS- Is the research at the Thornhill cultural site complete and would you consider opening it to the public? *The research is complete, and it is open to the public but there is no developed access. Our greatest concern is preservation of this very important site and site security is difficult in that area.*

- FDEP-Found typo in plan but language reads correct. *Shown typo and will be corrected.*

- CF-Would like to partner with the District to utilize both the D-Ranch and the Property for environmental education and for fire management. *Noted and agreed! We will send the North-Central Florida Prescribed Fire Memorandum of Understanding to you.*

- FWC-Increase recreational signage to include signage on the water and along State Rd. 415. *Noted and will evaluate specific areas to improve signage.*

- FNPS-What is the chemical herbicide use at the Property and have the long term effects on water quality been evaluated? *The District adheres to the chemical label as well as UF IFAS recommendations. The District uses an integrated approach to invasive species management that includes chemical, mechanical and biological controls.*

- FDEP-How are the normal high-water lines determined the on the Property? *We use the vegetation change from grass to treed. This generally follows the three foot contour line. Wanted something that doesn't change much and is straightforward to post and enforce.*

- CF-May want to look into permitting language in the sovereign submerged land lease to ensure that there are not any issues with new structures or repair of structures. *Noted and will look into.*

Appendix **E** – Public Meeting Summary

On April 27, 2023, a public hearing was held from noon to 1:30 pm at the Osteen Civic Center, 165 New Smyrna Blvd in Osteen, FL to solicit input as well as provide a question-and-answer session regarding the Lake Monroe Conservation Area land management plan update. Two members of the public and four staff members from the District attended. After a presentation including the overview of the land management plan and the goals and objectives, a comment period was convened followed by a question-and-answer session. The District also received several comments via email. A summary of the comments and questions as well as District responses in italics during the comment and question and answer period are provided below. The notices, posted in newspapers, posted on site and the announcements at public meeting as provided within this appendix as well.

In person comments and questions:

- Are e-bikes allowed? *Yes. The District is in the process of refining its rules to mirror that of FWC's. With that only a certain class of e-bike, the lowest speed, pedal assist bike will be allowed on the multi-use trails on the Property. Gas powered dirt bikes are not allowed.*

- Is the work that the Florida Public Archaeology Network has conducted on the Property contracted? *No, they are working under a grant to document sites that can be affected by climate change/sea level rise.*

- Why are wild hogs removed? *They can be quite destructive to ecosystems, in particular wetlands. They can change the hydrology of a site and affect its species composition.*

- The Lake Bethel ditch runs from the D-Ranch to the Property. Would filling this ditch be a partnership possibility with the District? *Yes, we can look into cost-share or resiliency funds.*

Emailed questions and comments (edited for typos but not content)

- Why can't we bow hunt wild hogs on the Kratzert tract all year? We as hunters pay a $26 a year permit to only be able to hunt for maybe 6 months. *FWC is the administrator and rule developer for the hunts on Lake Monroe WMA. They make the rule suggestions to the District, and we comment on them. It is rare for us to deviate much from the common WMA rules, one of which is hog hunting coinciding with deer and small game season. Except for Kissimmee Chain of Lakes WMA, no WMA's in Florida have year-round hog hunting. The off-season also allows for a balance in recreational activities and provides an opportunity for land management activities to not disturb hunters. There is an opportunity to hunt under statewide regulations waterward of the signed and blazed conservation line along the St. Johns River and Lake Monroe. This line demarks the sovereign land within Lake Monroe Conservation Area.*

- I was so worried there might have been big changes to the property in the plan, and so glad that doesn't seem to be happening. I hadn't been on the property for years and those times I was on horseback and I was very worried about the amount of feral hogs we saw. My husband and I hiked to the river Sunday and I was very relieved not to see much signs of the hogs and we really enjoyed our hike. I am certainly going to do my best to make it to that

April 27 meeting. Again thank you so much for this! *We are very glad you enjoy Lake Monroe Conservation Area and thank you for reading the land management plan! There is a lot of great resource management occurring there and we aim not to change that. Hogs continue to be an issue on many of our Conservation Areas and the District is trying its best to keep up with their management as we do with all invasive species affecting Florida. It's been beautiful by the river lately and glad you were able to head on down there.*

- Questions I have concern hunting and hiking on the property, (Kratzert tract) will there be prescribed burns, I have never seen signs of a burn, the fallen trees and under brush (due to hurricanes and storms) make it hard to navigate. I didn't know if there were plans to burn or not and if so would there be a schedule posted to the public. Most of the info, contained in the prospectus I don't understand although interesting to read. I do enjoy using the property and hope everyone will be able to continue for many years to come. Once again thanks. *By and large, the Kratzert tract is made up of natural communities that are not maintained with fire frequently. There are burn units along Reed Ellis road that are planted in pine and were pasture prior to District acquisition. These do have the potential to receive prescribed burns but are not the highest priority given our limited regional staffing (4 staff for nearly 80,000 acres across 5 counties). The last time these units were burned was 2004. We generally do not have a set burn schedule that is published as prescribed fires are heavily weather dependent, but we do announce them on the day of the prescribed fire on the District's website and Facebook page. We are glad you enjoy Lake Monroe Conservation Area and I can guarantee that it will be a place for all to enjoy as well for generations to come.*

Announcement at March 21, 2023 Volusia County Council Meeting. No Council meeting minutes have been posted for 2023. Link to video: https://www.youtube.com/watch?v=UtJpfR-XOYU&list=PLOb_PiKk0mFol4VLz9Hz78vbZEJ2mXn84&index=5

SJRWMD Public Meeting

Chris Kinslow, St. Johns River Water Management District, addressed the Board and announced a public hearing on April 27 regarding the District's Ten-Year Land Management Plan Update for the Lake Monroe Conservation Area. Commissioner Herr requested the information for the meeting be hosted on the County's website.

Vice Chairman Herr requested some guidance regarding the Commissioners' attendance to public meetings and notice.

Commissioner Dallari left at 2:20 p.m.

COUNTY MANAGER'S REPORT

Mr. Gray reported on the County employee vs. LYNX softball tournament.

COUNTY ATTORNEY'S REPORT

Mr. Chipok stated he has no report.

Copy of March 28, 2023 Seminole Board of County Commissioners Meeting Minutes

Announcement in the Florida Administrative Record:

WATER MANAGEMENT DISTRICTS
St. Johns River Water Management District

RULE NO.: RULE TITLE:
40C-9.110 Land Management Plans

The ST. JOHNS RIVER WATER MANAGEMENT DISTRICT announces a public meeting to which all persons are invited.

DATE AND TIME: Thursday, April 27, 2023, 12:00 Noon – 1:30 p.m.

PLACE: Osteen Civic Center, 165 New Smyrna Blvd., Deltona, FL 32764

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 Lake Monroe Conservation Area located near Osteen, Florida. The purpose of this hearing is to receive public comment regarding the development of the ten-year Land Management Plan update for the Conservation Area.

Comments may be presented orally or in writing at the hearing. Written comments may also be submitted via mail or email to P.O. Box 1429, Palatka, FL 32178-1429 to the attention of Chris Kinslow or ckinslow@sjrwmd.com, respectively. Comments should be mailed to arrive at the office prior to the date of the public hearing.

Use contact information provided below to request a copy of the Management Prospectus and/or the Draft Land Management Plan for Lake Monroe Conservation Area.

A copy of the agenda may be obtained by contacting: Chris Kinslow ckinslow@sjrwmd.com.

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: Chris Kinslow, ckinslow@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: Chris Kinslow, ckinslow@sjrwmd.com or (386)643-1939.

Announcement in the Daytona Beach News-Journal (Volusia County newspaper of record):

THE DAYTONA BEACH
NEWS-JOURNAL P.O. Box 630476, Cincinnati, OH 45263-0476

PROOF OF PUBLICATION

ST. JOHNS RIVER WATER MANAGEMENT
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
Po Box 1429
Palatka FL 32178-1429

STATE OF WISCONSIN, COUNTY OF BROWN

Before the undersigned authority personally appeared, said legal clerk, who, on oath says that he/she is LEGAL COORDINATOR of The News-Journal, a daily and Sunday newspaper, published at Daytona Beach in Volusia and Flagler Counties, Florida; that the attached copy of advertisement, being a Public Notices in the Circuit Court, was published in said newspaper in the issues dated or by publication on the newspaper's website, if authorized, on:

03/24/2023

Affiant further says that The News-Journal is a newspaper published at Daytona Beach, in said Volusia County, Florida, and that the said newspaper has heretofore been continuously published in said Volusia County, Florida each day and Sunday and has been entered as second-class mail matter at the post office in Daytona Beach, in said Volusia County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.
Subscribed and sworn to before on 03/24/2023

Legal Clerk

Notary, State of WI, County of Brown
3/7/27
My commision expires

Publication Cost:	$136.08	
Order No:	8582796	# of Copies:
Customer No:	466250	1
PO #:		

THIS IS NOT AN INVOICE!
Please do not use this form for payment remittance.

PUBLIC NOTICE
PUBLIC HEARING

The St. Johns River Water Management District announces a public hearing for the Lake Monroe Conservation Area located near Osteen, Florida. The hearing is scheduled from 12 to 1:30 p.m. Thursday, April 27, 2023 and will be held at the Osteen Civic Center, 165 New Smyrna Blvd., Deltona, FL, 32764.

The purpose of this hearing is to receive public comment regarding the development of the ten-year Land Management Plan update for the Conservation Area.

Comments may be presented orally or in writing at the hearing. Written comments may also be submitted via mail or email to P.O. Box 1429, Palatka, FL 32178-1429 to the attention of Chris Kinslow or ckinslow@sjrwmd.com, respectively. Comments should be mailed to arrive at the office prior to the date of the public hearing.

A Management Prospectus and/or the Draft Land Management Plan for Lake Monroe Conservation Area is available upon request from Chris Kinslow at ckinslow@sjrwmd.com.

March 22, 2023

KAITLYN FELTY
Notary Public
State of Wisconsin

Page 1 of 1

Announcement in the Sanford Herald (Seminole County newspaper of record):

Sanford Herald

Published Twice Weekly
Sanford, Seminole County, FL

STATE OF FLORIDA
COUNTY OF SEMINOLE

Before the undersigned authority personally appeared Scott Gabbey, who on oath says that he is the legal advertising specialist for Sanford Herald, a twice weekly newspaper published by Sanford Herald, LLC at Sanford, in Seminole County, Florida, that the attached copy of the advertisement,

being a Notice of Public Hearing

in the matter of

April 27, 2023 - Public Hearing Re: Lake Monroe Conservation Area

in the Court,

was published in said newspaper in the issues of

March 22, 2023

Affiant further says that said Sanford Herald is a newspaper published by Sanford Herald LLC at Sanford, in said Seminole County, Florida, and that the said newspaper has heretofore been continuously published in said Seminole County, Florida, twice weekly and has been entered as periodicals matter at the post office in Sanford, in said Seminole County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he or she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

(Signature of Affiant)

Sworn to and subscribed before me this 22nd day of March, 2023

(Signature of Notary Public)

Personally Known or Produced Identification ✓

Notary Public State of Florida
Thomas E Vincent
My Commission GG 309635
Expires 06/12/2023

The St. Johns River Water Management District announces a public hearing for the Lake Monroe Conservation Area located near Osteen, Florida. The hearing is scheduled for 12:00 to 1:30 pm on Thursday, April 27 th , 2023 and will be held at the Osteen Civic Center, 165 New Smyrna Blvd., Deltona, FL, 32764. The purpose of this hearing is to receive public comment regarding the development of the ten-year Land Management Plan update for the Conservation Area.

Comments may be presented orally or in writing at the hearing. Written comments may also be submitted via mail or email to P.O. Box 1429, Palatka, FL 32178-1429 to the attention of Chris Kinslow or ckinslow@sjrwmd.com, respectively. Comments should be mailed to arrive at the office prior to the date of the public hearing.

A Management Prospectus and/or the Draft Land Management Plan for Lake Monroe Conservation Area is available upon request from Chris Kinslow at ckinslow@sjrwmd.com

Publish: March 22, 2023
C144

Announcements posted on site a various access points on the Property

Appendix F - Soil Descriptions

The following soil series descriptions correspond with soil names found in Figure 5 and are taken directly from the USDA-NRCS using the online query tool.

BASINGER- The Basinger series consists of very deep, poorly drained and very poorly drained, rapidly permeable soils in sloughs, depressions, low flats, and poorly defined drainage ways. They formed in sandy marine sediments.

Most areas of Basinger soils have been cleared and are used for improved pasture and rangeland. With water control, they are used for winter truck crops and tame pasture. The natural vegetation may consist of wax myrtle, St. Johns wort, maidencane, pineland threeawn, cypress, slash pine, longleaf pine, pond pine, and other water tolerant plants.

BLUFF- 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. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 59 inches. Slopes range form 0 to 2 percent.

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.

CASSIA- The Cassia series consists of very deep, somewhat poorly drained soils that formed in sandy marine deposits. Cassia soils are on low ridges and knolls on scrubby flatwoods. Slopes range from 0 to 5 percent. Mean annual precipitation is about 55 inches and the mean annual temperature is about 72 degrees F.

Under natural conditions Cassia soils are used for water quality and wildlife habitat, some areas are used for range. Potential native vegetation consists of scattered slash pine, longleaf pine, and saw palmetto. The understory vegetation consists of splitbeard bluestem, broomsedge bluestem, creeping bluestem, low panicum, lopsided indiangrass, pineland threeawn, paspalum, switchgrass, runner oak, and saw palmetto.

DAYTONA- The Daytona series consists of very deep, moderately well drained, moderately rapid permeable soils on knolls and ridges in the flatwoods. They formed in sandy deposits of marine or eolian sediments. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 5 percent.

Most areas are in native vegetation and used for wildlife habitat. A few areas are used for citrus or for community developments. The native vegetation consists of sand pine with an understory of creeping bluestem, broomsedge bluestem, splitbeard bluestem, lopsided indiangrass, pineland threeawn, switchgrass, panicum, and paspalums.

EAUGALLIE- The EauGallie series consists of very deep, very poorly or poorly drained, slowly permeable soils in flats, sloughs and depressional areas in the Southern Florida Flatwoods and to a lesser extent in the Atlantic Coast Flatwoods, the South Central Florida Ridge, and the Southern Florida Lowlands. They formed in sandy and loamy marine sediments in Peninsula Florida. Near the type location, the man annual temperature is about 72 degrees F., and the man annual precipitation is about 55 inches. Slopes range from 0 to 2 percent.

Many areas of EauGallie soils are used for citrus, truck crops, and pastureland. The natural vegetation consists of longleaf pine, South Florida slash pine, slash pine, fetterbush. The understory vegetation includes running oak, saw palmetto, inkberry, gallberry, wax myrtle, southern bayberry and pineland threeawn.

ELECTRA- 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. Slopes range from 0 to 5 percent.

These soils are not used for cultivated crops. A few small areas are cleared and used for tame pasture. Most areas remain in native vegetation consisting of dwarf live oak, a few longleaf and sand pine, running oak, sawpalmetto, and blueberry. Creeping bluestem, chalky bluestem, lopsided indiangrass, low panicum, pineland threeawn, paspalum, and numerous forbs dominate the understory.

FARMTON- The Farmton series consists of very deep, poorly drained soils that formed in sandy and loamy marine sediments. Farmton soils are on flatwoods and low broad flats on marine terraces. Slopes are linear and range from 0 to 2 percent. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches.

Under natural conditions Farmton soils are used for water quality and wildlife habitat. Potential native vegetation consists of longleaf pine and slash pine. The understory is dominated by saw palmetto, waxmyrtle, gallberry, fetterbush, lyonia, creeping bluestem, chalky bluestem and pineland threeawn.

FLORIDANA- The Floridana series consists of very deep, very poorly drained, slowly to very slowly permeable soils on low broad flats, flood plains, and in depressional areas. They formed in thick beds of sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 74 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 1 percent.

Many areas of Floridana soils have been cleared and used for pasture. Where water control is adequate, it is used for growing truck crops and citrus. Natural vegetation consists of sand cordgrass, cabbage palmetto, myrtle, and pineland threeawn. In depressional areas, most of the soil has a sparse to dense cover of cypress. In flood plains, the vegetation is mostly sweetgum, blackgum, red maple, and cypress.

GATOR- The Gator series consists of very poorly drained organic soils that formed in moderately thick beds of hydrophytic plant remains overlying beds of loamy and sandy marine sediments. They are in depressions and on flood plains. Slopes are less than 1 percent.

Almost all areas are in marsh or swamp wetlands used for wildlife and water storage. Native vegetation is mostly cordgrass or Jamaica sawgrass, maidencane, Coastal Plain willow, redosier dogwood, or swamp vegetation including baldcypress, sweetgum, red maple, and American hornbeam.

HOLOPAW- The Holopaw series consists of deep and very deep, poorly and very poorly drained soil that formed in sandy and loamy marine sediments. Holopaw soils are on nearly level low-lying flats, poorly defined drainageways and depressional areas. Slopes range from 0 to 2 percent. Mean annual precipitation is about 55 inches and the mean annual temperature is about 72 degrees F.

Large areas of Holopaw soils are used for range. With adequate water control, these soils are used for citrus, truck crops, and tame pasture. Native vegetation is scattered slash and pond pine, cabbage palm and saw palmettos, scattered cypress, myrtle, sand cordgrass, gulf muhly, chalky bluestem, plumegrass, paspalum, blue maidencane, and pineland threeawn.

HONTOON- The Hontoon series consists of deep, very poorly drained, organic soils that formed in more than 51 inches of well decomposed, hydrophytic, herbaceous plant remains. Hontoon soils are in depressions, freshwater marshes, swamps and drainageways. Slopes range from 0 to 1 percent. Mean annual precipitation is about 51 inches and the mean annual temperature is about 72 degrees F.

Under natural conditions Hontoon soils are used for water quality, water storage, and wildlife habitat. Potential natural vegetation consists of loblolly bay, maple, gum, and scattered cypress trees with a ground cover of greenbriers, ferns, and other aquatic plants. In a few areas there is a ground cover of osmunda fern.

IMMOKALEE- The Immokalee series consists of very deep, very poorly and poorly drained soils that formed in sandy marine sediments. Immokalee soils are on flatwoods and low broad flats on marine terraces.

Slopes range from 0 to 2 percent. Mean annual precipitation is about 55 inches and the mean annual temperature is about 72 degrees F.

Under natural conditions Immokalee soils are used for water quality, forestry, and wildlife habitat. Large areas with adequate water management are used for citrus, truck crops, pastureland, and range. Potential native vegetation consists of longleaf and slash pine with an undergrowth of sawpalmetto, gallberry, waxmyrtle and pineland threeawn. In depressions, water tolerant plants such as cypress, loblollybay gorodonia, red maple, sweetbay, maidencane, blue maidencane, chalky bluestem, sand cordgrass and bluejoint panicum are more common.

MALABAR- The Malabar series consists of very deep, very poorly and poorly drained, slowly permeable soils in sloughs, shallow depressions and along flood plains. They formed in sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 73 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 2 percent.

Large areas of the Malabar soils are used extensively for range. Some areas are used for citrus crops, truck crops, and improved pasture with adequate water control. Native vegetation consists of scattered slash pine, cypress wax myrtle, cabbage palm, pineland threeawn, and maidencane. In depressions, the vegetation is dominantly St. Johnswort or maidencane.

MANATEE- The Manatee series consists of very deep, very poorly drained, moderately permeable soils in depressions, broad drainageways, and on flood plains. They formed in sandy and loamy marine sediments. Near the type location, the mean annual air temperature about 73 degrees F., and the mean annual precipitation is about 50 inches. Slope is dominantly less than 1 percent but ranges to 2 percent.

Most areas of Manatee soils remain in native vegetation. A few small areas have been drained and is used for growing winter truck crops, citrus groves and improved pasture. Natural vegetation consists of red maple, gum, cabbage palm and widely spaced cypress. Treeless areas are covered by pickerelweed, sedge, maidencane, Jamaica sawgrass, cutgrass bluestem, panicum, cinnamon fern, sand cordgrass, St. Johnswort, and other perennial grasses.

MYAKKA- The Myakka series consists of very deep, very poorly or poorly drained, moderately rapid or moderately permeable soils that occur primarily in mesic flatwoods of peninsular Florida. They formed in sandy marine deposits. Near the type location, the average annual temperature is about 72 degrees F., and the average annual precipitation is about 55 inches. Slopes range from 0 to 8 percent.

Most areas of Myakka soils are used for commercial forest production or native range. Large areas with adequate water control measures are used for citrus, improved pasture, and truck crops. Native vegetation includes longleaf and slash pine with an undergrowth of saw palmetto, running oak, inkberry, wax myrtle, huckleberry, chalky bluestem, pineland threeawn, and scattered fetterbush.

NITTAW- The Nittaw series consists of very poorly drained, slowly permeable soils that formed in thick deposits of clayey sediments of marine origin. These soils are in well defined drainageways, broad, nearly level swamps, and marshes of central and southern peninsular Florida. They are subject to flooding and water standing above the soil surface for 6 months or more in most years during late spring, summer and fall. Slopes are less than 2 percent.

Use is mainly for water storage and wildlife habitat. Some areas have been drained and cleared and used for improved pasture. Native vegetation is mixed hardwoods of bald cypress, red maple, sweetgum, and hickory with an understory of wax myrtle, greenbrier, wild grape, cabbage palm, and few shade and water tolerant forbes and grasses.

OKEELANTA- The Okeelanta series consists of very deep, very poorly drained, rapidly permeable soils in large fresh water marshes and small depressional areas. They formed in moderately thick deposits of decomposed hydrophytic non-woody sapric material overlying marine sand. Near the type location, the mean annual temperature is about 74 degrees F., and the mean annual precipitation is about 59 inches. Slopes range from 0 to 2 percent.

Many areas of Okeelanta soils are cleared and are used for truck crops, sod, sugarcane, and improved pasture grasses. Some areas are not developed and are used for water storage and as a wildlife habitat. Native vegetation consists of sawgrass, lilies, sedges, and other water tolerant plants. Willow, southern bayberry, and melaleuca are common tree species.

PLACID- 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.

Major uses of the Placid series are water quality, forestry, rangeland, and wildlife habitat. Some areas are used for truck crops, citrus, and pasture. Its dominant vegetation consists of maidencane, sand cordgrass, pickerelweed, giant cutgrass, waxmyrtle, sedges, and rushes. Scattered cypress, bay, pond pine, blackgum, tupelo, and cabbage palm occur in some areas.

POMONA- The Pomona series consists of very deep, poorly and very poorly drained soils that formed in sandy and loamy marine sediments. Pomona soils are on flats and flatwoods on marine terraces. Slopes range from 0 to 2 percent. The mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches.

Under natural conditions Pomona soils are used for water quality and wildlife habitat. Cultivated areas are used for truck crops and tame pasture. Potential native vegetation consists of slash pine, longleaf pine, and south Florida slash pine with an understory of saw palmetto, waxmyrtle, gallberry, creeping bluestem, chalky bluestem, indiangrass, and pineland threeawn.

RIVIERA- The Riviera series consists of very deep, poorly drained, very slowly permeable soils on broad, low flats, flatwoods and in depressions in the Southern Flatwoods and the Southern Florida Lowlands. They formed in stratified sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 75 degrees F., and the mean annual precipitation is about 62 inches. Slopes range from 0 to 2 percent.

When drained, Riviera soils are used for citrus, winter truck crops, and improved pasture. Native vegetation consists of slash pine, cabbage, and saw palmetto, scattered cypress, maidencane, and pineland threeawn.

ST. JOHNS- The St. Johns series consists of very deep, very poorly or poorly drained, moderately permeable soils on broad flats and depressional areas of the lower Coastal Plain. They formed in sandy marine sediments. Near the type location, the mean annual temperature is about 73 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 5 percent.

Most areas of St. Johns soils are used for forest or rangeland. Principal vegetation of the forested areas is longleaf pine, slash pine, and pond pine with an undergrowth of sawpalmetto, gallberry, waxmyrtle, huckleberry, and pineland threeawn. Some areas that have adequate water control are used for citrus, improved pasture, and special crops.

SMYRNA- The Smyrna series consists of very deep, poorly to very poorly drained soils formed in thick deposits of sandy marine materials. Permeability is rapid in the A, E and C horizons and moderate or moderately rapid in the Bh horizons. Slopes range from 0 to 2 percent.

Natural vegetation consists of longleaf and slash pines with an undergrowth of saw palmetto, running oak, gallberry, waxmyrtle, and pineland threeawn. Most areas are used for forest and range. Large areas are used for tame pasture.

TAVARES- 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. Slopes range from 0 to 8 percent. Mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches.

Some areas of Tavares soils are used for citrus. A few areas are used for corn, vegetable crops, watermelons, and improved pasture. 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.

TERRA CEIA- The Terra Ceia series consists of very deep, very poorly drained, rapidly permeable soils in fresh water marshes. They formed in more than 50 inches of well decomposed, hydrophytic, herbaceous plant remains. Near the type location, the mean annual precipitation is about 61 inches and the mean annual temperature is about 75 degrees F. Slopes are 0 to 1 percent.

Drained areas are used for truck and bulb crops, sugarcane, and improved pasture. Large undeveloped areas are used for water storage and as wildlife habitat. The natural vegetation consists of sawgrass, lilies, sedges, reeds, maidencane, spikerush, and other aquatic plants. Wooded plant species include cypress, blackgum, cabbage palm, carolina ash, loblolly bay, red maple, sweetbay, and pond pine. American and white mangrove trees are dominant in tidal areas.

TOMOKA- 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. Slopes range from 0 to 2 percent.

Some areas are cleared and used for truck, corn, sod crops and improved pasture. Uncleared areas are used for water storage and as a wildlife habitat. Native vegetation is sawgrass, lilies, reeds, sedges, myrtle and other aquatic plants. Cypress, red and white bay, maple and pond pine are common tree species.

WABASSO- The Wabasso series consists of very deep, very poorly and poorly drained, that formed in sandy and loamy marine sediments. Wabasso soils are on flatwoods, low broad flats, sloughs, depressions, and flood plains. Slopes are linear to concave and range from 0 to 2 percent. Near the type location, the mean annual precipitation is about 55 inches, and the mean annual temperature is about 72 degrees F.

Most areas of Wabasso soils are in natural vegetation and used for native range. Areas with adequate water control measures are used for citrus, truck crops, and tame pasture. The natural vegetation consists of longleaf pine, slash pine, cabbage palm, live oak, with an understory of sawpalmetto, laurel oak, waxmyrtle, chalky bluestem, creeping bluestem, indiangrass, little bluestem, Florida paspalum, running oak, south Florida slash pine and pineland threeawn.

WAUCHULA- The Wauchula series consists of very deep, very poorly or poorly drained, moderately slow or slowly permeable soils on flatwoods on the lower coastal plains. They formed in sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 5 percent.

Many areas of this soil have been cleared and are used for tame pasture or range. Some areas are used for citrus and vegetable crops where water control is adequate. The natural vegetation consists of longleaf pine, slash pine, sawpalmetto, with an understory of inkberry, fetter, southern bayberry, and pineland threeawn.

Appendix G – Lake Monroe Conservation Area Species List

Plants

Scientific name	Common Name	Status
Acer rubrum	red maple	
Alternanthera philoxeroides	alligator weed	I
Amphicarpum muehlenbergianum	blue maidencane	
Andropogon glomeratus	bushy bluestem	
Aristida stricta	wiregrass	
Asclepias curassavica	tropical milkweed	
Asimina reticulata	netted paw paw	
Asimina rugelii	Rugel's false paw paw	G1, S1, SE, FE
Aster sp.	aster	
Axonopus fissifolius	carpetgrass	
Baccharis angustifolia	saltbush	
Bacopa caroliniana	lemon bacopa	
Bejaria racemosa	tarflower	
Callicarpa americana	American beautyberry	
Campsis radicans	trumpet vine	
Carphephorus odoratissimus	vanillaleaf	
Celtis laevigata	sugarberry	
Centella asiatica	spadeleaf	
Cephalanthus occidentalis	buttonbush	
Cinnamomum camphora	camphor tree	I
Cirsium horridulum	purple thistle	
Cirsium nuttallii	nuttall's thistle	
Cladium jamaicense	sawgrass	
Cnidoscolus stimulosus	spurge nettle	
Commelina diffusa diffusa	common climbing dayflower	
Coreopsis gladiata	coastalplain tickseed	
Cornus foemina	swamp dogwood	
Crocanthemum corymbosum	pine barren frostweed	
Crotalaria pallida obovata	smooth crotalaria	I
Cynodon dactylon	bermudagrass	I
Cyperus haspan	haspan flatsedge	
Diodia virginiana	buttonweed	
Diospyros virginiana	persimmon	
Drosera brevifolia	dwarf sundew	
Drosera capillaris	pink sundew	
Eichhornia crassipes	water hyacinth	I
Eleocharis baldwinii	slender spikerush	
Elephantopus elatus	elephant's foot	

Emilia sonchifolia	lilac tasselflower
Encyclia sp.	butterfly orchid
Erigeron quercifolius	oakleaf fleabane
Eupatorium leptophyllum	falsefennel
Flaveria trinervia	clustered yellowtops
Fraxinus caroliniana	pop ash
Galium tinctorium	bedstraw
Gelsemium sempervirens	yellow jessamine
Gordonia lasianthus	swamp bay
Habenaria floribunda	toothpetal false reinorchid
Habenaria repens	water-spider orchid
Houstonia procumbens	roundleaf bluet
Hibiscus moscheutos	crimsoneyed rosemallow
Hydrocotyle umbellata	manyflower marshpennywort
Hydrocotyle verticillata	whorled marshpennywort
Hypericum cistifolium	roundpod St. John's-wort
Hypericum fasciculatum	sandweed
Hypericum hypericoides	St. Andrew's cross
Hypericum tenuifolium	sandhill St. John's-wort
Hypericum tetrapetalum	fourpetal St. John's-wort
Hyptis alata	cluster bushmint
Ilex cassine	dahoon holly
Ilex glabra	gallberry
Ilex vomitoria	yaupon holly
Iris virginica	Virginia iris
Iris savannarum	savanna iris
Juncus effusus	soft rush
Juniperus silicicola	red cedar
Lantana camara	common lantana
Lepidium virginicum	Virginia pepperweed
Leucobryum albidum	white moss
Liquidambar styraciflua	sweetgum
Luziola fluitans	southern watergrass
Lygodesmia aphylla	rose rush
Lyonia lucida	shining fetterbush
Medicago lupulina	black medick
Mikania scandens	climbing hempweed
Mimosa quadrivalvis var. *angustata*	sensitive brier

Mimosa strigillosa	sunshine mimosa	
Morella cerifera	wax myrtle	
Myrcianthes fragrans	twinberry	
Myriophyllum aquaticum	parrot's feather	
Nuphar advena	spatterdock	
Nuttallanthus floridanus	Florida toadflax	
Nymphaea odorata	American white waterlily	
Nyssa sylvatica var. *biflora*	swamp tupelo	
Oplismenus hirtellus	basket grass	
Osmunda cinnamomea	cinnamon fern	CE
Packera glabella	butterweed	
Panicum hemitomon	maidencane	
Panicum virgatum	switchgrass	
Parthenocissus quinquefolia	Virginia creeper	
Passiflora incarnata	purple passionflower	
Persea palustris	swamp bay	
Persicaria punctatum	smartweed	
Phyla nodiflora	carpetweed	
Phytolacca americana	pokeberry	
Pinus clausa	sand pine	
Pinus elliottii	slash pine	
Pinus palustris	longleaf pine	
Pinus serontina	pond pine	
Pistia stratiotes	water lettuce	I
Pleopeltis michauxiana	resurrection fern	
Pluchea camphorata	camporweed	
Pluchea odorata	sweetscent	
Polygala nana	candyroot	
Polygala rugelii	yellow milkwort	
Pontederia cordata	pickerelweed	
Portulaca pilosa	pink purselane	
Proserpinaca pectinata	combleaf mermaidweed	
Prunus serotina	black cherry	
Psychotria nervosa	shiny-leaved wild coffee	
Pterocaulon pycnostachyum	blackroot	
Ptilimnium capillaceum	herbwilliam	
Quercus geminata	sand live oak	
Quercus laurifolia	laurel oak	
Quercus myrtifolia	myrtle oak	
Quercus nigra	water oak	
Quercus virginiana	live oak	
Rhexia nashii	maid marian	

Rhus copallinum	winged sumac	
Rhynchospora colorata	whitetop sedge	
Rhynchospora latifolia	giant whitetop	
Rhynchospora microcarpa	southern beakrush	
Rhynchospora sp.	beakrush	
Rubus pensilvanicus	sawtooth blackberry	
Ruellia caroliniensis	Carolina ruellia	
Sabal palmetto	cabbage palm	
Sabatia grandiflora	largeflower rose gentian	
Sagittaria graminea	grassy arrowhead	
Sagittaria latifolia	duck potato	
Sagittaria sp.	arrowhead	
Saururus cernuus	lizard's tail	
Schoenoplectus tabernaemontani	soft-stem bulrush	
Scleria sp.	nutrush	
Scutellaria integrifolia	helmet skullcap	
Senna obtusifolia	sicklepod	
Serenoa repens	saw palmetto	CE
Sesbania vesicaria	bladderpod	
Setaria parviflora	knotroot foxtail	
Sideroxylon reclinatum	Florida bully	
Smilax tamnoides	bristly greenbrier	
Spartina bakeri	sand cordgrass	
Spermacoce verticillata	shrubby false buttonweed	
Spiranthes praecox	grass-leaved ladies' tresses	
Sporobolus indicus	smutgrass	I
Stachys floridana	Florida hedgenettle	
Syngonathus flavidulus	yellow hatpins	
Taxodium ascendens	pond cypress	
Taxodium distichum	bald cypress	
Tillandsia sp.	air plant	
Tillandsia usneoides	Spanish moss	
Triadica sebifera	Chinese tallow tree	I
Typha latifolia	cattail	
Ulmus americana	American elm	
Urena lobata	ceasarweed	I
Utricularia inflata	floating bladderwort	
Utricularia subulata	zigzag bladderwort	
Vaccinium myrsinites	shiny blueberry	
Vicia acutifolia	fourleaf vetch	
Vigna luteola	wild cowpea	

Viola lanceolata	white bog violet
Viola primulifolia	primrose-leaved violet
Vitis aestivalis	summer grape
Vitis sp.	grapevine
Vittaria lineata	shoestring fern
Wolffia brasiliensis	Brazilian watermeal
Woodwardia virginica	chain fern
Xyris caroliniana	yellow-eyed grass
Zeuxine strateurnatica	centipede grass orchid

Birds

Scientific name	Common Name	Status
Accipiter cooperii	Cooper's hawk	
Accipiter striatus	Sharp-shinned Hawk	
Actitis macularius	Spotted Sandpiper	
Agelaius phoeniceus	Red-winged blackbird	
Aix sponsa	Wood duck	
Ammodramus savannarum pratensis	Grasshopper Sparrow	
Anas acuta	Northern Pintail	
Anas crecca	Green-winged Teal	
Anas fulvigula	Mottled duck	
Anas platyrhynchos	Mallard	I
Anhinga anhinga	Anhinga	
Anthus rubescens	American Pipit	
Antigone canadensis pratensis	Florida sandhill crane	G5T2, S2, FN, ST
Antrostomus carolinensis	Chuck-will's-widow	
Antrostomus vociferus	Eastern Whip-poor-will	
Aphelocoma coerulescens	Florida Scrub-Jay	G1G2, S1S2, T, FT
Aramus guarauna	Limpkin	G5, S3, SN, FN
Archilochus colubris	Ruby-throated Hummingbird	
Ardea alba	Great Egret	
Ardea herodias	Great blue heron	
Aythya affinis	Lesser Scaup	
Aythya collaris	Ring-necked Duck	
Baeolophus bicolor	Tufted Titmouse	
Bombycilla cedrorum	Cedar Waxwing	
Botaurus lentiginosus	American bittern	
Bubo virginianus	Great Horned Owl	
Bubulcus ibis	Cattle egret	
Buteo brachyurus	Short-tailed Hawk	G4G5, S1, SN, FN
Buteo jamaicensis	Red-tailed hawk	
Buteo lineatus	Red-shouldered hawk	
Butorides virescens	Green heron	
Cairina moschata	Muscovy Duck	I
Calidris alpina	Dunlin	
Calidris fuscicollis	White-rumped Sandpiper	
Calidris mauri	Western Sandpiper	
Calidris melanotos	Pectoral Sandpiper	
Calidris minutilla	Least Sandpiper	

Calidris pusilla	Semipalmated Sandpiper	
Caracara plancus	Crested Caracara	G5, S2, T, FT
Cardinalis cardinalis	Northern Cardinal	
Cathartes aura	Turkey vulture	
Catharus guttatus	Hermit Thrush	
Catharus minimus	Gray-cheeked Thrush	
Chaetura pelagica	Chimney Swift	
Charadrius semipalmatus	Semipalmated Plover	
Charadrius vociferus	Killdeer	
Chordeiles minor	Common nighthawk	
Chordeiles minor	Common Nighthawk	
Chroicocephalus philadelphia	Bonaparte's Gull	
Circus hudsonius	Northern Harrier	
Cistothorus palustris	Marsh Wren	
Cistothorus stellaris	Sedge Wren	
Coccyzus americanus	Yellow-billed Cuckoo	
Colaptes auratus	Northern flicker	
Colinus virginianus	Northern bobwhite	
Colinus virginianus	Bobwhite quail	
Columba livia	Rock Pigeon	
Columbina passerina	Common Ground Dove	
Contopus virens	Eastern Wood-Pewee	
Coragyps atratus	Black vulture	
Corvus brachyrhynchos	American Crow	
Corvus ossifragus	Fish crow	
Cyanocitta cristata	Blue Jay	
Dendrocygna autumnalis	Black-bellied Whistling-Duck	
Dendrocygna bicolor	Fulvous Whistling-Duck	
Dendroica palmarum	Palm warbler	
Dolichonyx oryzivorus	Bobolink	
Dryocopus pileatus	Pileated woodpecker	
Dumetella carolinensis	Gray Catbird	
Egretta caerulea	Little blue heron	G5, S4, FN, ST
Egretta thula	Snowy egret	G5, S3, FN, SN
Egretta tricolor	Tricolored Heron	G5, S4, FN, ST
Elanoides forficatus	Swallow-tailed Kite	G5, S2, FN, SN
Eudocimus albus	White ibis	G5, S4, FN, SN
Falco columbarius	Merlin	G5, S2, FN, SN
Falco peregrinus	Peregrine Falcon	G4, S2, FN, SN
Falco sparverius paulus	Southeastern American kestrel	G5T4, S3, FN, ST
Fulica americana	American coot	

Gallinago delicata	Wilson's Snipe	
Gallinula chloropus	Common moorhen	
Gallinula galeata	Common Gallinule	
Gallus gallus	Red Junglefowl	I
Geothlypis formosa	Kentucky Warbler	
Geothlypis trichas	Common Yellowthroat	
Haemorhous mexicanus	House Finch	I
Haliaeetus leucocephalus	Bald eagle	G5, S3, FN, SN
Himantopus mexicanus	Black-necked Stilt	
Hirundo rustica	Barn Swallow	
Hydroprogne caspia	Caspian Tern	G5, S2, FN, SN
Hylocichla mustelina	Wood Thrush	
Icterus galbula	Baltimore Oriole	
Ixobrychus exilis	Least Bittern	
Lanius ludovicianus	Loggerhead shrike	
Larus delawarensis	Ring-billed Gull	
Leiothlypis celata	Orange-crowned Warbler	
Leiothlypis peregrina	Tennessee Warbler	
Leiothlypis ruficapilla	Nashville Warbler	
Leucophaeus atricilla	Laughing Gull	
Limnodromus griseus	Short-billed Dowitcher	
Limnodromus scolopaceus	Long-billed Dowitcher	
Lophodytes cucullatus	Hooded Merganser	
Mareca strepera	Gadwall	
Megaceryle alcyon	Belted kingfisher	
Megascops asio	Eastern Screech-Owl	
Melaeagris gallopavo osceola	Osceola turkey	
Melanerpes carolunus	Red-bellied woodpecker	
Melanerpes erythrocephalus	Red-headed woodpecker	
Meleagris gallopavo	Wild Turkey	
Melospiza georgiana	Swamp Sparrow	
Melospiza lincolnii	Lincoln's Sparrow	
Melospiza melodia	Song Sparrow	
Mimus polyglottos	Northern mockingbird	
Mniotilta varia	Black-and-white Warbler	
Molothrus ater	Brown-headed Cowbird	
Mycteria americana	Wood Stork	G4, S2, FT, ST
Myiarchus crinitus	Great Crested Flycatcher	
Nannopterum auritum	Double-crested Cormorant	

Nyctanassa violacea	Yellow-crowned Night-Heron	G5, S3, FN, SN
Nycticorax nycticorax	Black-crowned Night-Heron	G5, S3, FN, SN
Oxyura jamaicensis	Ruddy Duck	
Pandion haliaetus	Osprey	G5, S3S4, FN, SN
Parkesia motacilla	Louisiana Waterthrush	
Parkesia noveboracensis	Northern Waterthrush	
Passer domesticus	House Sparrow	I
Passerculus sandwichensis	Savannah sparrow	
Passerina caerulea	Blue Grosbeak	
Passerina cyanea	Indigo Bunting	
Pavo cristatus	Indian peafowl	
Pelecanus erythrorhynchos	American White Pelican	
Petrochelidon fulva	Cave Swallow	
Petrochelidon pyrrhonota	Cliff Swallow	
Peucaea aestivalis	Bachman's Sparrow	G3, S3, FN, SN
Pheucticus ludovicianus	Rose-breasted Grosbeak	
Picoides pubescens	Downy woodpecker	
Pipilo erythrophthalmus	Eastern Towhee	
Piranga rubra	Summer Tanager	
Platalea ajaja	Roseate Spoonbill	G5, S2, FN, ST
Plegadis falcinellus	Glossy ibis	G5, S3, FN, SN
Podilymbus podiceps	Pied-billed Grebe	
Poecile carolinensis	Carolina Chickadee	
Polioptila caerulea	Blue-gray gnatcatcher	
Pooecetes gramineus	Vesper Sparrow	
Porphyrio martinica	Purple Gallinule	
Porzana carolina	Sora	
Progne subis	Purple Martin	
Pyrocephalus rubinus	Vermilion Flycatcher	
Quiscalus major	Boat-tailed grackle	
Quiscalus quiscula	Common Grackle	
Rallus elegans	King Rail	G4, S3, S4
Regulus calendula	Ruby-crowned kinglet	
Riparia riparia	Bank Swallow	
Rostrhamus sociabilis	Snail Kite	G4G5, S2, E, FE
Rynchops niger	Black Skimmer	G5, S3, FN, ST
Sayornis phoebe	Eastern phoebe	
Seiurus aurocapilla	Ovenbird	
Setophaga americana	Northern Parula	
Setophaga caerulescens	Black-throated Blue Warbler	
Setophaga citrina	Hooded Warbler	

Setophaga coronata	Yellow-rumped Warbler	
Setophaga discolor	Prairie Warbler	
Setophaga fusca	Blackburnian Warbler	
Setophaga magnolia	Magnolia Warbler	
Setophaga pensylvanica	Chestnut-sided Warbler	
Setophaga petechia	Yellow Warbler	
Setophaga pinus	Pine Warbler	
Setophaga ruticilla	American Redstart	
Setophaga tigrina	Cape May Warbler	
Sialia sialis	Eastern Bluebird	
Sitta canadensis	Red-breasted Nuthatch	
Sitta pusilla	Brown-headed Nuthatch	
Spatula discors	Blue-winged Teal	
Sphyrapicus varius	Yellow-bellied Sapsucker	
Spinus tristis	American Goldfinch	
Spizella passerina	Chipping Sparrow	
Spizella pusilla	Field Sparrow	
Stelgidopteryx serripennis	Northern Rough-winged Swallow	
Sterna forsteri	Forster's Tern	
Sternula antillarum	Least Tern	G4, S3, FN, ST
Streptopelia decaocto	Eurasian Collared-Dove	I
Strix varia	Barred owl	
Sturnella magna	Eastern meadowlark	
Sturnus vulgaris	Starling	
Sturnus vulgaris	European Starling	I
Tachycineta bicolor	Tree swallow	
Thalasseus maximus	Royal Tern	G5, S3, FN, SN
Thryothorus ludovicianus	Carolina wren	
Toxostoma rufum	Brown Thrasher	
Tringa flavipes	Lesser Yellowlegs	
Tringa melanoleuca	Greater Yellowlegs	
Tringa solitaria	Solitary Sandpiper	
Troglodytes aedon	House Wren	
Turdus migratorius	American Robin	
Tyrannus tyrannus	Eastern Kingbird	
Tyto alba	Barn Owl	
Vireo flavifrons	Yellow-throated Vireo	
Vireo griseus	White-eyed Vireo	
Vireo olivaceus	Red-eyed Vireo	
Vireo philadelphicus	Philadelphia Vireo	
Vireo solitarius	Blue-headed Vireo	
Yellow-throated Warbler	Yellow-throated Warbler	

Zenaida asiatica	White-winged Dove
Zenaida macroura	Mourning dove

Mammals

Scientific name	Common Name
Dasypus novemcinctus	Nine banded armadillo
Dedelphis virginiana	Opossum
Lynx rufus	Bobcat
Odocoileus virginianus	White-tailed deer
Procyon lotor	Racoon
Sciurus carolinensis	Eastern gray squirrel
Sciurus niger niger	Southeastern fox squirrel
Sus scrofa	Feral hog
Sylvilagus floridanus	Eastern cottontail rabbit
Ursus americanus floridanus	Florida black bear

Amphibians

Scientific name	Common Name
Arcis gryllus	Southern cricket frog
Hyla cinerea	Green treefrog
Hyla crucifer	Spring peeper
Hyla femoralis	Pine woods treefrog
Hyla gratiosa	Barking treefrog
Lithobates capito	Gopher frog G2, S3
Rana catesbeiana	Bullfrog

Reptiles

Scientific name	Common Name	Status
Alligator mississippiensis	American alligator	
Anolis carolinensis	Green anole	
Anolis sagrei	Brown anole	
Apalone ferox	Florida softshell turtle	
Aspidoscelis sexlineatus	Six-lined racerunner	
Crotalus adamanteus	Eastern diamondback rattlesnake	G3, S3, FN, SN
Drymachron couperi	Eastern Indigo snake	G3, S2, T, FT
Elaphe guttata	Corn snake	
Elaphe obsoleta quadrivittata	Yellow rat snake	

Gopherus polyphemus	Gopher tortoise	G3, S3, ST, C
Kinosternon baurri	Three striped mud turtle	
Micrurus fulvius	Eastern coralsnake	
Nerodia fasciata pictiventris	Florida watersnake	
Pituophis melanoleucus mugitus	Florida Pine snake	G4, S3, ST
Sisturus miliarius	Pygmy rattlesnake	
Sisturus miliarius barbouri	Dusky pygmy rattlesnake	
Terrapene carolina	Eastern box turtle	

Insects and Arachnids

Scientific name	Common Name	Statu
Acmaeodera pulchella	flat-headed cypress sapwood borer	
Anartia jatrophae	white peacock	
Brephidium pseudofea	eastern pygmy-blue	
Bulimulus bonariensis	Ghost Bulimulus	
Celithemis eponina	Halloween pennant	
Chortophaga viridifasciata	green-striped grasshopper	
Dasymutilla occidentalis	red velvet ant	
Drymaeus dormani	manatee treesnail	
Erythrodiplax minuscula	little blue dragonlet	
Erythemis simplicicollis	Eastern pondhawk	
Eurema daira	Barred yellow	
Hermeuptychia sosybius	Carolina satyr	
Heteropoda venatoria	Pantropical huntsman spider	
Ips calligraphus	Sixspined ips	
Ischnura ramburii	Rambur's forktail	
Junonia coenia	Common buckeye	
Polistes metricus	metric paper wasp	
Odontotaenius disjunctus	Horned passalus beetle	
Ornidia obesa	Green jewel fly	
Papilio cresphontes	giant swallowtail	
Papilio polyxenes	Black swallowtail	
Papilio Troilus	Spicebush swallowtail	
Pococera robustella	Pine webworm moth	
Trichonephila clavipes	Golden silk spider	
Xylocopa micans	southern carpenter bee	

Appendix H – Lake Monroe Conservation Area Listed and FNAI Tracked Species

Plants

Scientific name	Common Name	Status
Asimina rugelii	Rugel's false paw paw	G1, S1, SE, FE
Osmunda cinnamomea	Cinnamon fern	CE
Serenoa repens	Saw palmetto	CE

Birds

Scientific name	Common Name	Status
Antigone canadensis pratensis	Florida sandhill crane	G5T2, S2, FN, ST
Aphelocoma coerulescens	Florida Scrub-Jay	G1G2, S1S2, T, FT
Aramus guarauna	Limpkin	G5, S3, SN, FN
Buteo brachyurus	Short-tailed Hawk	G4G5, S1, SN, FN
Caracara plancus	Crested Caracara	G5, S2, T, FT
Egretta caerulea	Little Blue Heron	G5, S4, ST, FN
Egretta thula	Snowy Egret	G5, S3, SN, FN
Egretta tricolor	Tricolored Heron	G5, S4, ST, FN
Elanoides forficatus	Swallow-tailed kite	G5, S2, SN, FN
Eudocimus albus	White Ibis	G5, S5, SN, FN
Falco columbarius	Merlin	G5, S2, FN, SN
Falco peregrinus	Peregrine Falcon	G4, S2, FN, SN
Falco sparverius paulus	Southeastern American kestrel	G5T4, S3, FN, ST
Haliaeetus leucocephalus	Bald eagle	G5, S3, FN, SN
Hydroprogne caspia	Caspian Tern	G5, S2, FN, SN
Mycteria americana	Wood Stork	G4, S2, FT, FT
Nyctanassa violacea	Yellow-crowned Night-Heron	G5, S3, FN, SN
Nycticorax nycticorax	Black-crowned Night-Heron	G5, S3, FN, SN
Pandion haliaetus	Osprey	G5, S3S4, SN, FN
Peucaea aestivalis	Bachman's Sparrow	G3, S3, FN, SN
Platalea ajaja	Roseate Spoonbill	G5, S2, ST, FN
Plegadis falcinellus	Glossy ibis	G5, S3, FN, SN
Mycteria americana	Wood Stork	G4, S2, FT, FT
Rallus elegans	King Rail	G4, S3, S4

Rostrhamus sociabilis	Snail Kite	G4G5, S2, E, FE
Rynchops niger	Black Skimmer	G5, S3, FN, ST
Sternula antillarum	Least Tern	G4, S3, FN, ST
Thalasseus maximus	Royal Tern	G5, S3, FN, SN

Mammals

Scientific name	Common Name	Status
Sciurus niger niger	Southeastern fox squirrel	G5T5, S3
Ursus americanus floridanus	Florida black bear	G5T4, S4, FN, SN

Reptiles

Scientific name	Common Name	Status
Crotalus adamanteus	Eastern diamondback rattlesnake	G3, S3, FN, SN
Drymachron couperi	Eastern Indigo snake	G3, S2, T, FT
Gopherus polyphemus	Gopher tortoise	G3, S3, ST, C
Pituophis melanoleucus mugitus	Florida Pine snake	G4, S3, ST

Amphibians

Scientific name	Common Name	Status
Lithobates capito	Gopher frog	G2, S3

Species Ranking and Legal Status definitions as reported by FNAI

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
FE = Federally Endangered
SE = State Endangered
FT = Federally Threatened
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
FT(S/A) = Federal Threatened due to similarity of appearance
DL = Delisted.
ST = State Threatened
T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
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.
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 (FNAI designation).
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. (FNAI designation)
S3 = 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 of other factors. (FNAI designation)
S4 = Apparently secure in Florida (may be rare in parts of range). (FNAI designation)
S5 = Demonstrably secure in Florida. (FNAI designation)
I = Invasive Species
CE = Commercially Exploited (FDACS designation)

Appendix I – Lake Monroe Conservation Area 2023 Management Review Team Summary

The bulleted land manager responses to the comments provided by the DCCA 2020 Management Review Team are below, followed by the Management Review Team checklists completed by the members.

Mark Rizzo, Conservation Florida: Set up for additional bird bandings for the Florida scrub jay.

- *Permits from the U.S. Fish and Wildlife Service and U.S. Geological Survey Bird Banding Lab are required for banding Florida Scrub-Jays. Permits from those agencies were issued to a now retired former District employee. The District is working with those agencies to transfer the permits to an existing staff member. Once all required permits have been obtained, banding activities will resume and continue as staff time permits and as populations warrant.*

Consider more signage on SR 415 highlighting the Property.

- *Additional or better placed signage will be installed near the Brickyard Slough Parking lot. This will likely be reinstalling the sign leaning on the fence to inside the parking lot to not interfere with the FDOT right-of-way.*

Kate Muldoon, Fl Native Plant Society: Recommend partnering with Audubon to secure additional volunteers to band and monitor scrub jays.

- *We will contact the local Audubon chapter for assistance with jay banding and monitoring efforts as needed. We foresee the potential to expand volunteer opportunities through future JayWatch surveys as well. The District will consider recruiting assistance from Audubon volunteers with conditioning jays for future planned trapping and banding efforts once all required permits have been obtained.*

Recommend you partner with local environmental groups, environmental educators to increase your environmental education footprint. So many wonderful ecosystems!

- *We rarely turn away offers to conduct environmental education on conservation areas and staff does a fair amount of outreach both within surrounding communities as well as tabling at events. LMCA has a lot to offer and we enjoy the opportunity to show it off! We will also coordinate with Conservation Florida about their future plans for an environmental learning center on their adjacent D Ranch property and incorporate information about the LMCA into their programming as much as possible.*

Justin Ellenberger, FWC: Install addition signage guiding visitors to the parking lot for Brickyard Slough tract. Reinstall sign leaning on fence for the same tract.

- *The sign leaning on the fence will be reinstalled within the parking lot to not interfere with the FDOT right-of-way. We will attempt to coordinate with FDOT for additional "brown" signage.*

St. Johns River
Water Management District

Name: Mark Romagosa

Affiliation: FL. Park Service D3

Email: Mark.romagosa@floridadep.gov

MANAGEMENT REVIEW CHECKLIST
MANAGEMENT REVIEW TEAM MEETING
LAKE MONROE CONSERVATION AREA
APRIL 26, 2023

Instructions: Please take time to review the management plan summary. During the meeting, please rate the extent to which you perceive the District is managing the property in accordance with the 2012 land management plan.

LAND MANAGEMENT TASK 2012	DUE DATE	REVIEW RATING Do presented observations comply with land management activities/goals set forth in the management plan?	COMMENTS
Resource Protection and Management			
Water Resources			
o Conduct maintenance and incidental or emergency repair of water resource structures as necessary.	Annual	(Yes) No In Progress	
o Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	As needed	(Yes) No In Progress	

o Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	Annual	Yes No In Progress	
o Repair or replace structure #78 to improve condition and functionality of this water structure.	2013	Yes No In Progress	
o Repair or replace structure #85 to improve condition and functionality of this water structure.	2013	Yes No In Progress	
Flora and Fauna			
o Collect species occurrence data and incorporate into the land management biological database.	Upon discovery	Yes No In Progress	
o Adhere to the Wood Stork habitat management guidelines established by USFWS.	Annual	Yes No In Progress	
o Adhere to the USFWS National Bald Eagle Management Guidelines.	Annual	Yes No In Progress	
o Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	As needed	Yes No In Progress	
o Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the amelioration of the onsite population of FSJs.	Annual	Yes No In Progress	
o Conduct annual FSJ banding activities.	As needed	Yes No In Progress	
o Conduct annual JayWatch monitoring efforts.	Annual	Yes No In Progress	

o Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	Annually-summer	Yes No In Progress	
o Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	Annually-spring	Yes No In Progress	
o Locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	2013	Yes No In Progress	
o Coordinate with FDOT regarding installation of wildlife barrier fencing.	2013	Yes No In Progress	
o Coordinate with FDOT, UCF, and others regarding monitoring use of crossing structures and efficacy of barrier fencing.	2017	Yes No In Progress	
o Expand population of Rugel's false pawpaw from current location to other portions of the property.	2014	Yes No In Progress	
Natural Community Management			
o Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	As needed	Yes No In Progress	
o Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	-	Yes No In Progress	
o Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	Annual	Yes No In Progress	
o Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	Annual	Yes No In Progress	

o Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	Annual	Yes No In Progress	
o Maintain FSJ Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	Annual	Yes No In Progress	
Fire Management			
o Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Fire Management Plan	Annual	Yes No In Progress	
o Develop annual burn plans.	Annually by September 1st	Yes No In Progress	
o Continue to populate the fire management database.	As burns occur	Yes No In Progress	
o Conduct fireline maintenance.	Biannually Spring and Fall unless site conditions warrant otherwise	Yes No In Progress	
Exotic Species			
o Document, report, and treat exotic species.	Annual	Yes No In Progress	
o Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	2013	Yes No In Progress	
o Upload infestation data into land management database.	2014	Yes No In Progress	

o Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	Annual	Yes No In Progress	
Cultural Resources			
o Identify and report any new sites.	Upon discovery	Yes No In Progress	

Land Use Management

Access			
o Maintain parking areas, signs, gates, trails, and roads	Annually	Yes No In Progress	
o Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	Annually by September 30th	Yes No In Progress	
Recreation			
o Maintain parking area, kiosk, inclement weather shelter, and trail.	Monthly or as necessary	Yes No In Progress	
o Maintain current information in recreation guide, trail guides, kiosk, and District website.	As needed	Yes No In Progress	
o Maintain portable restroom service contract.	-	Yes No In Progress	
o Mow recreational trails.	Quarterly	Yes No In Progress	
o Conduct trail blazing and trimming maintenance.	Annually by December 31st.	Yes No In Progress	

o Maintain inclement weather shelter and campsites.	Quarterly	Yes No In Progress	
Environmental Education			
o Continue to offer educational opportunities if possible and subject to staff and budget availability.	-	Yes No In Progress	
Security			
o Coordinate with local law enforcement and FWC for security needs.	As needed	Yes No In Progress	
o Maintain contract with private security firm.	-	Yes No In Progress	Contract dissolved
o Develop monthly, prioritized security needs and provide to contracted security firm.	Monthly	Yes No NA In Progress	NA
o Conduct biennial boundary and conservation line posting maintenance.	2012, 2014, 2016, 2018, 2020	Yes No In Progress	
Administration			
Acquisition			
o Evaluate adjacent properties for potential acquisition.	Annually by September 1	Yes No In Progress	
o Refine boundary and parcel data information and map layers.	-	Yes No In Progress	
Cooperative Agreements			
o Administer easements, agreements, leases, and SUAs		Yes No In Progress	

Please answer the following questions:

1. **Is the property being managed in a manner that is compatible with conservation and recreation?**

YES **NO**

2. **Does the current management plan provide sufficient protection to the properties natural and cultural resources?**

YES **NO**

Group Discussion

Are the management practices in compliance with the current land management plan?

SJRWMD are doing an excellent job w/ this property! It looks amazing + is a great place for the conservation of natural resources + appropriate recreation. Staff have done an amazing job of leveraging partners like FWC, Volusia Co., DOT, cattle lessees, conservation groups, user groups, volunteers, + more to accomplish the multitude of duties necessary to manage such a large piece of property. The love the staff has for this site + conservation of natural FL is VERY evident.

St. Johns River
Water Management District

Name: Heather Chasez

Affiliation: FDOT

Email: heather.chasez@dot.state.fl.us

MANAGEMENT REVIEW CHECKLIST
MANAGEMENT REVIEW TEAM MEETING
LAKE MONROE CONSERVATION AREA
APRIL 26, 2023

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LAND MANAGEMENT TASK 2012	DUE DATE	REVIEW RATING Do presented observations comply with land management activities/goals set forth in the management plan?	COMMENTS
Resource Protection and Management			
Water Resources			
o Conduct maintenance and incidental or emergency repair of water resource structures as necessary.	Annual	Yes No (In Progress)	
o Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	As needed	Yes No (In Progress)	

In Progress was selected for all annual, as needed, & upon discovery because although these were observed to be in line with the management plan it is recognized that they are on-going efforts. In lieu of "In Progress" the answer would be yes

o Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	Annual	Yes No (In Progress)	
o Repair or replace structure #78 to improve condition and functionality of this water structure.	2013	(Yes) No In Progress	
o Repair or replace structure #85 to improve condition and functionality of this water structure.	2013	(Yes) No In Progress	
Flora and Fauna			
o Collect species occurrence data and incorporate into the land management biological database.	Upon discovery	Yes No (In Progress)	
o Adhere to the Wood Stork habitat management guidelines established by USFWS.	Annual	Yes No (In Progress)	
o Adhere to the USFWS National Bald Eagle Management Guidelines.	Annual	Yes No (In Progress)	
o Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	As needed	Yes No (In Progress)	
o Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the amelioration of the onsite population of FSJs.	Annual	Yes No (In Progress)	
o Conduct annual FSJ banding activities.	As needed	Yes No (In Progress)	
o Conduct annual JayWatch monitoring efforts.	Annual	Yes No (In Progress)	

o Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	Annually-summer	Yes No In Progress	
o Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	Annually-spring	Yes No In Progress	
o Locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	2013	Yes No In Progress	Continuously occurs
o Coordinate with FDOT regarding installation of wildlife barrier fencing.	2013	Yes No In Progress	
o Coordinate with FDOT, UCF, and others regarding monitoring use of crossing structures and efficacy of barrier fencing.	2017	Yes No In Progress	
o Expand population of Rugel's false pawpaw from current location to other portions of the property.	2014	Yes No In Progress	
Natural Community Management			
o Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	As needed	Yes No In Progress	
o Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	-	Yes No In Progress	no longer an active project
o Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	Annual	Yes No In Progress	
o Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	Annual	Yes No In Progress	

o Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	Annual	Yes No In Progress	
o Maintain FSJ Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	Annual	Yes No In Progress	
Fire Management			
o Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Fire Management Plan	Annual	Yes No In Progress	
o Develop annual burn plans.	Annually by September 1st	Yes No In Progress	
o Continue to populate the fire management database.	As burns occur	Yes No In Progress	
o Conduct fireline maintenance.	Biannually Spring and Fall unless site conditions warrant otherwise	Yes No In Progress	
Exotic Species			
o Document, report, and treat exotic species.	Annual	Yes No In Progress	
o Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	2013	Yes No In Progress	
o Upload infestation data into land management database.	2014	Yes No In Progress	

o Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	Annual	Yes No In Progress	
Cultural Resources			
o Identify and report any new sites.	Upon discovery	Yes No In Progress	
Land Use Management			
Access			
o Maintain parking areas, signs, gates, trails, and roads	Annually	Yes No In Progress	
o Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	Annually by September 30th	Yes No In Progress	
Recreation			
o Maintain parking area, kiosk, inclement weather shelter, and trail.	Monthly or as necessary	Yes No In Progress	
o Maintain current information in recreation guide, trail guides, kiosk, and District website.	As needed	Yes No In Progress	
o Maintain portable restroom service contract.	-	Yes No In Progress	
o Mow recreational trails.	Quarterly	Yes No In Progress	
o Conduct trail blazing and trimming maintenance.	Annually by December 31st.	Yes No In Progress	

o Maintain inclement weather shelter and campsites.	Quarterly	Yes No In Progress	
Environmental Education			
o Continue to offer educational opportunities if possible and subject to staff and budget availability.	-	Yes No In Progress	
Security			
o Coordinate with local law enforcement and FWC for security needs.	As needed	Yes No In Progress	
o Maintain contract with private security firm.	-	Yes No In Progress	Contract was dissolved due to the firm not being able to provide staff
o Develop monthly, prioritized security needs and provide to contracted security firm.	Monthly	Yes No In Progress	"
o Conduct biennial boundary and conservation line posting maintenance.	2012, 2014, 2016, 2018, 2020	Yes No In Progress	
Administration			
Acquisition			
o Evaluate adjacent properties for potential acquisition.	Annually by September 1	Yes No In Progress	
o Refine boundary and parcel data information and map layers.	-	Yes No In Progress	
Cooperative Agreements			
o Administer easements, agreements, leases, and SUAs		Yes No In Progress	

Please answer the following questions:

1. **Is the property being managed in a manner that is compatible with conservation and recreation?**

(YES) **NO**

2. **Does the current management plan provide sufficient protection to the properties natural and cultural resources?**

(YES) **NO**

Group Discussion

Are the management practices in compliance with the current land management plan?

Yes, all the information provided and items/areas observed indicated that the management practices are in compliance with the current land management plan.

St. Johns River
Water Management District

Name: Donald King

Affiliation: FFS

Email: Donald.King@FDACS.gov

MANAGEMENT REVIEW CHECKLIST
MANAGEMENT REVIEW TEAM MEETING
LAKE MONROE CONSERVATION AREA
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Resource Protection and Management			
Water Resources			
o Conduct maintenance and incidental or emergency repair of water resource structures as necessary.	Annual	(Yes) No In Progress	
o Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	As needed	(Yes) No In Progress	

o Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	Annual	(Yes) No In Progress	
o Repair or replace structure #78 to improve condition and functionality of this water structure.	2013	(Yes) No In Progress	
o Repair or replace structure #85 to improve condition and functionality of this water structure.	2013	(Yes) No In Progress	
Flora and Fauna			
o Collect species occurrence data and incorporate into the land management biological database.	Upon discovery	(Yes) No In Progress	
o Adhere to the Wood Stork habitat management guidelines established by USFWS.	Annual	(Yes) No In Progress	
o Adhere to the USFWS National Bald Eagle Management Guidelines.	Annual	(Yes) No In Progress	
o Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	As needed	(Yes) No In Progress	
o Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the amelioration of the onsite population of FSJs.	Annual	Yes No (In Progress)	
o Conduct annual FSJ banding activities.	As needed	(Yes) No In Progress	
o Conduct annual JayWatch monitoring efforts.	Annual	(Yes) No In Progress	

o Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	Annually-summer	(Yes) No In Progress	
o Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	Annually-spring	(Yes) No In Progress	
o Locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	2013	(Yes) No In Progress	
o Coordinate with FDOT regarding installation of wildlife barrier fencing.	2013	(Yes) No In Progress	
o Coordinate with FDOT, UCT, and others regarding monitoring use of crossing structures and efficacy of barrier fencing.	2017	(Yes) No In Progress	
o Expand population of Rugel's false pawpaw from current location to other portions of the property.	2014	Yes No (In Progress)	
Natural Community Management			
o Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	As needed	(Yes) No In Progress	
o Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	-	Yes (No) In Progress	
o Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	Annual	(Yes) No In Progress	
o Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	Annual	(Yes) No In Progress	

o Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	Annual	(Yes) No In Progress	
o Maintain FSJ Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	Annual	(Yes) No In Progress	
Fire Management			
o Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Fire Management Plan	Annual	(Yes) No In Progress	
o Develop annual burn plans.	Annually by September 1st	(Yes) No In Progress	
o Continue to populate the fire management database.	As burns occur	(Yes) No In Progress	
o Conduct fireline maintenance.	Biannually Spring and Fall unless site conditions warrant otherwise	(Yes) No In Progress	
Exotic Species			
o Document, report, and treat exotic species.	Annual	(Yes) No In Progress	
o Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	2013	(Yes) No In Progress	
o Upload infestation data into land management database.	2014	(Yes) No In Progress	

o Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	Annual	(Yes) No In Progress	
Cultural Resources			
o Identify and report any new sites.	Upon discovery	(Yes) No In Progress	
Land Use Management			
Access			
o Maintain parking areas, signs, gates, trails, and roads	Annually	(Yes) No In Progress	
o Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	Annually by September 30th	(Yes) No In Progress	
Recreation			
o Maintain parking area, kiosk, inclement weather shelter, and trail.	Monthly or as necessary	(Yes) No In Progress	
o Maintain current information in recreation guide, trail guides, kiosk, and District website.	As needed	(Yes) No In Progress	
o Maintain portable restroom service contract.	-	(Yes) No In Progress	
o Mow recreational trails.	Quarterly	(Yes) No In Progress	
o Conduct trail blazing and trimming maintenance.	Annually by December 31st.	(Yes) No In Progress	

o Maintain inclement weather shelter and campsites.	Quarterly	Yes No In Progress	
Environmental Education			
o Continue to offer educational opportunities if possible and subject to staff and budget availability.	-	Yes No In Progress	
Security			
o Coordinate with local law enforcement and FWC for security needs.	As needed	Yes No In Progress	
o Maintain contract with private security firm.	-	Yes No In Progress	
o Develop monthly, prioritized security needs and provide to contracted security firm.	Monthly	Yes No In Progress	
o Conduct biennial boundary and conservation line posting maintenance.	2012, 2014, 2016, 2018, 2020	Yes No In Progress	
Administration			
Acquisition			
o Evaluate adjacent properties for potential acquisition.	Annually by September 1	Yes No In Progress	
o Refine boundary and parcel data information and map layers.	-	Yes No In Progress	
Cooperative Agreements			
o Administer easements, agreements, leases, and SUAs		Yes No In Progress	

Please answer the following questions:

1. **Is the property being managed in a manner that is compatible with conservation and recreation?**

(YES) **NO**

2. **Does the current management plan provide sufficient protection to the properties natural and cultural resources?**

(YES) **NO**

Group Discussion

Are the management practices in compliance with the current land management plan?

- The public areas were well maintained
- The Rx program was consistan from Year to Year and the appropriate burn Rotations are being established.
- Road are accessable & in usable shape.
- Staff was very knelegble about the property and enthusiastic about ~~the~~ Implimenting the management plan.

St. Johns River
Water Management District

Name: Justin Ellenberger

Affiliation: FWC

Email: justin.ellenberger@myfwc.com

MANAGEMENT REVIEW CHECKLIST
MANAGEMENT REVIEW TEAM MEETING
LAKE MONROE CONSERVATION AREA
APRIL 26, 2023

Instructions: Please take time to review the management plan summary. During the meeting, please rate the extent to which you perceive the District is managing the property in accordance with the 2012 land management plan.

LAND MANAGEMENT TASK 2012	DUE DATE	REVIEW RATING Do presented observations comply with land management activities/goals set forth in the management plan?	COMMENTS
Resource Protection and Management			
Water Resources			
o Conduct maintenance and incidental or emergency repair of water resource structures as necessary.	Annual	(Yes) No In Progress	
o Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	As needed	(Yes) No In Progress	

o Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	Annual	(Yes) No In Progress	
o Repair or replace structure #78 to improve condition and functionality of this water structure.	2013	(Yes) No In Progress	
o Repair or replace structure #85 to improve condition and functionality of this water structure.	2013	(Yes) No In Progress	
Flora and Fauna			
o Collect species occurrence data and incorporate into the land management biological database.	Upon discovery	(Yes) No In Progress	GT Survey Paw Paw FSJ, eagle
o Adhere to the Wood Stork habitat management guidelines established by USFWS.	Annual	(Yes) No In Progress	
o Adhere to the USFWS National Bald Eagle Management Guidelines.	Annual	(Yes) No In Progress	
o Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	As needed	(Yes) No In Progress	Nice wildlife jump outs along 415
o Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the amelioration of the onsite population of FSJs.	Annual	(Yes) No In Progress	
o Conduct annual FSJ banding activities.	As needed	Yes No (In Progress)	
o Conduct annual JayWatch monitoring efforts.	Annual	(Yes) No In Progress	

o Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	Annually-summer	(Yes) No In Progress	
o Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	Annually-spring	(Yes) No In Progress	
o Locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	2013	(Yes) No In Progress	
o Coordinate with FDOT regarding installation of wildlife barrier fencing.	2013	(Yes) No In Progress	
o Coordinate with FDOT, UCF, and others regarding monitoring use of crossing structures and efficacy of barrier fencing.	2017	(Yes) No In Progress	
o Expand population of Rugel's false pawpaw from current location to other portions of the property.	2014	Yes No (In Progress)	
Natural Community Management			
o Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	As needed	(Yes) No In Progress	
o Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	-	Yes (No) In Progress	
o Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	Annual	(Yes) No In Progress	
o Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	Annual	(Yes) No In Progress	

o Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	Annual	(Yes) No In Progress	Cattle shredding. flooding
o Maintain FSJ Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	Annual	(Yes) No In Progress	
Fire Management			
o Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Fire Management Plan	Annual	(Yes) No In Progress	
o Develop annual burn plans.	Annually by September 1st	(Yes) No In Progress	
o Continue to populate the fire management database.	As burns occur	(Yes) No In Progress	
o Conduct fireline maintenance.	Biannually Spring and Fall unless site conditions warrant otherwise	(Yes) No In Progress	
Exotic Species			
o Document, report, and treat exotic species.	Annual	(Yes) No In Progress	
o Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	2013	(Yes) No In Progress	
o Upload infestation data into land management database.	2014	(Yes) No In Progress	

o Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	Annual	(Yes) No In Progress	
Cultural Resources			
o Identify and report any new sites.	Upon discovery	(Yes) No In Progress	
Land Use Management			
Access			
o Maintain parking areas, signs, gates, trails, and roads	Annually	(Yes) No In Progress	Enough signs on road? Main sign Laying on fence.
o Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	Annually by September 30th	(Yes) No In Progress	
Recreation			
o Maintain parking area, kiosk, inclement weather shelter, and trail.	Monthly or as necessary	(Yes) No In Progress	
o Maintain current information in recreation guide, trail guides, kiosk, and District website.	As needed	(Yes) No In Progress	
o Maintain portable restroom service contract.	-	(Yes) No In Progress	
o Mow recreational trails.	Quarterly	(Yes) No In Progress	
o Conduct trail blazing and trimming maintenance.	Annually by December 31st.	(Yes) No In Progress	

o Maintain inclement weather shelter and campsites.	Quarterly	(Yes) No In Progress	
Environmental Education			
o Continue to offer educational opportunities if possible and subject to staff and budget availability.	-	(Yes) No In Progress	
Security			
o Coordinate with local law enforcement and FWC for security needs.	As needed	(Yes) No In Progress	
o Maintain contract with private security firm.	-	Yes (No) In Progress	
o Develop monthly, prioritized security needs and provide to contracted security firm.	Monthly	Yes (No) In Progress	
o Conduct biennial boundary and conservation line posting maintenance.	2012, 2014, 2016, 2018, 2020	(Yes) No In Progress	
Administration			
Acquisition			
o Evaluate adjacent properties for potential acquisition.	Annually by September 1	(Yes) No In Progress	
o Refine boundary and parcel data information and map layers.	-	(Yes) No In Progress	
Cooperative Agreements			
o Administer easements, agreements, leases, and SUAs		(Yes) No In Progress	

Please answer the following questions:

1. **Is the property being managed in a manner that is compatible with conservation and recreation?**

(YES) NO

2. **Does the current management plan provide sufficient protection to the properties natural and cultural resources?**

(YES) NO

Group Discussion

Are the management practices in compliance with the current land management plan?

Yes

Commend WMD and staff on using varied Mechinacal and fire treatments managing scrub and Florida scrub jay.

Commend WMD and staff on providing very informative maps w/ lots of detail for CMR.

Commend WMD and staff on providing hunting opportunities on 1/2 CMCA for entire state season and delineating SSL boundary.

St. Johns River
Water Management District

Name: Dean Gemeinhardt

Affiliation: Volusia County

Email: Dgemeinhardt@Volusia.org

MANAGEMENT REVIEW CHECKLIST
MANAGEMENT REVIEW TEAM MEETING
LAKE MONROE CONSERVATION AREA
APRIL 26, 2023

Instructions: Please take time to review the management plan summary. During the meeting, please rate the extent to which you perceive the District is managing the property in accordance with the 2012 land management plan.

LAND MANAGEMENT TASK 2012	DUE DATE	REVIEW RATING Do presented observations comply with land management activities/goals set forth in the management plan?	COMMENTS
Resource Protection and Management			
Water Resources			
o Conduct maintenance and incidental or emergency repair of water resource structures as necessary.	Annual	Yes No In Progress	
o Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	As needed	Yes No In Progress	

o Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	Annual	Yes No In Progress	
o Repair or replace structure #78 to improve condition and functionality of this water structure.	2013	Yes No In Progress	
o Repair or replace structure #85 to improve condition and functionality of this water structure.	2013	Yes No In Progress	
Flora and Fauna			
o Collect species occurrence data and incorporate into the land management biological database.	Upon discovery	Yes No In Progress	
o Adhere to the Wood Stork habitat management guidelines established by USFWS.	Annual	Yes No In Progress	
o Adhere to the USFWS National Bald Eagle Management Guidelines.	Annual	Yes No In Progress	
o Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	As needed	Yes No In Progress	
o Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the amelioration of the onsite population of FSJs.	Annual	Yes No In Progress	
o Conduct annual FSJ banding activities.	As needed	Yes No In Progress	
o Conduct annual JayWatch monitoring efforts.	Annual	Yes No In Progress	

o Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	Annually-summer	Yes No In Progress	
o Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	Annually-spring	Yes No In Progress	
o Locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	2013	Yes No In Progress	
o Coordinate with FDOT regarding installation of wildlife barrier fencing.	2013	Yes No In Progress	
o Coordinate with FDOT, UCF, and others regarding monitoring use of crossing structures and efficacy of barrier fencing.	2017	Yes No In Progress	
o Expand population of Rugel's false pawpaw from current location to other portions of the property.	2014	Yes No In Progress	
Natural Community Management			
o Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	As needed	Yes No In Progress	
o Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	-	Yes No In Progress	
o Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	Annual	Yes No In Progress	
o Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	Annual	Yes No In Progress	

o Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	Annual	Yes No In Progress	
o Maintain FSJ Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	Annual	Yes No In Progress	
Fire Management			
o Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Fire Management Plan	Annual	Yes No In Progress	
o Develop annual burn plans.	Annually by September 1st	Yes No In Progress	
o Continue to populate the fire management database.	As burns occur	Yes No In Progress	
o Conduct fireline maintenance.	Biannually Spring and Fall unless site conditions warrant otherwise	Yes No In Progress	
Exotic Species			
o Document, report, and treat exotic species.	Annual	Yes No In Progress	
o Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	2013	Yes No In Progress	
o Upload infestation data into land management database.	2014	Yes No In Progress	

o Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	Annual	Yes No In Progress	
Cultural Resources			
o Identify and report any new sites.	Upon discovery	Yes No In Progress	
Land Use Management			
Access			
o Maintain parking areas, signs, gates, trails, and roads	Annually	Yes No In Progress	
o Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	Annually by September 30th	Yes No In Progress	
Recreation			
o Maintain parking area, kiosk, inclement weather shelter, and trail.	Monthly or as necessary	Yes No In Progress	
o Maintain current information in recreation guide, trail guides, kiosk, and District website.	As needed	Yes No In Progress	
o Maintain portable restroom service contract.	-	Yes No In Progress	
o Mow recreational trails.	Quarterly	Yes No In Progress	
o Conduct trail blazing and trimming maintenance.	Annually by December 31st.	Yes No In Progress	

o Maintain inclement weather shelter and campsites.	Quarterly	Yes No In Progress	
Environmental Education			
o Continue to offer educational opportunities if possible and subject to staff and budget availability.	-	Yes No In Progress	
Security			
o Coordinate with local law enforcement and FWC for security needs.	As needed	Yes No In Progress	
o Maintain contract with private security firm.	-	Yes No In Progress	
o Develop monthly, prioritized security needs and provide to contracted security firm.	Monthly	Yes No In Progress	
o Conduct biennial boundary and conservation line posting maintenance.	2012, 2014, 2016, 2018, 2020	Yes No In Progress	
Administration			
Acquisition			
o Evaluate adjacent properties for potential acquisition.	Annually by September 1	Yes No In Progress	
o Refine boundary and parcel data information and map layers.	-	Yes No In Progress	
Cooperative Agreements			
o Administer easements, agreements, leases, and SUAs		Yes No In Progress	

Please answer the following questions:

1. **Is the property being managed in a manner that is compatible with conservation and recreation?**

(YES) **NO**

2. **Does the current management plan provide sufficient protection to the properties natural and cultural resources?**

(YES) **NO**

Group Discussion

Are the management practices in compliance with the current land management plan?

- The management practices are in compliance with the current land management plan, Overall the District is doing a very good job with the management practices.

- using cattle leases for fuel mitigation along 415 is a very useful tool

St. Johns River
Water Management District

Name: Kimberly Seidl

Affiliation: FDEP Central District

Email: Kim.Seidl@floridadep.gov

MANAGEMENT REVIEW CHECKLIST
MANAGEMENT REVIEW TEAM MEETING
LAKE MONROE CONSERVATION AREA
APRIL 26, 2023

Instructions: Please take time to review the management plan summary. During the meeting, please rate the extent to which you perceive the District is managing the property in accordance with the 2012 land management plan.

LAND MANAGEMENT TASK 2012	DUE DATE	REVIEW RATING Do presented observations comply with land management activities/goals set forth in the management plan?	COMMENTS
Resource Protection and Management			
Water Resources			
o Conduct maintenance and incidental or emergency repair of water resource structures as necessary.	Annual	Yes No (In Progress)	
o Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	As needed	(Yes) No In Progress	

o Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	Annual	Yes No (In Progress)	
o Repair or replace structure #78 to improve condition and functionality of this water structure.	2013	(Yes) No In Progress	
o Repair or replace structure #85 to improve condition and functionality of this water structure.	2013	(Yes) No In Progress	
Flora and Fauna			
o Collect species occurrence data and incorporate into the land management biological database.	Upon discovery	Yes No (In Progress)	
o Adhere to the Wood Stork habitat management guidelines established by USFWS.	Annual	(Yes) No In Progress	
o Adhere to the USFWS National Bald Eagle Management Guidelines.	Annual	(Yes) No In Progress	
o Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	As needed	(Yes) No In Progress	
o Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the amelioration of the onsite population of FSJs.	Annual	Yes No (In Progress)	
o Conduct annual FSJ banding activities.	As needed	Yes No (In Progress)	
o Conduct annual JayWatch monitoring efforts.	Annual	(Yes) No In Progress	

o Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	Annually-summer	(Yes) No In Progress	
o Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	Annually-spring	(Yes) No In Progress	
o Locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	2013	(Yes) No In Progress	
o Coordinate with FDOT regarding installation of wildlife barrier fencing.	2013	(Yes) No In Progress	
o Coordinate with FDOT, UCF, and others regarding monitoring use of crossing structures and efficacy of barrier fencing.	2017	(Yes) No In Progress	
o Expand population of Rugel's false pawpaw from current location to other portions of the property.	2014	Yes No (In Progress)	
Natural Community Management			
o Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	As needed	Yes No (In Progress)	
o Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	-	Yes (No) In Progress	Project no longer in existance.
o Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	Annual	(Yes) No In Progress	
o Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	Annual	Yes No (In Progress)	

o Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	Annual	(Yes) No In Progress	
o Maintain FSI Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	Annual	(Yes) No In Progress	
Fire Management			
o Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Fire Management Plan	Annual	Yes No (In Progress)	
o Develop annual burn plans.	Annually by September 1st	(Yes) No In Progress	
o Continue to populate the fire management database.	As burns occur	(Yes) No In Progress	
o Conduct fireline maintenance.	Biannually Spring and Fall unless site conditions warrant otherwise	(Yes) No In Progress	
Exotic Species			
o Document, report, and treat exotic species.	Annual	Yes No (In Progress)	
o Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	2013	(Yes) No In Progress	
o Upload infestation data into land management database.	2014	(Yes) No In Progress	

o Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	Annual	Yes No In Progress	
Cultural Resources			
o Identify and report any new sites.	Upon discovery	(Yes) No In Progress	
Land Use Management			
Access			
o Maintain parking areas, signs, gates, trails, and roads	Annually	(Yes) No In Progress	
o Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	Annually by September 30th	Yes No In Progress	
Recreation			
o Maintain parking area, kiosk, inclement weather shelter, and trail.	Monthly or as necessary	(Yes) No In Progress	
o Maintain current information in recreation guide, trail guides, kiosk, and District website.	As needed	(Yes) No In Progress	
o Maintain portable restroom service contract.		(Yes) No In Progress	
o Mow recreational trails.	Quarterly	(Yes) No In Progress	
o Conduct trail blazing and trimming maintenance.	Annually by December 31st.	(Yes) No In Progress	

o Maintain inclement weather shelter and campsites.	Quarterly	(Yes) No In Progress	
Environmental Education			
o Continue to offer educational opportunities if possible and subject to staff and budget availability.	-	Yes No (In Progress)	
Security			
o Coordinate with local law enforcement and FWC for security needs.	As needed	(Yes) No In Progress	
o Maintain contract with private security firm.	-	Yes (No) In Progress	Mutually dissolved agreement.
o Develop monthly, prioritized security needs and provide to contracted security firm.	Monthly	Yes (No) In Progress	^
o Conduct biennial boundary and conservation line posting maintenance.	2012, 2014, 2016, 2018, 2020	(Yes) No In Progress	
Administration			
Acquisition			
o Evaluate adjacent properties for potential acquisition.	Annually by September 1	(Yes) No In Progress	
o Refine boundary and parcel data information and map layers.	-	(Yes) No In Progress	
Cooperative Agreements			
o Administer easements, agreements, leases, and SUAs		(Yes) No In Progress	

Please answer the following questions:

1. **Is the property being managed in a manner that is compatible with conservation and recreation?**

(YES) **NO**

2. **Does the current management plan provide sufficient protection to the properties natural and cultural resources?**

(YES) **NO**

Group Discussion

Are the management practices in compliance with the current land management plan?

Yes.

The staff for the Lake Monroe WMA are doing an excellent job managementing this Property: Specifically, Exotic plant management, prescribed burning, scrub habitat creation and management and cultural resource protection.

Thank you, everyone with the SJRWMD team, for setting this up and ~~on~~ having thoughtful discussion on the future of this property.

St. Johns River
Water Management District

Name: Kate Muldoon

Affiliation: PawPaw Chapter / Fl. Native Plant Society

Email: ironkate@yahoo.com

MANAGEMENT REVIEW CHECKLIST
MANAGEMENT REVIEW TEAM MEETING
LAKE MONROE CONSERVATION AREA
APRIL 26, 2023

Instructions: Please take time to review the management plan summary. During the meeting, please rate the extent to which you perceive the District is managing the property in accordance with the 2012 land management plan.

LAND MANAGEMENT TASK 2012	DUE DATE	REVIEW RATING Do presented observations comply with land management activities/goals set forth in the management plan?	COMMENTS
Resource Protection and Management			
Water Resources			
o Conduct maintenance and incidental or emergency repair of water resource control structures as necessary.	Annual	(Yes) No In Progress	earthen berms, culverts, etc.
o Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	As needed	(Yes) No In Progress	

Hal Scott

o Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	Annual	Yes No In Progress	
o Repair or replace structure #78 to improve condition and functionality of this water structure.	2013 2023	Yes No In Progress	
o Repair or replace structure #85 to improve condition and functionality of this water structure.	2013	Yes No In Progress	
Flora and Fauna			
o Collect species occurrence data and incorporate into the land management biological database.	Upon discovery	Yes No In Progress	
o Adhere to the Wood Stork habitat management guidelines established by USFWS.	Annual	Yes No In Progress	
o Adhere to the USFWS National Bald Eagle Management Guidelines.	Annual	Yes No In Progress	
o Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	As needed	Yes No In Progress	
o Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the amelioration of the onsite population of FSJs.	Annual	Yes No In Progress	
o Conduct annual FSJ banding activities.	As needed	Yes No ~~In Progress~~	2020 was last banding event.
o Conduct annual JayWatch monitoring efforts.	Annual	Yes No In Progress	conducted end of July

o Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	Annually-summer	Yes No In Progress	
o Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	Annually-spring	Yes No In Progress	
o Locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	2013 2023	Yes No In Progress	
o Coordinate with FDOT regarding installation of wildlife barrier fencing.	2013	Yes No In Progress	
o Coordinate with FDOT, UCF, and others regarding monitoring use of crossing structures and efficacy of barrier fencing.	2017	Yes No In Progress	
o Expand population of Rugel's false pawpaw from current location to other portions of the property.	2014	Yes No In Progress	Stalled
Natural Community Management			
o Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	As needed	Yes No In Progress	
o Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	N/A	Yes No In Progress	
o Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	Annual	Yes No In Progress	
o Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	Annual	Yes No In Progress	

o Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	Annual	Yes No In Progress	mechanical, fire, hurricanes, etc. mowing, chopping
o Maintain FSJ Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	Annual	Yes No In Progress	
Fire Management			
o Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Fire Management Plan	Annual	Yes No In Progress	1) weather 2) fuel 3) resource availability, reliet on contractors/ cooperators / staff.
o Develop annual burn plans.	Annually by September 1st	Yes No In Progress	130 A/yr.
o Continue to populate the fire management database.	As burns occur	Yes No In Progress	
o Conduct fireline maintenance.	Biannually Spring and Fall unless site conditions warrant otherwise	Yes No In Progress	
Exotic Species			
o Document, report, and treat exotic species.	Annual	Yes No In Progress	Invasive Plant mgmt. Paton Bay
o Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	2013	Yes No In Progress	also map smaller areas. Lease-assists
o Upload infestation data into land management database.	2014	Yes No In Progress	

o Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	Annual	Yes No In Progress	used metric to assess success
Cultural Resources			
o Identify and report any new sites.	Upon discovery	Yes No In Progress	FL Public Archaeol. Network X2 in last 2 yrs. FPAN
Land Use Management			
Access			
o Maintain parking areas, signs, gates, trails, and roads	Annually	Yes No In Progress	
o Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	Annually by September 30th	Yes No In Progress	
Recreation			
o Maintain parking area, kiosk, inclement weather shelter, and trail.	Monthly or as necessary	Yes No In Progress	
o Maintain current information in recreation guide, trail guides, kiosk, and District website.	As needed	Yes No In Progress	
o Maintain portable restroom service contract.	-	Yes No In Progress	
o Mow recreational trails.	Quarterly	Yes No In Progress	
o Conduct trail blazing and trimming maintenance.	Annually by December 31st.	Yes No In Progress	

o Maintain inclement weather shelter and campsites.	Quarterly	(Yes) No In Progress	
Environmental Education			
o Continue to offer educational opportunities if possible and subject to staff and budget availability.	-	Yes No (In Progress)	SUA (special use access)
Security			
o Coordinate with local law enforcement and FWC for security needs.	As needed	Yes No In Progress	FWC does regular inspections
o Maintain contract with private security firm.	N/A	Yes (No) In Progress	contract is not really executed
o Develop monthly, prioritized security needs and provide to contracted security firm.	~~Monthly~~ N/A	Yes (No) In Progress	
o Conduct biennial boundary and conservation line posting maintenance.	2012, 2014, 2016, 2018, 2020	(Yes) No In Progress	
Administration			
Acquisition			
o Evaluate adjacent properties for potential acquisition.	Annually by September 1	(Yes) No In Progress	
o Refine boundary and parcel data information and map layers.	-	(Yes) No In Progress	
Cooperative Agreements			
o Administer easements, agreements, leases, and SUAs		(Yes) No In Progress	

Please answer the following questions:

1. **Is the property being managed in a manner that is compatible with conservation and recreation?**

(YES) NO

2. **Does the current management plan provide sufficient protection to the properties natural and cultural resources?**

(YES) NO

Group Discussion

Are the management practices in compliance with the current land management plan?

Overall, the land management practices of the LMCA seem to be well-conceived, well-executed, and often revisited. Their cooperative agreements & practices with fellow agencies and NGOs are impressive. Kudos to the excellent staff, their knowledge, & diligence.

1. Recommend you partner w/ Audubon to secure additional volunteers to monitor & bush scrub jays.

2. Recommend your partner with local environmental groups, environmental educators, etc. to increase your environ. ed. footprint. So many wonderful ecosystems!

St. Johns River
Water Management District

Name: Mark Rizzo

Affiliation: Conservation Florida

Email: mark@conservationfla.org

MANAGEMENT REVIEW CHECKLIST
MANAGEMENT REVIEW TEAM MEETING
LAKE MONROE CONSERVATION AREA
APRIL 26, 2023

Instructions: Please take time to review the management plan summary. During the meeting, please rate the extent to which you perceive the District is managing the property in accordance with the 2012 land management plan.

LAND MANAGEMENT TASK 2012	DUE DATE	REVIEW RATING Do presented observations comply with land management activities/goals set forth in the management plan?	COMMENTS
Resource Protection and Management			
Water Resources			
o Conduct maintenance and incidental or emergency repair of water resource structures as necessary.	Annual	(Yes) No In Progress	
o Maintain water resource structures database and incorporate maintenance, repair, and any new structures.	As needed	(Yes) No In Progress	

o Visually inspect roads, trails, and culverts for erosion problems and maintenance and repair needs.	Annual	Yes No In Progress	
o Repair or replace structure #78 to improve condition and functionality of this water structure.	2013	Yes No In Progress	
o Repair or replace structure #85 to improve condition and functionality of this water structure.	2013	Yes No In Progress	
Flora and Fauna			
o Collect species occurrence data and incorporate into the land management biological database.	Upon discovery	Yes No In Progress	
o Adhere to the Wood Stork habitat management guidelines established by USFWS.	Annual	Yes No In Progress	
o Adhere to the USFWS National Bald Eagle Management Guidelines.	Annual	Yes No In Progress	
o Coordinate with FWC and FDOT regarding bear habitat management and the installation, maintenance, and monitoring of wildlife crossing structures and barrier fences.	As needed	Yes No In Progress	
o Conduct habitat management activities including prescribed fire and mechanical treatments to aid in the amelioration of the onsite population of FSJs.	Annual	Yes No In Progress	
o Conduct annual FSJ banding activities.	As needed	Yes No In Progress	
o Conduct annual JayWatch monitoring efforts.	Annual	Yes No In Progress	

o Utilizing JayWatch and other monitoring data, identify and annually map FSJ territories.	Annually-summer	(Yes) No In Progress	
o Conduct annual spring monitoring of Rugel's false pawpaw and incorporate into ArcGIS database.	Annually-spring	(Yes) No In Progress	
o Locate and confirm activity status of known Bald Eagle nest sites and update Bald Eagle database.	2013	(Yes) No In Progress	
o Coordinate with FDOT regarding installation of wildlife barrier fencing.	2013	(Yes) No In Progress	
o Coordinate with FDOT, UCF, and others regarding monitoring use of crossing structures and efficacy of barrier fencing.	2017	(Yes) No In Progress	
o Expand population of Rugel's false pawpaw from current location to other portions of the property.	2014	(Yes) No In Progress	
Natural Community Management			
o Conduct visual monitoring and forest management activities as necessary in response to disease, insect infestation, or wind damage.	As needed	(Yes) No In Progress	
o Coordinate with the City of Deltona regarding the Deltona Scrub-jay Mitigation Project.	-	Yes (No) In Progress	No longer a program.
o Implement management activities as needed within the FSJ habitat area to maintain a mosaic of desired habitat conditions.	Annual	(Yes) No In Progress	
o Implement management activities within the mesic flatwoods and areas of planted pine to encourage optimal forest health and targeted basal areas.	Annual	(Yes) No In Progress	

o Implement appropriate management actions within the floodplain marsh to restrict woody shrub growth while encouraging site appropriate herbaceous coverage.	Annual	Yes No In Progress	
o Maintain FSJ Habitat Tracking spreadsheet as management activities occur in delineated habitat areas.	Annual	Yes No In Progress	
Fire Management			
o Implement prescribed burning as described in the District's Fire Management Plan and the Lake Monroe Fire Management Plan	Annual	Yes No In Progress	
o Develop annual burn plans.	Annually by September 1st	Yes No In Progress	
o Continue to populate the fire management database.	As burns occur	Yes No In Progress	
o Conduct fireline maintenance.	Biannually Spring and Fall unless site conditions warrant otherwise	Yes No In Progress	
Exotic Species			
o Document, report, and treat exotic species.	Annual	Yes No In Progress	
o Locate and map infestations of FLEPPC Category I species with infestations of 2 acres or larger.	2013	Yes No In Progress	
o Upload infestation data into land management database.	2014	Yes No In Progress	

o Inspect and map treated infestations of invasive exotics to measure success of treatments and assess additional needs.	Annual	Yes No In Progress	
Cultural Resources			
o Identify and report any new sites.	Upon discovery	Yes No In Progress	

Land Use Management

Access			
o Maintain parking areas, signs, gates, trails, and roads	Annually	Yes No In Progress	
o Update roads and firelines in the land management database as maintenance, repair or creation of new roads or trails occurs.	Annually by September 30th	Yes No In Progress	
Recreation			
o Maintain parking area, kiosk, inclement weather shelter, and trail.	Monthly or as necessary	Yes No In Progress	
o Maintain current information in recreation guide, trail guides, kiosk, and District website.	As needed	Yes No In Progress	
o Maintain portable restroom service contract.	-	Yes No In Progress	
o Mow recreational trails.	Quarterly	Yes No In Progress	
o Conduct trail blazing and trimming maintenance.	Annually by December 31st.	Yes No In Progress	

o Maintain inclement weather shelter and campsites.	Quarterly	(Yes) No In Progress	
Environmental Education			
o Continue to offer educational opportunities if possible and subject to staff and budget availability.	-	(Yes) No In Progress	
Security			
o Coordinate with local law enforcement and FWC for security needs.	As needed	(Yes) No In Progress	Retain Direct FWC presence No longer formal program
o Maintain contract with private security firm.	-	Yes (No) In Progress	No longer Contract
o Develop monthly, prioritized security needs and provide to contracted security firm.	Monthly	Yes (No) In Progress	No longer contract
o Conduct biennial boundary and conservation line posting maintenance.	2012, 2014, 2016, 2018, 2020	(Yes) No In Progress	
Administration			
Acquisition			
o Evaluate adjacent properties for potential acquisition.	Annually by September 1	(Yes) No In Progress	
o Refine boundary and parcel data information and map layers.	-	(Yes) No In Progress	
Cooperative Agreements			
o Administer easements, agreements, leases, and SUAs		(Yes) No In Progress	

Please answer the following questions:

1. **Is the property being managed in a manner that is compatible with conservation and recreation?**

(YES) **NO**

2. **Does the current management plan provide sufficient protection to the properties natural and cultural resources?**

(YES) **NO**

Group Discussion

Are the management practices in compliance with the current land management plan? Yes

The District has shown great efforts to comply and exceed with the protection of the property and their approach of the land mgt activities that are implemented. Great job on these efforts and the leveraging of partnerships used on the property.

Suggestions

- Set up a potential for more bird banders for the FSJs
- Potentially more signage on SR 415 highlighting property

Appendix J – Lake Monroe Conservation Area Fire Management Plan

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 Lake Monroe Conservation Area (Property or LMCA).

Introduction and Objectives

The Property lies within portions of Sections 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 34, 35, 36 of Township 19 South, Range 31 East; Sections 19, 30, 31 of Township 19 South Range 32 East and Section 1 of Township 20 South, Range 31 East. The Property is located within the Middle St. Johns River Basin and lies almost entirely within Volusia County with a portion located in Seminole County

The Property is located approximately four miles northeast of the City of Sanford and one mile south of the town of Osteen on the eastern shore of Lake Monroe. State Road (SR) 415 bisects the Property, dividing it into two tracts. The Kratzert tract is located west of SR 415; the Brickyard Slough tract is located to the east of SR 415. Access to the Kratzert tract is via a parking area on Reed Ellis Rd. which leads to a 1.4-mile multi-use loop trail. Access to the Brickyard Slough tract is via Beck Ranch Park on SR 415 which leads to 7.6 miles of multi-use trails.

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 Property include:

- Reduction of fuel loads through the application of prescribed fire to decrease potential risk of damaging wildfires.
- Introduction of growing season (April - August) 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 Property be partitioned into manageable burn units prior, termed fire management units (FMU) 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 Property.

Fire Return Interval

The general frequency to which fire returns to a community type 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. The following discussion of native plant communities occurring on the Property and optimal fire return intervals

was characterized in part using information from the 2010 Florida Natural Areas Inventory's *Guide to the Natural Communities of Florida* (Table 1).

Table 1: Fire Return Interval by Natural Community Type

Natural Community Type	FNAI Fire Return Interval
Floodplain marsh	Periodic; no established return interval
Hydric hammock	Not fire maintained
Scrubby flatwoods	5-15 years
Floodplain swamp	Not fire maintained
Mesic flatwoods	2-4 years
Wet flatwoods	3-5 years
Depression marsh	2-15 years; depending on community embedded within
Basin marsh	2-15 years; depending on community embedded within
Basin swamp	2-15 years; depending on community embedded within
Dome swamp	2-15 years; depending on community embedded within
Sandhill	1-3 years

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. Below are descriptions of these natural communities relationship with fire in order of overall acreage found on the Property.

Floodplain marsh, the most extensive natural community of LMCA at 4,057 acres, would have historically received periodic fire, though this natural community is principally maintained by flooding with hydroperiods of over 250 days common. The Property's floodplain marsh is relatively intact, with little hydrologic alterations. This allows for the flooding of the St. Johns River to impact the Property as it has historically. There are benefits to applying fire to the floodplain marsh at LMCA which include reducing woody shrubs and improving wildlife habitat though the research is, at times, contradictive on the last benefit. Limited access, difficulty in establishing containment lines in this natural community as well as proximity to smoke sensitive areas makes the application of prescribed fire on the floodplain marshes of LMCA a low priority.

Much of the 1,335 acres of hydric hammocks on the Property are adjacent to or surrounded by its floodplain marsh. These natural communities very infrequently received fire historically and this disturbance is not considered an important part of hydric hammock dynamics. For this reason, they are not considered fire maintained. Prescribed fires in adjacent flatwoods communities found on the Property are often allowed to burn into the ecotone of the hydric hammock but these hammocks should not be considered a natural firebreak. The cabbage palm (*Sabal palmetto*) component of this natural community can provide fuel continuity. In addition, duff accumulation in hydric hammock's

poorly drained soils can cause extended smoldering issues if a fire occurs when soil moisture is low. While not fire maintained, this community can be susceptible to wildfires. Wildfires can change the structure of hydric hammocks shifting the community's composition from live oak (*Quercus virginiana*) dominance towards the fire tolerant cabbage palm.

Fire management within the 505 acres of scrubby flatwoods on the Property is of particular importance to the listed plants and animals found on LMCA. The scrubby flatwoods have a fire return interval at 5 to 15 years, which is longer than the other flatwoods natural communities found on the Property and is due to the slightly more continuous ground cover compared to scrub but more fractured than mesic flatwoods, resulting in a frequency that is intermediate within the three. This structure often results in a patchwork or mosaic burn pattern, where some portions of a scrubby flatwoods burn unit burn at high intensity where other portions may not burn at all. This pattern is of particular importance to the Florida scrub jay (*Aphelocoma coerulescens*). If fire return intervals are too short, the scrub oaks', which are common in this natural community, acorn production will be diminished. If the fire return interval is too long, the scrub oaks will attain a height that is not favorable for the Florida scrub jay as well as produce liter that will cover up open sandy patches the Florida scrub jay needs for caching acorns. An additional consideration at LMCA is to fracture the spatial continuity of the prescribed burns conducted on the Property to provide a mosaic across the landscape as well. All the scrubby flatwoods on the Property occur on the Brickyard Slough tract.

Floodplain swamp is not a fire maintained natural community. It is usually too wet to support fire and at LMCA it is surrounded by natural communities that are principally maintained by flooding. Fire in this natural community may greatly damage the understory.

Mesic flatwoods has one of the shortest fire return intervals on the Property at 2 to 4 years. It is also the most common natural community in Florida and makes up 269 acres at LMCA. Its dominant overstory tree at LMCA is slash pine (*Pinus elliottii*) with pond pine (*Pinus serotina*) and longleaf pine (*Pinus palustris*) as secondary overstory species. The midstory is comprised of sabal palm and various oaks with an understory of saw palmetto (*Serenoa repens*) and various forbs. This vegetation combination produces a highly flammable fuel bed which directly relates to the short fire return interval. The mesic flatwoods on the Property often blend into adjacent natural communities without a fuel break. This results in a well-maintained ecotone but can make prescribed fire management challenging due to the differing fire weather conditions needed to meet burn objectives on mesic flatwoods but exclude fire from the adjacent natural community like hydric hammock. Most of the mesic flatwoods on the Property currently have been maintained within the fire return interval goal maximum of 4 years.

Wet flatwoods on the LMCA are composed of slash pine and a scrub layer with little understory plants. This natural community is more hydric that mesic flatwoods and historically had a slightly longer fire return interval of 3-5 year compared to the 2-4 years on mesic flatwoods. The wet flatwoods on the property face a similar prescribed fire application challenge to the mesic flatwoods being fire weather timing. At 96 acres wet flatwoods do not comprise a large area of the Property, but their short fire return interval makes them a priority for management.

Fire management within the remaining pyric plant communities (described below) will be in conjunction with the associated scrubby, mesic or wet flatwoods. These plant communities will burn as site conditions permit during the implementation of prescribed burns in adjacent natural

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

- The 105 combined acres of basin and depression marsh provide prime breeding habitat for a variety of herpetofauna, including the rare gopher frog (*Rana capito*). These marshes are embedded within the scrubby and mesic flatwoods on the Property. These marshes will be prescribed burned in conjunction with these flatwoods. Prescribed fire objectives for the flatwoods units that have basin and/or depression marshes included within them should include ensuring fire moves into the ecotone between the natural communities in order to reduce the shrubby fire shadow that often occurs in the transition between uplands and wetlands.

- The 23 acres of basin swamp on the Property are adjacent to pyric natural communities and historically received fire along their ecotone. Many of these swamps have been excluded from fire prior to District acquisition by constructing fire breaks around their edged. This has resulted in high fuel accumulation. While every effort should be made to reintroduce fire back into the ecotones of the basin swamps on LMCA, doing so must be done over successive prescribed fires with very specific fire weather and wet site conditions to limit the potential of smoldering duff fires. Likely the other swamps on the Property, a wildfire in this natural community can be significantly altering.

- The 14 acres of dome swamps on the Property are embedded within the flatwoods and will likely receive fire on their ecotones when fires are affecting the surrounding community.

- The eight acres of sandhill, located on the Kratzert tract of the Property is significantly fire suppressed. This site will likely need mechanical treatment prior to the application of prescribed fire for the fire effects to be accelerated.

The altered communities on LMCA are not included in this fire return interval discussion and will be burned as needed or as a component of larger FMU's which includes the above-described natural communities.

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 April through mid-August. Fires during the growing season generally have significant ecological benefits as most fire adapted flora is perpetuated by fire. 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 late November through mid-March, help to reduce fuel loads in overgrown areas or in areas of newly planted pines. Cooler conditions associated with dormant season burning are a consideration in areas of high fuel loads and where only minimal pine mortality is acceptable. Additionally, dormant season burning may result in fewer safety and smoke management issues due to higher fuel moisture and more consistent winds. District staff will continue to work to maintain fire return intervals that are consistent with those identified by FNAI for the various communities within the Property (Table 1).

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, District staff, and when all 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; and

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, Florida Forest Service, the St. Johns River Water Management District, or by dialing 911.

Post Burn Reports

Burn reports must be completed after each prescribed burn or wildfire. These reports include detailed information regarding the acreage, fuel models, staff and equipment hours, cooperator hours, contractor hours, weather (forecasted and observed) and fire behavior. 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 (Figure 1). Fuel loads across the Property are moderate. Accumulated fuels have the potential to produce a tremendous amount of smoke as areas are burned. As the surrounding areas become increasingly urbanized, smoke management concerns will increase in magnitude, as there become fewer acceptable places to maneuver a smoke column from a prescribed fire.

While the Property 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 FMU. Smoke management is a limiting factor in the application of prescribed fire within the Property (Figure 1). As development increases in the area, fire management will become more difficult. Increasing daily traffic on SR's 415 and 46 as well as proximity to the Sanford International Airport will further impact the District's ability to implement prescribed burns at the appropriate fire return intervals within the Property. Concern for smoke settling into Lake Monroe and the St. Johns River from prescribed fires on the Property is also a concern. Currently, the Property still has a smoke shed into which to place a smoke column from a

prescribed fire, but smoke management will continue to be a concern and challenge for the future application of prescribed fire.

Depending on the arrangement and composition of fuels, fire spread will be through grasses and/or needle litter or shrub layer. Areas within the Property having heavier shrub and mid-story fuel accumulation can burn for long periods of time causing additional smoke management issues. If areas of duff and organic soils are present in a FMU, these must also be considered in regard smoke management. If these are fuels do not contain a high moisture content, then the potential of long term shouldering combustion and smoke production is high.

A fire weather forecast is obtained and evaluated for suitable prescribed fire conditions and smoke management objectives. A wind direction is chosen that will transport smoke away from urbanized areas and/or pose the least possible impact on smoke sensitive areas. When possible, the smoke plume from burns should be directed back through the Property. Smoke can then mix and loft into the atmosphere over uninhabited or rural land adequately enough to minimize off-site impacts.

On burn days, the ability of smoke to mix and disperse into the atmosphere should be acceptable for the fuels within the burn unit. The Dispersion index is a value that indicates the atmosphere's ability to "absorb and disperse" smoke. The higher the index value, the more the smoke dissipates but these high values can also produce erratic fire behavior. Dispersion indices should be above 25. Dispersions of greater than 75 will not be utilized unless other weather conditions mitigate expected fire behavior such as high relative humidities and recently burned fuels (less than 6 months) adjacent to the unit. Forecast mixing heights should be above 1,700 ft. 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.

Mechanical and Chemical Treatments

Short and long-term weather conditions and a fire management unit's proximity to urban areas become increasingly important when implementing a prescribed fire program. Should drought conditions become severe, or if smoke management becomes an insurmountable problem, the District may use mechanical methods, such as mowing or roller-chopping, as well as herbicide treatments as alternatives to prescribed fire. Ideally these methods are a bridge to the continued use of prescribed fire with additional mitigation measures such as reducing burn acerage size in urbanizing areas.

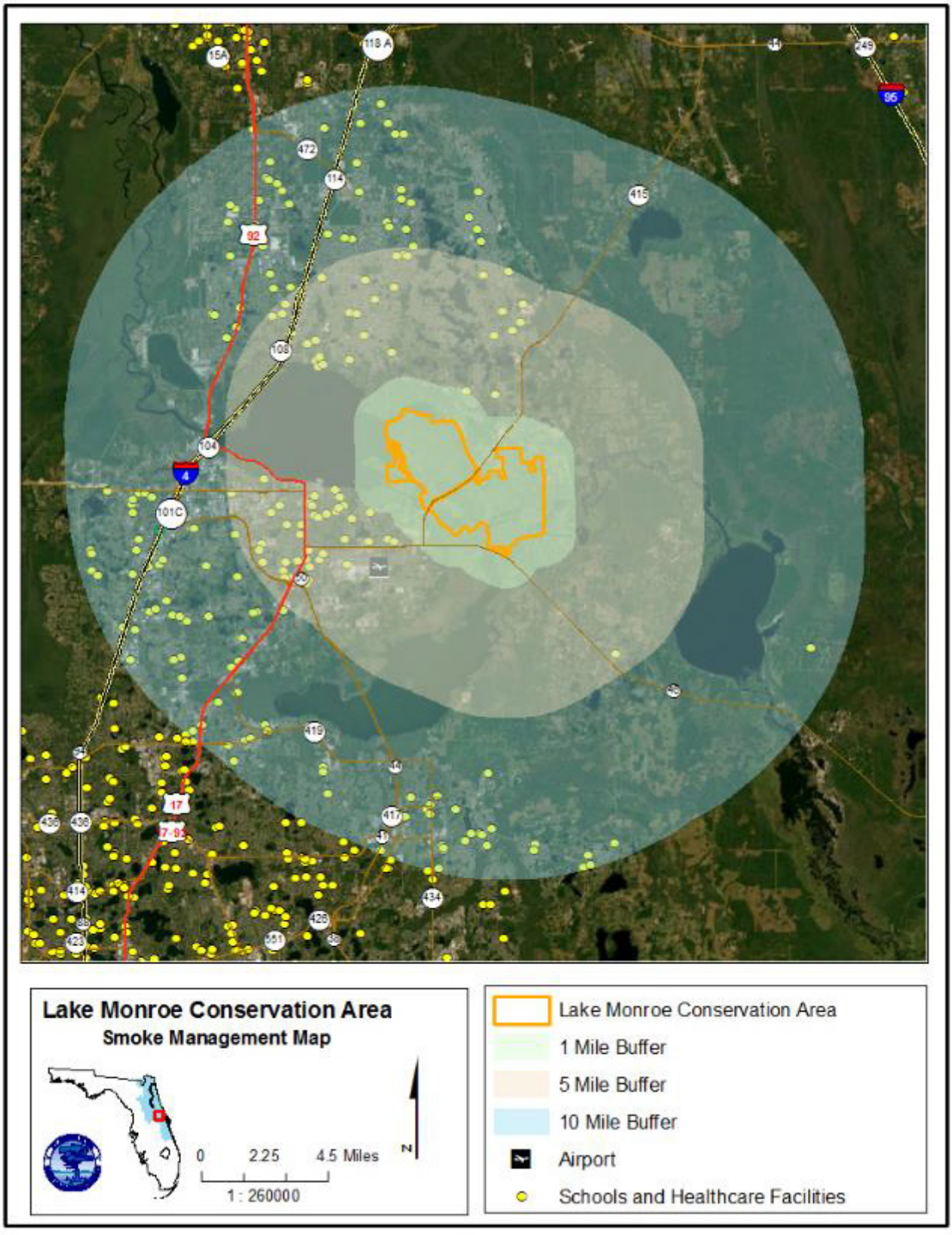

Figure 1: Fire management – smoke sensitive areas.

Hazards
Common hazards include heat stress, venomous snakes, trip hazards or falling trees. Individual prescriptions address the hazards to consider when burning each unit and are discussed during the pre-burn briefing.

Legal Considerations

Only burn managers certified by Florida Forest Service will approve the unit prescriptions and must be on site while the burn is being conducted. Prescriptions and weather parameters will be approved up the burn manager's chain of command before a specific burn can be conducted. Certified burn managers adhering to the requirements of Section 590.125, F.S., are protected from liability for damage or injury caused by fire or resulting smoke, unless gross negligence is proven.

Fire Management Units

FMU's have been delineated on the Property. Where logical, the District used existing roads and landscape features to delineate fire management units. Occasionally, multiple FMUs with similar fire needs will be burned simultaneously and roads and natural landscape features provide a break in fuels so that staff may burn smaller areas than initially planned if needed.

Ideally, District staff would thoroughly address and describe each fire management unit in terms of its fire management needs. All fire management units are categorized into one of several fuel model (FM) descriptions. The 13 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.

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

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

A. Historic The Property Definition

Historic properties include archaeological sites and historic structures as well as other types of resources. Section 267.021, Florida Statutes (F.S.), defines "Historic the Property" or "historic resource" as "any prehistoric district, site, building, object, or other real or personal the 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

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

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

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

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

C. Statutory Authority

The full text of Chapter 267, F.S. and additional information related to the treatment of historic properties is available at:
https://dos.myflorida.com/historical/preservation/compliance-and-review/regulations-guidelines/

D. Management Implementation

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

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

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

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

E. Archaeological Resource Management (ARM) Training

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

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

F. Matrix for Ground Disturbance on State Lands

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

Additional information regarding the matrix is available at:

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

G. Human Remains Treatment

Pursuant to chapter 872, F.S., it is illegal to willfully and knowingly disturb human remains. In the event human remains are discovered, the provisions of chapter 872, F.S., will be followed. All activity in the area that may disturb the remains will cease. Bones and nearby items will be left in place and law enforcement or the local district medical examiner will be notified immediately of the discovery. Additional information regarding the treatment of human remains and cemeteries is available at:

https://dos.myflorida.com/historical/archaeology/human-remains/

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

H. Division of Historical Resources Review Procedure

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

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

* * *

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

Compliance and Review Section
Bureau of Historic Preservation
Division of Historical Resources
R. A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250
StateLandsCompliance@dos.myflorida.com
Phone: (850) 245-6333
Toll Free: (800) 847-7278
Fax: (850) 245-6435

Appendix L – Arthropod Control Plan

Volusia County
FLORIDA

PUBLIC WORKS DEPARTMENT
MOSQUITO CONTROL DIVISION

Marcus McDonough
MOSQUITO CONTROL DIRECTOR

801 South Street, New Smyrna Beach, Florida 32168
Phone: (386) 424-2920 • Fax: (386) 424-2924
MMcDonough@volusia.org

February 1, 2023

Chris Kinslow, Land Resource Specialist
St. Johns River Water Management District
P.O. Box 1429
Palatka, FL 32178-1429
(386) 643-1939

Dear Mr. Kinslow,

The East Volusia Mosquito Control District does not have an Arthropod Control Plan that covers the Lake Monroe Conservation Area.

The Lake Monroe Conservation Area is included in the District's County wide operational area. Arthropod control operations are necessary within this area to protect public health.

Sincerely,

Marcus McDonough
Volusia County Mosquito Control Director