

Land Management Plan Compliance Checklist

Required for State-owned conservation lands over 160 acres (Updated July 2022)

Instructions for managers:

Complete each item and fill in the applicable correlating page numbers and/or appendix where the item can be found within the land management plan (LMP). If an item does not apply to the subject property, please describe that fact on a correlating page number of the LMP. Do not mark an "N/A" for any items below.

For more information, please visit the stewardship portion of the Division of State Lands' website at: <http://floridadep.gov/lands/environmental-services/content/land-stewardship>

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	Page 1 (Executive Summary); Page 7 (II.A.1)
2	The land acquisition program, if any, under which the property was acquired.	18-2.018 & 18-2.021	Page 1 (Executive Summary); Page 9 (II.A.4)
3	Degree of title interest held by the Board, including reservations and encumbrances such as leases.	18-2.021	Page 10 (II.B.2)
4	The legal description and acreage of the property.	18-2.018 & 18-2.021	Page 7 (II.A.2)
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	Exhibits B & D
6	An assessment as to whether the property, or any portion, should be declared surplus. <i>Provide Information regarding assessment and analysis in the plan, and provide corresponding map.</i>	18-2.021	Page 12 (II.D.3)
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. <i>Please clearly indicate parcels on a map.</i>	18-2.021	Page 12 (II.D.2); Exhibit C
8	Identification of adjacent land uses that conflict with the planned use of the property, if any.	18-2.021	Page 13 (II.D.4)
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	Page 3 (I.A)
10	Proximity of property to other significant State, local or federal land or water resources.	18-2.021	Page 8 (II.A.3); Exhibit F

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	Page 1 (Executive Summary); Page 3 (I.A); Page 10 (II.B.3)
12	A description of past and existing uses, including any unauthorized uses of the property.	18-2.018 & 18-2.021	Page 3 (I.B); Page 10 (II.B.4); Page 13 (II.D.6); Page 14 (II.E); Page 15 (III); Page 17 (IV); Page 24 (V); Page 26 (VI); Page 33 (VII)
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	Page 12 (II.D)

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	Page 1 (Executive Summary); Page 14 (II.E.1)
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	Page 15 (III.C-D); Exhibit H
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	Page 15 (II.E.6); Page 16 (III.C); Page 20 (IV.C.2); Page 32 (VI.F)
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	Page 3 (I.A)
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	Page 13 (II.B.5)
19	Letter of compliance from the local government stating that the LMP is in compliance with the Local Government Comprehensive Plan.	BOT requirement	Page 15 (II.D.5); Exhibit T
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	Page 7 (I.C Goal 7); Page 17 (IV); Exhibits J & K
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	Page 3 (I.A); Page 10 (II.B.4);
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	Page 30 (VI.C.1-4)
23	A statement regarding incompatible use in reference to Ch. 253.034(10).	253.034(10)	Page 12 (II.D.1)

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

Section C: Public Involvement Items

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
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24	A statement concerning the extent of public involvement and local government participation in the development of the plan, if any.	18-2.021	Page 1 (Executive Summary); Page 17 (II.E.4); Exhibits S, T, U, V
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	✓
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. <i>Include the advisory group members and their affiliations, as well as the date and location of the advisory group meeting.</i>	259.032	Page 15 (II.E.4); Exhibit U
27	Summary of comments and concerns expressed by the advisory group for parcels over 160 acres	18-2.021	Exhibit U
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. <i>Include a copy of each County's advertisements and announcements (meeting minutes will suffice to indicate an announcement) in the management plan.</i>	253.034 & 259.032	✓
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. <i>Include manager's replies to the team's findings and recommendations.</i>	259.036	Page 15 (II.E.4); Exhibit S
30	Summary of comments and concerns expressed by the management review team, if required by Section 259.036, F.S.	18-2.021	Exhibit S
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	Exhibit S

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. <i>Use brief descriptions and include USDA maps when available.</i>	18-2.021	Page 17 (IV.A); Exhibit I
33	Insert FNAI based natural community maps when available.	ARC consensus	Exhibits L, P, Q
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	Page 19 (IV.C); Exhibits I, L, M, O
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	Page 23 (IV.G)
36	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding beaches and dunes.	18-2.021	Page 23 (IV.E)
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	Page 23 (IV.F)

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	Page 22 (IV.C.4); Exhibits L, M
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	Page 19 (IV.C.1); Exhibits L, M
40	The identification or resources on the property that are listed in the Natural Areas Inventory. <i>Include letter from FNAI or consultant where appropriate.</i>	18-2.021	Page 20 (IV.C.2); Page 33 (VII); Exhibits L, P, Q
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	Page 4 (I.C); Page 15 (III.C-D); Page 17 (IV); Page 26 (VI.A-B); Page 33 (VII)
42	Habitat Restoration and Improvement	259.032 & 253.034	Page 17 (IV)
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.	↓	Page 4 (I.C); Page 33 (VII)
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.		Page 4 (I.C)
42-C.	The associated measurable objectives to achieve the goals.		Page 4 (I.C)
42-D.	The related activities that are to be performed to meet the land management objectives and their associated measures. <i>Include fire management plans - they can be in plan body or an appendix.</i>		Page 4 (I.C); Page 26 (VI); Page 33 (VII)
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.		Page 11 (II.C.4)
43	***Quantitative data description of the land regarding an inventory of forest and other natural resources and associated acreage. <i>See footnote.</i>	253.034	Page 7 (II.A.2,4); Page 11 (II.C); Page 33 (VII); Exhibits E, I, L, P, S
44	Sustainable Forest Management, including implementation of prescribed fire management		Page 26 (VI); Exhibit N
44-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	18-2.021, 253.034 & 259.032 ↓	Page 4 (I.C. Goal 1); Page 26 (VI); Page 33 (VII)
44-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		Page 4 (I.C. Goal 1)
44-C.	Measurable objectives (see requirement for #42-C).		Page 4 (I.C. Goal 1)
44-D.	Related activities (see requirement for #42-D).		Page 26 (VI); Page 33 (VII)
44-E.	Budgets (see requirement for #42-E).		Page 11 (II.C.4)
45	Imperiled species, habitat maintenance, enhancement, restoration or population restoration	259.032 & 253.034	
45-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	Page 6 (I.C. Goal 4); Page 20 (IV.C.1); Page 33 (VII)

45-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		Page 6 (I.C. Goal 4); Page 20 (IV.C.1); Page 33 (VII)
45-C.	Measurable objectives (see requirement for #42-C).		Page 6 (I.C. Goal 4)
45-D.	Related activities (see requirement for #42-D).		Page 20 (IV.C.1); Page 33 (VII)
45-E.	Budgets (see requirement for #42-E).		Page 11 (II.C.4)
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	Page 23 (IV.C.6)
45-G	Economic feasibility of establishing a gopher tortoise recipient site, including the initial cost, recurring management costs and the revenue projections.	259.105	Page 23 (IV.C.6)
46	***Quantitative data description of the land regarding an inventory of exotic and invasive plants and associated acreage. <i>See footnote.</i>	253.034	Page 31 (VI.D); Exhibit O
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	Exhibit V
48	Exotic and invasive species maintenance and control	259.032 & 253.034	Page 31 (VI.D)
48-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	Page 6 (I.C. Goal 5); Exhibit O
48-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		Page 6 (I.C. Goal 5)
48-C.	Measurable objectives (see requirement for #42-C).		Page 6 (I.C. Goal 5)
48-D.	Related activities (see requirement for #42-D).		Page 31 (VI.D,E); Page 33 (VII)
48-E.	Budgets (see requirement for #42-E).		Page 11 (II.C.4)

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. <i>If yes, provide a list of the appropriate managing agencies that have been notified of the proposed plan.</i>	18-2.018 & 18-2.021	Page 7 (II.B.7)
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	Page 17 (IV.B); Exhibits J, K
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	Page 18 (IV.B.4)
52	***Quantitative description of the land regarding an inventory of hydrological features and associated acreage. <i>See footnote.</i>	253.034	Page 17 (IV.B); Page 33 (VII)
53	Hydrological Preservation and Restoration	259.032 & 253.034	
53-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	Page 7 (Goal 7); Page 17 (IV.B)
53-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		Page 7 (Goal 7)

53-C.	Measurable objectives (see requirement for #42-C).		Page 7 (Goal 7)
53-D.	Related activities (see requirement for #42-D).		Page 7 (Goal 7); Page 22 (IV.B)
53-E.	Budgets (see requirement for #42-E).		Page 11 (II.C.4)

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. <i>Include maps of all cultural resources except Native American sites, unless such sites are major points of interest that are open to public visitation.</i>	18-2.018, 18-2.021 & per DHR's request	Page 15 (III.B); Exhibit G
55	***Quantitative data description of the land regarding an inventory of significant land, cultural or historical features and associated acreage.	253.034	Page 19 (III.A); Exhibit G
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	Page 16 (III.C,D); Exhibit H
57	Cultural and Historical Resources	259.032 & 253.034	Page 15 (III)
57-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	Page 6 (I.C. Goal 6)
57-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		Page 6 (I.C. Goal 6)
57-C.	Measurable objectives (see requirement for #42-C).		Page 6 (I.C. Goal 6)
57-D.	Related activities (see requirement for #42-D).		Page 16 (III.C,D)
57-E.	Budgets (see requirement for #42-E).		Page 11 (II.C.4)

**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. <i>See footnote.</i>	253.034	Page 11 (II.C); Exhibit D
59	Capital Facilities and Infrastructure	259.032 & 253.034	Page 11 (II.C)
59-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	Page 7 (I.C. Goal 8); Page 11 (II.C)
59-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		Page 7 (I.C. Goal 8)
59-C.	Measurable objectives (see requirement for #42-C).		Page 7 (I.C. Goal 8)
59-D.	Related activities (see requirement for #42-D).		Page 11 (II.C); Page 24 (V)
59-E.	Budgets (see requirement for #42-E).		Page 13 (II.C.4)
60	*** Quantitative data description of the land regarding an inventory of recreational facilities and associated acreage.	253.034	Page 24 (V); Exhibit D
61	Public Access and Recreational Opportunities	259.032 & 253.034	Page 24 (V)
61-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	Page 4 (I.C. Goal 2)
61-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		Page 4 (I.C. Goal 2)
61-C.	Measurable objectives (see requirement for #42-C).		Page 4 (I.C. Goal 2)

61-D.	Related activities (see requirement for #42-D).		Page 10 (II.B.4); Page 15 (II.E.5,6); Exhibits A, B, D, E
61-E.	Budgets (see requirement for #42-E).		Page 11 (II.C.4)

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	✓
63	Place the Executive Summary at the front of the LMP. Include a physical description of the land.	ARC and 253.034	Page 1 (Executive Summary)
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	Page 3 (I.B); Exhibit A
65	Key management activities necessary to achieve the desired outcomes regarding other appropriate resource management.	259.032	Page 4 (I.C); Page 33 (VII)
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	Page 11 (II.C.4)
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	Page 11 (II.C.4)
68	A statement of gross income generated, net income and expenses.	18-2.018	Page 11 (II.C.4)

*** = 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.

TEN-YEAR LAND MANAGEMENT PLAN
FOR THE
WATSON ISLAND STATE FOREST
ST. JOHNS COUNTY



PREPARED BY THE
FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
FLORIDA FOREST SERVICE

APPROVED ON
MONTH DD, 2023

TEN-YEAR LAND MANAGEMENT PLAN
FOR THE
WATSON ISLAND STATE FOREST



Approved by:

Erin Albury, Director
Florida Forest Service

Date

James Roberts, Chief
Forest Management Bureau

Date

**TEN-YEAR LAND MANAGEMENT PLAN
WATSON ISLAND STATE FOREST
TABLE OF CONTENTS**

Land Management Plan Executive Summary	1
I. Introduction.....	3
A. General Mission and Management Plan Direction	3
B. Past Accomplishments	3
C. Goals / Objectives for the Next Ten-Year Period	4
II. Administration Section	7
A. Descriptive Information	7
1. Common Name of Property	7
2. Legal Description and Acreage.....	7
3. Proximity to Other Public Resource	8
4. Property Acquisition and Land Use Considerations	9
B. Management Authority, Purpose and Constraints	9
1. Purpose for Acquisition / Management Prospectus	9
2. Degree of Title Interest Held by the Board.....	10
3. Designated Single or Multiple-Use Management.....	10
4. Revenue Producing Activities.....	10
5. Conformation to State Lands Management Plan	11
6. Legislative or Executive Constraints	11
7. Aquatic Preserve/Area of Critical State Concern	11
C. Capital Facilities and Infrastructure.....	11
1. Property Boundaries Establishment and Preservation	11
2. Improvements	11
3. On-Site Housing.....	11
4. Operations Infrastructure	11
D. Additional Acquisitions and Land Use Considerations	12
1. Alternate Uses Considered.....	12
2. Additional Land Needs	12
3. Surplus Land Assessment	12
4. Adjacent Conflicting Uses	13
5. Compliance with Local Comprehensive Plan.....	13
6. Utility Corridors and Easements	13
E. Agency & Public Involvement.....	14
1. Responsibilities of Managing Agencies.....	14
2. Law Enforcement.....	14
3. Wildland Fire	14
4. Public and Local Government Involvement	15
5. Volunteers	15
6. Friends of Florida State Forests	15

III. Archaeological / Cultural Resources and Protection	15
A. Past Uses	15
B. Archaeological and Historical Resources	16
C. Ground Disturbing Activities.....	16
D. Survey and Monitoring	16
IV. Natural Resources and Protection.....	17
A. Soils and Geologic Resources.....	17
1. Resources	17
2. Soil Protection.....	17
B. Water Resources	17
1. Resources	17
2. Water Classification.....	18
3. Water Protection	18
4. Swamps, Marshes, and Other Wetlands	18
5. Wetlands Restoration	18
6. Basin Management Action Plan.....	19
C. Floral and Faunal Resources	19
1. Rare, Threatened and Endangered Species	19
2. Florida Natural Areas Inventory	20
3. Florida Fish and Wildlife Conservation Commission	21
4. Game Species and Other Wildlife.....	22
5. Survey and Monitoring	22
6. Gopher Tortoise Recipient Site Feasibility Assessment.....	23
D. Sustainable Forest Resources.....	23
E. Beaches and Dune Resources	23
F. Mineral Resources	23
G. Unique Natural Features and Outstanding Native Landscapes.....	23
H. Research Projects / Specimen Collection	23
I. Ground Disturbing Activities.....	24
V. Public Access and Recreation.....	24
A. Existing	25
B. Planned.....	25
VI. Forest Management Practices	26
A. Prescribed Fire	26
B. Wildfire Prevention and Mitigation Strategies	28
1. Suppression Strategies	28
2. Smoke Management.....	29
3. Firebreaks and Firelines.....	29
4. Sensitive Areas.....	29
5. Firewise Communities	30
6. Adjacent Neighbor Contacts	30
7. Post-Burn Evaluations	30

C. Sustainable Forestry & Silviculture	30
1. Strategies	30
2. Silvicultural Operations	30
3. Forest Inventory	31
4. Timber Sales	31
5. Cattle Grazing	31
D. Non-Native Invasive Species Control.....	31
E. Insects, Disease, and Forest Health.....	32
F. Use of Private Land Contractors.....	33
VII. Proposed Management Activities for Natural Communities	33
A. Basin Swamp	35
B. Bottomland Forest.....	36
C. Dome Swamp.....	37
D. Floodplain Swamp	38
E. Mesic Flatwoods	39
F. Mesic Hammock	40
G. Scrubby Flatwoods.....	41
H. Wet Flatwoods	42
I. Wet Prairie	43
J. Managed Community Types.....	43
K. Altered Landcover Types.....	44
VIII. References.....	45
IX. Glossary of Abbreviations	46

TABLES

Table 1. WISF Acreage by Funding Source	Page 8
Table 2. Nearby Public Conservation Land and Easements	Page 8
Table 3. Parcel Acquisition.....	Page 9
Table 4. Rare, Endangered and Threatened Species.....	Page 20
Table 5. Non-Native Invasive Species Found on WISF	Page 32
Table 6. Natural Community Types.....	Page 33
Table 7. Managed Community Types.....	Page 34
Table 8. Other Altered Landcover Types	Page 34
Table 9. Prescribed Fire Interval Guide.....	Page 34

**TEN-YEAR LAND MANAGEMENT PLAN
WATSON ISLAND STATE FOREST
EXHIBITS**

Ten-Year Management Accomplishment Summary	Exhibit A
Boundary and Road Maps.....	Exhibit B
Optimal Management Boundary Map	Exhibit C
Facilities, Recreation, and Improvements.....	Exhibit D
Tract Maps	Exhibit E
Proximity to Significant Managed Lands	Exhibit F
Archaeological and Cultural Sites	Exhibit G
Management Procedures for Archaeological and Historical Sites and Properties on State Owned or Controlled Lands	Exhibit H
Soil Maps and Descriptions	Exhibit I
DEP Outstanding Florida Waters.....	Exhibit J
Water Resources and BMAP Maps	Exhibit K
Florida Natural Areas Inventory Managed Area Data Report.....	Exhibit L
FWC Listed Species Occurrence Records	Exhibit M
WISF Fire History.....	Exhibit N
Non-Native Invasive Species Map.....	Exhibit O
Current FNAI Natural Communities and Cover Type Map	Exhibit P
Historic FNAI Natural Communities Map	Exhibit Q
Management Prospectus	Exhibit R
Land Management Review	Exhibit S
Compliance with Local Comprehensive Plan.....	Exhibit T
State Forest Management Plan Advisory Group Summary.....	Exhibit U
Arthropod Control Plan.....	Exhibit V

LAND MANAGEMENT PLAN EXECUTIVE SUMMARY

LEAD AGENCY: Florida Department of Agriculture and Consumer Services (FDACS), Florida Forest Service
COMMON NAME: Watson Island State Forest
LOCATION: St. Johns County
ACREAGE TOTAL: 505.58 acres

Historic Natural Communities	Approximate Acreage*
Floodplain swamp	142
Wet flatwoods	106
Bottomland forest	87
Wet prairie	59
Mesic flatwoods	32

* A 25-acre area has not been surveyed

Historic Natural Communities	Approximate Acreage*
Mesic hammock	28
Basin swamp	19
Scrubby flatwoods	3
Dome swamp	2

TIITF LEASE AGREEMENT NUMBER: 3556

USE: Single ☐ Multiple ☒

MANAGEMENT AGENCY

Florida DACS, Florida Forest Service
Florida Fish and Wildlife Conservation Commission
St. Johns River Water Management District
Department of State, Division of Historical Resources

RESPONSIBILITY

General Forest Resource Management
Wildlife Resources and Laws
Water Resource Protection and Restoration
Historical & Archaeological Resource Management

DESIGNATED LAND USE: Multiple-Use State Forest
SUBLEASES: None
ENCUMBRANCES: None
TYPE OF ACQUISITION: Watson Island Tract was acquired in 1976 through a special warranty deed from a private individual. Warner Tract was acquired in 2005 under the Florida Forever conservation program.
UNIQUE FEATURES: Approximately one mile of frontage on St. Johns River; freshwater swamp, live oak hammocks, pine flatwoods, and sawgrass marsh.
ARCHAEOLOGICAL / HISTORICAL: No (0) known sites
MANAGEMENT NEEDS: Ecosystem restoration through prescribed fire, management of timber resources including timber inventory, and boundary line maintenance.
ACQUISITION NEEDS: 8,369 Acres of Optimal Management Boundary
SURPLUS ACREAGE: None
PUBLIC INVOLVEMENT: 2018 Land Management Review, St. Johns County Board of Commissioners, Management Plan Advisory Group and Public Hearing, Acquisition and Restoration Council - - - - -

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

ARC Approval Date: _____ TIITF Approval Date: _____

Comments: _____

I. Introduction

One of Florida's smaller State Forests, Watson Island State Forest (WISF) is comprised of 505.58 acres located near St. Augustine in St. Johns County, about 36 miles south of Jacksonville. The Watson Island Tract (275.5 acres) is located along the St. Johns River, which acts as the western boundary of the State Forest, while the Warner Tract (230 acres) is located just a few miles inland from the St. Johns River. See Exhibit B for Boundary and Road Map.

The WISF contains several diverse ecological communities including mesic and wet flatwoods, bottomland forests, floodplain forests, and floodplain marshes. Size and access limitations have been key factors in management activities to date. Modest accomplishments in public access improvements, fuels management, restoration activities, and boundary maintenance are realizable over the next ten-year period. Funding for these activities is the most critical management need.

A. General Mission and Management Plan Direction

The primary mission of the Florida Forest Service (FFS) is to "protect Florida and its people from the dangers of wildland fire and manage the forest resources through a stewardship ethic to assure they are available for future generations".

Management strategies for WISF center on the multiple-use concept, as defined in sections 589.04(3) and 253.034(2)(a), Florida Statutes (F.S.). Implementation of this concept will utilize and conserve State Forest resources in a harmonious and coordinated combination that will best serve the people of the state of Florida, and that is consistent with the purpose for which the forest was acquired. Multiple-use management for WISF will be accomplished with the following strategies:

- Practice sustainable forest management for the efficient generation of revenue and in support of State Forest management objectives;
- Provide for resource-based outdoor recreation opportunities for multiple interests;
- Restore and manage healthy forests and native ecosystems ensuring the long-term viability of populations and species listed as endangered, threatened, or rare, and other components of biological diversity, including game and non-game wildlife and plants;
- Protect known archaeological, historical, and cultural resources;
- Restore, maintain, and protect hydrological functions, related water resources, and the health of associated wetlands and aquatic communities; and
- Provide research and educational opportunities related to natural resource management.

This management plan is provided according to requirements of sections 253.034, 259.032, and 373, F.S., and was prepared utilizing guidelines outlined in section 18-2.021 of the Florida Administrative Code (F.A.C.). It is not an annual work plan or detailed operational plan but provides general guidance for the management of WISF for the next ten-year period and outlines the major concepts that will guide management activities on the forest.

B. Past Accomplishments

Data regarding past management activities and public use on WISF have been compiled monthly and are available from the forest manager. A table has been prepared for this plan that summarizes the accomplishments for each of the past ten years. See Exhibit A. The table does not attempt to account for all activities on WISF but summarizes major activities. Since the approval of the

previous management plan in 2010, developments and accomplishments are as follows:

- Prescribed fire applied to 258 acres
- 1 culvert installed
- 0.25-mile road constructed
- 3.8 miles of forest boundary marked or maintained
- 2.7 miles of perimeter firebreaks maintained
- 505 acres of timber inventoried
- Treatment of 5 non-native invasive plant species on approximately 3 acres

C. Goals / Objectives for the Next Ten-Year Period

The following goals and objectives provide direction and focus of management resources for the next ten-year planning period. Funding, agency program priorities, and the potential for wildfire during the planning period will determine the degree to which these objectives can be met. Management activities on WISF during this period must conserve, protect, utilize, and enhance the natural and historical resources and manage resource-based public outdoor recreation, which is compatible with the conservation and protection of this forest. Most of the management operations will be conducted by the FFS, although appropriate activities will be contracted to private sector vendors or completed with the cooperation of other agencies. All activities will enhance the property's natural resource or public recreation value.

The management activities listed below will be addressed within the ten-year management period and are defined as short-term goals, long-term goals, or ongoing goals. Short-term goals are goals that are achievable within a two-year planning period, and long-term goals are achievable within a ten-year planning period. Objectives are listed in priority order for each goal. Other activities will be completed with minimal overhead expense and existing staff.

➤ **GOAL 1: Sustainable Forest Management**

Objective 1: Continue to update and implement the Five-Year Silviculture Action Plan including reforestation, timber harvesting, prescribed burning, restoration, and timber stand improvement activities and goals. (Ongoing objective)

Performance Measures:

- Annual updates of the Five-Year Silviculture Action Plan completed
- Continued implementation of the Five-Year Silviculture Action Plan (acres treated)

Objective 2: Continue to implement the FFS process for developing stand descriptions and conducting forest inventory, including maintaining a GIS database containing forest stands, roads, and other attributes (including, but not limited to: rare, threatened, and endangered species, archaeological and historical resources, and non-native invasive species locations). (Ongoing objective)

Performance Measures:

- Update GIS database and re-inventory all attributes as required by FFS procedures
- Number of acres inventoried

➤ **GOAL 2: Public Access and Recreation Opportunities**

Objective 1: Establish public access and recreation activities that are compatible with multiple-use management. (Short-term objective)

Performance Measure:

- Number of additional public access points established
- Number of new recreation activities established

Objective 2: Once established, maintain public access and recreation activities that are compatible with multiple-use management. (Ongoing objective)

Performance Measure: Number of visitor opportunities per day

Objective 3: Safely integrate human use into WISF, following the Five-Year Outdoor Recreation Plan, and update plan annually. (Ongoing objective)

Performance Measures:

- Continued implementation of the Five-Year Outdoor Recreation Plan
- Annual updates of the Five-Year Outdoor Recreation Plan completed

Objective 4: Evaluate the potential for public access and recreation opportunities that are compatible with multiple-use management. Recreation opportunities will fall under the scope of multi-use management in accordance with watershed protection, conservation, and ecosystem restoration; and as detailed in the purpose for acquisition. (Short-term objective)

Performance Measure: Annual evaluation of additional visitor opportunities

Objective 5: Recruit volunteers and volunteer organizations to assist with recreation and / or resource management. (Ongoing objective)

Performance Measures:

- Number of volunteers and organizations that assist with projects
- Number of hours provided by volunteers

➤ **GOAL 3: Habitat Restoration, Improvement, and Fire Management**

Objective 1: The WISF currently contains approximately 223 acres of fire-dependent communities. WISF staff will plan and conduct prescribed burns in a manner that benefits these fire-dependent natural communities within the forest. To achieve an average fire-return interval of 2 to 4 years for most fire-dependent communities, FFS will attempt to conduct prescribed burns on an average of approximately 56 to 112 acres per year. Currently FFS staff estimates 141 acres at WISF are within the desired fire-return interval. (Ongoing objective)

Performance Measures:

- Number of acres burned during the dormant and growing seasons
- Number of acres burned within target fire-return interval

Objective 2: Continue to annually update and implement the Five-Year Prescribed Burning Management Plan and the prescribed burning goals. (Ongoing objective)

Performance Measures:

- Annual updates of the Five-Year Prescribed Burning Management Plan completed
- Continued implementation of the Five-Year Prescribed Burning Management Plan (acres treated)

Objective 3: Reduce the threat of wildfire within the wildland urban interface on WISF and the surrounding community through a comprehensive mitigation strategy that includes evaluating

vegetative fuels near residential areas and identifying potential fuel reduction projects. (Ongoing objective)

Performance Measures:

- Evaluation complete
- Should the evaluation determine that fuel reduction is necessary, number of acres treated for fuel reduction

Objective 4: Utilize prescribed fire to enhance restoration of native groundcover. Evaluate areas where native groundcover has been eliminated or heavily impacted from historical land use on a case by case basis for alternative methods to address reestablishment of native groundcover plants. Restore native groundcover where practical or heavily impacted from historical land use. (Long-term objective)

Performance Measure: Number of acres restored

➤ **GOAL 4: Listed and Rare Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration**

Objective 1: In cooperation with the FWC, develop a Wildlife Management Strategy addressing the wildlife species for WISF, with emphasis on imperiled species and associated management prescriptions for their habitats. (Ongoing objective)

Performance Measures:

- Imperiled species management strategy completed
- Baseline listed and rare species list completed for WISF

Objective 2: In consultation with FWC, implement survey and monitoring protocols, where feasible, for listed and rare species. (Ongoing objective)

Performance Measure: Number of species for which monitoring is ongoing

➤ **GOAL 5: Non-native Invasive Species Management and Control**

Objective 1: Continue to follow and annually update the Five-Year Ecological Plan for WISF, to locate, identify, and control non-native invasive species. (Ongoing objective)

Performance Measures:

- Total number of acres identified and successfully treated
- Annual updates of the Five-Year Ecological Plan completed
- Continue to maintain WISF non-native invasive species database information annually

➤ **GOAL 6: Cultural and Historical Resource Management**

Objective 1: Ensure all known sites are recorded in the Department of State, Division of Historical Resources (DHR) Florida Master Site File. (Ongoing objective)

Performance Measure: Number of recorded sites

Objective 2: Monitor recorded sites and send updates to the DHR Florida Master Site File as needed. (Ongoing objective)

Performance Measure: Number of sites monitored. Reports submitted to DHR

Objective 3: Maintain at least one (1) qualified staff member as an Archaeological Resource Management (ARM) Monitor. (Ongoing objective)

Performance Measure: Number of local staff trained as ARM monitors

➤ **GOAL 7: Hydrological Preservation and Restoration**

Objective 1: Protect water resources during management activities through the implementation of Silviculture Best Management Practices (BMPs) that are applicable to forest road maintenance and construction, construction of pre-suppression fire lines, timber stand improvement activities, sinkholes, etc. (Ongoing objective)

Performance Measure: Percent compliance with Silviculture BMPs

Objective 2: Close, rehabilitate, or restore those roads, firelines, and trails that have evidence of erosion into surrounding water bodies causing alterations to the hydrology and / or water quality. (Ongoing objective)

Performance Measure: Total number of roads, firelines, and trails closed, rehabilitated, and / or restored

Objective 3: Conduct or obtain a site assessment/study to identify potential hydrological restoration needs. (Short-term objective)

Performance Measure: Assessment conducted

➤ **GOAL 8: Capital Facilities and Infrastructure**

Objective 1: WISF staff maintain the 0.35 miles of service roads (Warner Tract). (Ongoing objective)

Performance Measure:

- Number of miles of existing roads maintained

Objective 2: Continue to implement the Five-Year Boundary Survey and Maintenance Management Plan and update annually. Approximately 20 percent of the forest boundary will be evaluated and remarked annually as necessary which includes harrowing, reposting signage, and repainting boundary trees. (Ongoing objective)

Performance Measures:

- Continued implementation of the Five-Year Boundary Survey and Maintenance Management Plan
- Percentage of forest boundary maintained each year
- Annual updates of the Five-Year Boundary Survey and Maintenance Management Plan completed

II. Administration Section

A. Descriptive Information

1. Common Name of Property

The common name of the property is Watson Island State Forest.

2. Legal Description and Acreage

The Watson Island Tract is located in Section 41, Township 7 South, Range 27 East (197 acres), a portion of Section 16, Township 7 South, Range 27 East (77.5 acres), and a portion of the southeast corner of Section 39, Township 7 South, Range 27 East described as “East 100 feet South of SR 13” (1 acre). Total acreage for the Watson Island Tract is 275.5. The

Warner Tract is located within Section 17, Township 7 South, Range 28 East and is 230 acres in total. Detailed legal descriptions for the property can be found in lease agreement number 3556. A copy of the lease held in the Department of Environmental Protection, Division of State Lands office in Tallahassee, the FFS State Office in Tallahassee and the DeLeon Forestry Station. See Exhibit E. Acreage acquired by funding source is identified in Table 1.

Table 1. WISF Acreage by Funding Source

Funding Source	Acres
Private Donation	275.50
Florida Forever	230.08

A complete legal description of lands owned by the Board of Trustees of the Internal Improvement Trust Fund (TIITF) is on record at the DeLeon Forestry Station Office, Florida Department of Environmental Protection (DEP), and the FFS State Office in Tallahassee.

3. **Proximity to Other Public Resources**

Lands managed by state, federal, or local government for conservation of natural or cultural resources that are located within approximately 20 miles of the WISF are included in Exhibit F and Table 2.

Table 2. Nearby Public Conservation Land and Easements

Conservation Tract	Agency	Distance
Meldrim Conservation Easement	DEP	Adjacent E
Turnbull Conservation Area	St. Johns County	3 miles NE
Bayard Conservation Area	SJRWMD	3 miles W
Sixmile Creek Preserve	NFLT	5 miles N
Terra Pines Conservation Easement	St. Johns County	5 miles E
Riverdale Park	St. Johns County	5 miles SW
McCullough Creek Conservation Area	St. Johns County	5 miles S
Twelve Mile Swamp Conservation Area	SJRWMD	6 miles NE
Wards Creek Mitigation Parcel	St. Johns County	6 miles NW
Palmo Fish Camp Park	St. Johns County	6 miles NW
Jack Wright Island Conservation Area	St. Johns County	7 miles NW
Mussallem Trail Head	St. Johns County	8 miles SE
Tocoi Junction Conservation Area	St. Johns County	8 miles SE
Mystery Pit Conservation Easement	St. Johns County	8 miles NE
Deep Creek Conservation Area	SJRWMD	8 miles S
Larson Tract	St. Johns County	10 miles SE
Spengler Island Conservation Area	St. Johns County	10 miles E
Stokes Landing Conservation Area	SJRWMD	11 miles NE
Shore Drive Park	St. Johns County	11 miles SE
Northwest Park	St. Johns County	12 miles SE
Green Cove Springs Nature Preserve	COGCS	12 miles NW
Sylvan West Conservation Easement	SJRWMD	5 miles NE

Conservation Tract	Agency	Distance
Julington-Durbin Preserve	SJRWMD	15 miles N
Mystery Pit Conservation Easement	St. Johns County	8 miles NE
Gourd Island Conservation Area	SJRWMD	13 miles NW
Nocatee Preserve	St. Johns County	13 miles NE
Anastasia State Park	DRP	13 miles E
Guana Tolomato Matanzas National Estuarine Research Reserve	CAMA	14 miles E
Deep Creek State Forest	FFS	14 miles NE
Moses Creek Conservation Area	SJRWMD	15 miles SE
Matanzas State Forest	FFS	16 miles SE
Faver-Dykes State Park	DRP	18 miles SE
9A Mitigation Parcels	SJRWMD	20 miles N

CAMA – Division of Coastal and Aquatic Managed Areas

DEP – Florida Department of Environmental Protection

FFS – Florida Forest Service

SJRWMD – St. Johns River Water Management District

COGCS – City of Green Cove Springs

DRP – Florida Department of Recreation and Parks

NFLT – North Florida Land Trust

4. Property Acquisition and Land Use Considerations

Watson Island Tract was acquired through a special warranty deed from a private landowner on November 18, 1976. The Watson Island Tract encompasses 275.5 acres. The Warner Tract was acquired through the Florida Forever Program on November 14, 2005. The Warner Tract encompasses 230.08 acres. See Table 3.

Table 3. Parcel Acquisition

Parcel Name	Closing Date	Lease Date	TIITF Lease No.	Acres
Watson Island	11/18/1976	3/19/1979	3556	275.50
Warner	11/14/2005	12/22/2008	3556	230.08

B. Management Authority, Purpose, and Constraints

1. Purpose for Acquisition / Management Prospectus

The Watson Island Tract was acquired as a donation to the FFS in 1976. The Warner Tract was acquired as part of the St. Johns River Blueway Florida Forever Conservation Project. The St. Johns River Blueway was designed to preserve the last remaining shorelines of the St. Johns River and several of its tributaries. The goals and objectives defined by these acquisitions include:

- Conservation of lands supporting native, relatively unaltered flora or fauna representing a natural area unique to, or scarce within, a region of Florida or larger geographical area;
- Conservation of lands supporting habitat critical to providing significant protection for an endangered or threatened species of plant or animal;
- Preserve the last remaining shorelines of the St. Johns River;
- Provision of opportunities for recreation activities that are compatible with the protection of the rare and sensitive resources;
- Restoration of altered ecosystems to correct environmental damage that has already occurred; and
- Conservation of critical forest habitats.

The overall management of WISF is guided by the Management Prospectus for the St. Johns River Blueway Project. See Exhibit R.

Management is conducted by FDACS, FFS, with assistance, as warranted, from other agencies. FFS is the manager of forest resources, recreation, water resource protection, watershed protection, and land use planning on WISF.

2. Degree of Title Interest Held by the Board

The TIITF holds fee simple title to WISF under lease agreement 3556 to provide authority to FFS. Copies of this agreement and related deeds are on file at the FFS State Office, the Department of Environmental Protection office in Tallahassee, and at the Bunnell District Office.

3. Designated Single or Multiple-Use Management

WISF is managed under a multiple-use concept by the FFS, under the authority of Chapters 253 and 589, F.S. The FFS is the lead managing agency as stated in TIITF Management Lease number 3556.

Multiple-use management is the harmonious and coordinated management of timber, recreation, conservation of fish and wildlife, forage, archaeological and historic sites, habitat and other biological resources, and water resources so they are utilized in the combination that will best serve the people of the state, making the most judicious use of the land for some or all these resources and considering the relative values of the various resources. Local demands, acquisition objectives, and other factors influence the array of uses that are compatible with and allowed on any specific area of the forest. This management approach is believed to provide for the greatest public benefit, by allowing compatible uses while protecting overall forest health, native ecosystems, and the functions and values associated with them.

4. Revenue Producing Activities

Numerous activities on WISF provide for multiple uses, as well as generate revenue to offset management costs. Revenue producing activities will be considered when they have been determined to be financially feasible and will not adversely impact management of the forest. Current and potential revenue producing activities for the WISF include, but are not limited to:

- Timber harvests – Timber harvests on WISF will be conducted to improve forest health, promote wildlife habitat, restore plant communities, and provide additional benefits.
- Apiary leases – There are currently no apiary leases on WISF. The feasibility of pursuing and establishing apiary leases on WISF in areas where appropriate will be evaluated in accordance with guidelines stated in the State Forest Handbook.
- Firewood – WISF staff may consider issuance of fuel wood permits as requested.
- Recreation fees – There is currently no recreation on WISF. The feasibility of pursuing and establishing recreation opportunities on WISF in areas where appropriate will be evaluated in accordance with guidelines stated in the State Forest Handbook.

5. Conformation to State Lands Management Plan

Management of the forest under the multiple-use concept complies with the State Lands Management Plan and provides optimum balanced public utilization of the property. Specific authority for the FFS's management of public land is derived from Chapters 253, 259, and 589, F.S.

6. Legislative or Executive Constraints

There are no known legislative or executive constraints specifically directed toward WISF.

FFS makes every effort to comply with applicable statutes, rules, and ordinances when managing the forest. For example, when public facilities are developed on State Forests, every effort is made to comply with Public Law 101-336, the Americans with Disabilities Act. As new facilities are developed, the universal access requirements of this law are followed in all cases except where the law allows reasonable exceptions (e.g., where handicap access is structurally impractical or where providing such access would change the fundamental character of the facility being provided).

7. Aquatic Preserve / Area of Critical State Concern

This area is not within an aquatic preserve or an area of critical state concern, nor is it in an area under study for such designation.

C. Capital Facilities and Infrastructure

1. Property Boundaries Establishment and Preservation

WISF boundary lines, 6.75 miles in total, are managed by State Forest personnel in accordance with the guidelines of the State Forest Handbook. The forest boundary lines are to be maintained by periodic clearing, repainting and reposting, and placement of State Forest boundary signs by FFS personnel. See Exhibit B.

2. Improvements

There are currently no buildings or recreation infrastructure present on the WISF.

3. On-Site Housing

There are currently no residences on WISF.

FFS may establish on-site housing (mobile / manufactured home) on WISF if deemed necessary to alleviate security and management issues. The need and feasibility for the State Forest will be evaluated and established if considered appropriate by the District Manager and approved by the FFS Director. Prior to the occurrence of any ground disturbing activity for establishing on-site housing, a notification will be sent to the DHR and Florida Natural Areas Inventory (FNAI) for review and recommendations. This type of housing will not exceed three homes per location with the possibility of more than one on-site housing location occurring if considered necessary by the District Manager and approved by the Director.

4. Operations Infrastructure

There is no operations budget for WISF. WISF is managed in conjunction with Matanzas State Forest. Personnel, budget, and equipment resources are shared between these two

forests. Implementation of any of the activities within this management plan is contingent on availability of funding, other resources, and other statewide priorities.

There is currently one forester position assigned to WISF who also manages Deep Creek State Forest and Matanzas State Forest in St. Johns County. Approximately 10% of the forester's time is allocated to WISF. The Forest Area Supervisor and forest rangers for St. Johns County provide assistance and resources for projects that are associated with WISF. Resources from Bakersville and Dupont forestry tower sites are available to assist in resource management activities on the forest.

The forester will work to achieve the goals outlined in this management plan. Recreation planning and management activities as well as resource management and planning activities, such as trail flagging / identification, recreation facility placement, timber cruising, and sale administration, etc., are the responsibility of the forester under the direction of the Forest Resource Administrator and District Manager. Forest operations, such as road maintenance, operations / recreation facility maintenance, prescribed burning, etc., are the responsibility of the Forest Area Supervisor under the direction of the District Manager.

D. Additional Acquisitions and Land Use Considerations

1. Alternate Uses Considered

No alternate uses are being considered at this time. Alternate uses will be considered as requests are made and will be accommodated as appropriate if they are determined to be compatible with existing uses and with the management goals and objectives of the forest. Uses determined as incompatible include but are not limited to: water resource development projects, water supply projects, storm-water management projects, sewage treatment facilities, linear facilities, off highway vehicle use, dumping, mining, and oil well stimulation (e.g. hydraulic fracturing/fracking), or as determined by law, regulation, or other incompatible uses as described elsewhere in the management plan. Deadhead logging is not compatible and is not considered an appropriate use within or adjacent to the State Forest boundaries.

2. Additional Land Needs

There are 97 parcels of land comprised of 8,369 acres adjacent to WISF which should receive priority for acquisition because they would benefit the management of the property. The FFS will work with these property owners, on a willing seller basis, to acquire these parcels.

Purchasing of additional land within the optimal management boundary would facilitate restoration, protection, maintenance, and management of the natural resources on WISF. See Exhibit C.

3. Surplus Land Assessment

On conservation lands where FFS is the lead manager, FFS assesses and identifies areas for potential surplus land. This consists of an examination of resource and operational management needs, public access and recreation use, and GIS modeling and analysis.

The evaluation of WISF by FFS has determined that all portions of the area are being managed and operated for the original purposes of acquisition, as well as, center on the multiple-use concept, as defined in sections 589.04(3) and 253.034(2)(a), F.S. Implementation of this

concept will utilize and conserve State Forest resources in a harmonious and coordinated combination that will best serve the people of the state of Florida. Therefore, no portion of the WISF is recommended for potential surplus.

4. Adjacent Conflicting Uses

During the development of this management plan, FFS staff identified and evaluated adjacent land uses; reviewed current comprehensive plans and future land use maps in making the determination that there is currently one known conflicting adjacent land use. This conflict is related to the development of the access road for the Warner tract. Currently, the access right-of-way for the forest is located between three private residences. The owners of these residences have voiced concerns about the development of the forest access road through their community.

FFS will cooperate with adjacent property owners, prospective owners, or prospective developers to discuss methods to minimize negative impacts on management, resources, facilities, roads, recreation, etc., and discuss ways to minimize encroachment onto the forest.

Currently there are no conflicting uses on WISF regarding the Watson Island Tract. However, plans for development to the northeast and southeast of the Warner Tract may require special planning for smoke management as well as encroachment issues.

5. Compliance with Local Comprehensive Plan

This plan was submitted to the St. Johns County Board of Commissioners for review and compliance with their local comprehensive plans. See Exhibit T.

6. Utility Corridors and Easements

FFS does not favor the fragmentation of natural communities with linear facilities. Consequently, easements for such uses will be discouraged to the greatest extent practical.

When such encroachments are unavoidable, previously disturbed sites will be the preferred location. The objectives, when identifying possible locations for new linear facilities, will be to minimize damage to sensitive resources (e.g., listed species and archaeological sites), minimize habitat fragmentation, limit disruption of management activities, including prescribed burns, and limit disruption of resource-based multiple use activities such as recreation.

There is an existing 60-foot wide by 230-foot long ingress and egress easement on the Warner Tract occupying 0.32 acres identified in a 2005 DEP Land Acquisition Survey Review. This easement extends from the end of Oscar Ashton Road to the east line of the property and provides access for three residential parcels clustered there. There are powerlines associated with the residences crossing this easement. There are no other utility lines, pipelines, linear facilities, and transportation corridors located within WISF.

Collocation of new linear facilities with existing corridors will be considered but will be used only where expansion of existing corridors does not increase the level of habitat fragmentation and disruption of management and multiple-use activities. FFS will further encourage the use

of underground cable where scenic considerations are desirable as well as encourage the development and use of wildlife crossings for unavoidable roadway development projects. Easements for such utilities are subject to the review and approval of the TIITF and WMD. Requests for linear facility uses will be handled according to the Governor and the Cabinet's linear facilities policy.

The FFS does not consider WISF suitable for any new linear facilities.

E. Agency & Public Involvement

1. Responsibilities of Managing Agencies

FFS is the lead managing agency, responsible for overall forest management and public recreation activities, as stated in TIITF Management Lease number 3556. Pursuant to the management lease, the lead managing agency may enter into further agreements or to subleases on any part of the forest.

FFS will cooperate with the DHR regarding appropriate management practices on historical or archaeological sites on the property as stated in Section 267.061, F.S. FFS will consult DHR prior to the initiation of ground disturbing activities as required per DHR guidelines.

FWC assumes law enforcement responsibilities, enforces hunting regulations, cooperatively sets hunting season dates with FFS, and conducts other wildlife management activities with input from FFS.

The SJRWMD will be consulted and involved in matters relating to water management and hydrological restoration as appropriate.

2. Law Enforcement

Primary law enforcement responsibilities will be handled by FWC law enforcement officers. Rules governing the use of WISF are stated in Chapter 5I-4, F.A.C. FWC will enforce fish and wildlife regulations and aid in enforcing State Forest rules. FWC does not currently have an officer dedicated to patrolling and enforcement on WISF. This task is shared among multiple FWC officers who also patrol and enforce laws on properties and waterways outside of WISF.

The FDACS Office of Agricultural Law Enforcement (OALE) will assist with open burning and wildfire investigations as needed. The St. Johns County Sheriff's Office provides additional assistance as needed.

Special rules under Chapter 5I-4, F.A.C. were promulgated for FDACS, FFS, to manage the use of state lands and better control traffic, and to oversee camping and other uses on State Forests.

3. Wildland Fire

The FFS has the primary responsibility for prevention, detection, and suppression of wildfires wherever they may occur. The FFS shall provide leadership and direction in the evaluation, coordination, allocation of resources, and monitoring of wildfire management and protection

(F.S. 590.01). The FFS also has the responsibility of authorizing prescribed burns (F.S. 590.02 [1][i]).

4. Public and Local Government Involvement

This plan has been prepared by FFS and will be carried out primarily by the FFS. FFS responds to public involvement through liaison committees, management plan advisory groups, public hearings, and through ongoing direct contact with user groups. A Land Management Review Team, as coordinated by the Division of State Lands, has conducted a review of management plan implementation in 2018. See Exhibit S. The review team's recommendations were addressed in this plan, as appropriate.

The plan was developed with input from the WISF Management Plan Advisory Group and was reviewed at a public hearing on October 28, 2022. A summary of the advisory group's meetings and discussions, as well as written comments received on the plan, are included in Exhibit U. The Acquisition and Restoration Council (ARC) public hearing and meeting serve as an additional forum for public input and review of the plan.

5. Volunteers

To supplement the staff assigned to WISF, the Recreation Coordinator is responsible for recruiting interested volunteers who can bring needed experience and skills to assist with the management of the forest recreation program, as well as the resource management activities to further the FFS mission. Volunteer activities may occur as one-time events or in association with long-term recurring projects and routine maintenance.

There are currently no volunteers assisting FFS staff at WISF.

6. Friends of Florida State Forest

Friends of Florida State Forests Inc. (FFSF) is a Direct Support Organization of the Florida Forest Service. FFSF supports management activities and projects on Florida's State Forests. FFSF is established by Florida Statute, supports programs within Florida's State Forests and is governed by a board of directors representing all areas of the state. Through community support, FFSF assists the FFS to expand opportunities for recreation, environmental education, fire prevention, and forest management within Florida's State Forests.

The FFSF program is referenced in Chapter 589.012, F.S. For more information visit: www.floridastateforests.org.

III. Archaeological / Cultural Resources and Protection

A. Past Uses

In the early 1900s, pine, cypress, and hardwood timber were harvested from the Watson Island Tract and then rafted down the river. This is the only significant man-made disturbance that is known to have taken place on the tract. This tract has been used for occasional hunting by a few local families for many years. Wetlands, which almost entirely surround the property, and rough undergrowth conditions, hinder public access to the property. Game species that have been hunted on this property in the past include white-tailed deer (*Odocoileus virginianus*), feral hogs (*Sus scrofa*), squirrels (*Sciurus* spp.), and wild turkeys (*Meleagris gallopavo*). Evidence of past

camping activities (small tin shed and campfire site) was found on the Watson Island Tract after the initial purchase.

The Warner Tract was predominantly planted in row crops during the 1930s and 1940s. After the 1940s, the Tract was left to naturally regenerate into slash pine (*Pinus elliottii*) and mixed hardwood and pine stands. In 1985, a wildfire burned most of the tract. In 1987, eleven acres of slash pine were planted while the remaining acres were left to naturally regenerate slash pine and mixed hardwoods in the bottomland forest community.

B. Archaeological and Historical Resources

A cultural resource assessment for the existence of archaeological and historical resources has not been conducted on the tract. However, a January 2019 review of DHR's Florida Master Site File confirmed that there are no archaeological or historical sites recorded within WISF. See Exhibit G. The DHR has indicated there is potential for existence of such sites on both tracts, though neither seems promising. On Watson Island Tract, the areas in which DHR indicates archaeological sites are most likely to occur are situated along the St. Johns River frontage and live oak hammock areas, and on Warner Tract where portions of higher ground adjoin the stream that passes through the property.

C. Ground Disturbing Activities

Representatives of DHR and FNAI will be consulted prior to the initiation of proposed ground disturbing activity as required per DHR guidelines. FFS will make every effort to protect known archaeological and historical resources, utilizing the internal approval process explained in chapter two of the State Forest Handbook. FFS will follow the "Management Procedures for Archaeological and Historical Sites and Properties on State Owned or Controlled Lands" and will comply with all appropriate provisions of Section 267.061(2)(a,b), F.S. See Exhibit H. Any significant ground disturbing activity proposal will be submitted to DHR's Compliance and Review office for review prior to undertakings and allow the Division a reasonable opportunity to comment. Ground disturbing activities not specifically covered by this plan will be conducted under the parameters of the "Interim Management Guidelines."

D. Survey and Monitoring

Currently, eight (8) local district FFS staff are trained by DHR as Archaeological Resource Management (ARM) monitors. FFS will pursue opportunities for additional personnel to receive ARM Monitor training. FFS will consult with public lands archaeologists at DHR as necessary to determine an appropriate priority and frequency of monitoring at each of the listed sites, and any protection measures that might be required. Unless required on a more frequent basis, all archaeological and historical sites within the forest will be monitored at least annually. FFS field staff will monitor the listed sites to note condition and any existing or potential threats.

Any known archaeological and historical sites will be identified on maps to aid State Forest staff and if necessary, law enforcement personnel in patrolling and protecting sites. Applicable surveys will be conducted by ARM monitors or contracted archaeologists during the process of planning and implementing multiple-use management activities. FFS personnel will remain alert for any environmentally significant resources and protective actions will be taken as necessary. In addition, FFS will seek the advice and recommendations of DHR regarding any additional

archaeological survey needs. Trained monitors may oversee limited types of ground disturbing activities in which DHR recommends monitoring. FFS will utilize the services of DHR Public Lands archaeologists, when available, to locate and evaluate unknown resources, and to make recommendations in the management of known resources.

IV. Natural Resources and Protection

The primary purpose of FFS management of WISF is to preserve the shorelines of the St. Johns River and several of its tributaries through a stewardship ethic to assure these resources will be available for future generations. Management activities will be executed in a manner to maintain and protect / enhance the hydrological resources on WISF. If problems arise, corrective action will be implemented by FFS staff under the direction of FFS's Forest Hydrology Section. Efforts will be made to monitor and protect WISF's waterbodies and their associated water quality and native plants and animals.

WISF falls within the jurisdiction of the SJRWMD. FFS will coordinate with SJRWMD and / or DEP, as necessary, on activities pertaining to water resource protection and management. Any activities requiring water management district permits will be handled accordingly. FFS will work with SJRWMD to ensure that levels and quality of ground and surface water resources are appropriately monitored.

A. Soils and Geologic Resources

1. Resources

Soil information for WISF was obtained from the United States Department of Agriculture Natural Resources Conservation Service (NRCS). The NRCS lists four (4) major soils on WISF which are: Riviera fine sand, Pomona fine sand, Terra Ceia muck, and Floridana fine sand. Detailed information on all soils present on the forest may be found in Exhibit I.

2. Soil Protection

Management activities will be executed in a manner to that minimizes negative impacts to the soil. As problems arise, corrective action will be implemented by FFS staff under the direction of the FFS Forest Hydrology section in conjunction with recommendations as contained in the most current version of the Florida Silviculture BMP Manual.

Currently there are no major or significant soil erosion problems on WISF.

B. Water Resources

The water resources on WISF perform essential roles in the protection of water quality, groundwater recharge, flood control, and aquatic habitat preservation. In the interest of maintaining these valuable resource functions, State Forest management personnel will work with the FFS Hydrology Section to incorporate wetlands restoration into the overall resource management program as opportunities arise, particularly where wetlands systems have been impaired or negatively impacted by previous management activities or natural disasters. See Exhibit K for map of the water resources on WISF.

1. Resources

The St. Johns River forms the western boundary of the forest, and a branch of Six Mile Creek

runs through the eastern part of the Warner Tract.

2. Water Classification

The Florida Department of Environmental Protection, Standards Development Section reports that there are no waters on or near WISF listed as exceptions to Class III in subparagraph 62-302.400(17)(b)55, F.A.C.; therefore, all of the surface waters on or adjacent to the site are classified as Class III waters (Fish Consumption, Recreation, Propagation and Maintenance of a healthy, Well-Balanced Population of Fish and Wildlife), which is the statewide default classification under subsection 62-302.400(15), F.A.C.

According to Subsection 62-302.700(9), F.A.C., there are no Outstanding Florida Waters (OFW) on, adjacent to, or near WISF. While there are several other parcels in the vicinity of WISF that are considered conservation lands at a Federal, State or Local level, they have not been designated as OFWs. See Exhibit J.

3. Water Protection

An objective for the acquisition and management of this public land was to optimize ecological restoration, protect and manage existing natural resources, and facilitate sensible public use. Concern over a continuous usable source of fresh water requires emphasis on protecting this vital resource. Water resource protection measures, at a minimum, will be accomplished using BMPs as described in the most current version of the Silviculture BMP Manual.

4. Swamps, Marshes, and Other Wetlands

In addition to the waterways, WISF contains approximately 250 acres in four (4) hydric communities: floodplain swamp, bottomland forest, basin swamp, and dome swamp. Maintenance of naturally occurring wetlands communities is a high priority and will be accomplished through appropriate management activities, including prescribed fire when necessary, and adherence to Silviculture BMP.

5. Wetland Restoration

Wetland restoration objectives on WISF include erosion control, restoration of hydrology, and restoration of wetlands plant and animal communities. To achieve these objectives, restoration activities may involve road and soil stabilization, water level control structure removal or installation, non-native invasive species control, site preparation and re-vegetation with native wetlands species, and project monitoring. These activities may be conducted individually or concurrently; implemented by FFS personnel or by non-FFS personnel under mitigation or grant contractual agreements. Wetlands restoration projects should be conducted in conjunction with other restoration activities indicated elsewhere in this plan.

Where applicable, WISF, with assistance from the FFS Forest Management Bureau, may pursue funding to develop and implement wetlands restoration projects. Additionally, cooperative research among FFS, other state agencies, and the federal government will provide valuable information in determining future management objectives of wetland restoration.

Wetland restoration will be coordinated with the SJRWMD. Any activities requiring permits from the water management district will be handled accordingly and will follow the latest edition of the FFS Silviculture Best Management Practices Manual.

6. Florida Department of Environmental Protection Basin Management Action Plans (BMAP)

A Basin Management Action Plan is a "blueprint" for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load (TMDL). It represents a comprehensive set of strategies, including, but not limited to permit limits on wastewater facilities, urban and agricultural best management practices, conservation programs, financial assistance and revenue generating activities, all designed to implement the pollutant reductions established by the TMDL. These broad-based plans are developed with local stakeholders, as they rely on local input and local commitment, and are adopted by Secretarial Order to be enforceable.

The BMAP provides for phased implementation under Subparagraph 403.067(7)(a)1, F.S. The phased BMAP approach allows for the implementation of projects designed to achieve incremental reductions, while simultaneously monitoring and conducting studies to better understand the water quality dynamics (sources and response variables) in the watershed.

The entirety of WISF lies within the St. Johns River Above Palmo Creek BMAP. See Exhibit K.

C. Floral and Faunal Resources

1. Rare, Endangered, and Threatened Species

The intent of FFS is to manage WISF in a manner that will minimize the potential for wildlife species to become imperiled. FFS employees continually monitor the forest for threatened or endangered species while conducting management activities. Specialized management techniques may be used, as necessary, to protect or increase protection of rare, threatened, and endangered species, as applicable for both plants and animals. See Table 4.

According to FNAI records for the Watson Island Tract, the West Indian manatee (*Trichechus manatus*) and short-nose sturgeon (*Acipenser brevirostrum*) are known to be present in the adjacent St. Johns River. While not federally listed, the Bachman's sparrow (*Aimophila aestivalis*) has been recorded on the Bayard Conservation Area and may occur on the forest. An active bald eagle nest occurs on the Watson Island Tract. The nest is embedded within a forested wetland. See Exhibits L and M. Due to its isolation, little or no management activity is likely to occur in proximity to the nest. FFS will follow the USFWS National Bald Eagle Management Guidelines in carrying out any management activities within the area.

Table 4. Rare, Endangered, and Threatened Species Documented on WISF

Common Name	Scientific Name	FNAI Global Rank*	FNAI State Rank*	Federal Status*	State Status*
Bald eagle	<i>Haliaeetus leucocephalus</i>	G5	S3	N	N
Florida black bear	<i>Ursus americanus floridanus</i>	G5T4	S4	N	N
Painted bunting	<i>Passerina ciris</i>	G5	S1S2	N	N
Florida mountainmint	<i>Pycnanthemum floridanum</i>	G3	S3	N	LT

* STATUS / RANK KEY

Federal Status (USFWS): LE = Listed Endangered, LT = Listed Threatened, N = Not currently listed, 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. SAT, T(S/A) = Threatened due to similarity of appearance. A species that is threatened due to similarity of appearance with another listed species and is listed for its protection. Species listed as T(S/A) are not biologically endangered or threatened and are not subject to Section 7 consultation

State Status (FWC): Animals: FE = Listed as Endangered Species at the Federal level by the USFWS, FT = Listed as Threatened Species at the Federal level by the USFWS, F(XN) = Federal listed as an experimental population in Florida, FT(S/A) = Federal Threatened due to similarity of appearance, ST = State population listed as Threatened by the FWC, SSC = Listed as Species of Special Concern by the FWC, N = Not currently listed, nor currently being considered for listing.

Plants: LE = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act; LT = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered; CE = Commercially Exploited; N = Not currently listed, nor currently being considered for listing.

FNAI Global Rank: G1= Critically Imperiled, G2= Imperiled, G3= Very Rare, G4= Apparently Secure, G5= Demonstrably Secure, GNR = Element not yet ranked (temporary), G#? = Tentative rank, T# = Taxonomic Subgroup; numbers have same definition as G#'s.

FNAI State Rank: S1= Critically Imperiled, S2= Imperiled, S3= Very Rare, S4= Apparently Secure, S5 = Demonstrably secure in Florida, S#? = Tentative Rank.

2. Florida Natural Areas Inventory

The Florida Natural Areas Inventory (FNAI) is the single most comprehensive source of information available on the locations of rare species and significant ecological resources throughout Florida.

FNAI has reported the following:

a. Element Occurrences

The FNAI element occurrences data layer includes occurrences of rare species and natural communities. For animals and plants, element occurrences usually indicate a viable population of the species, although they may also reflect historically documented observations which may no longer be extant.

Documented habitat includes basin swamp, bottomland forest, dome swamp, floodplain swamp, mesic flatwoods, mesic hammock, pine plantation, scrubby flatwoods, wet flatwoods, and wet prairie.

b. Likely and Potential Habitat for Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near WISF. Rare species and communities that have not been documented but that are likely or potential at the site are listed in Exhibit L.

c. Land Acquisition Projects

The St. Johns River Blueway runs along the eastern shore of the St. Johns River between Green Cove Springs and Palatka. It includes considerable forested wetlands by the river and around six tributary creeks, plus mesic flatwoods, freshwater marsh, and a portion of disturbed uplands. The project also bounds the WISF on the west bank of the St. Johns River. See Exhibit R.

FNAI recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species before expansions or alterations are made to any facilities.

3. Florida Fish and Wildlife Conservation Commission

The FWC Fish and Wildlife Research Institute (FWRI) reports numerous records of listed species occurrences or critical habitats within the confines of the property. This includes state and federally listed endangered or threatened species.

Other findings by the FWC include:

- a. The property is located adjacent to a Strategic Habitat Conservation Area for the bald eagle (*Haliaeetus leucocephalus*) and painted bunting (*Passerina ciris*).
- b. WISF is located within an area of moderate Species Richness which indicates the total number of species within potential habitat identified in a specific location.
- c. WISF is adjacent to Priority Wetlands, which are wetlands significant to listed wetland-dependent vertebrates.
- d. FWC's response includes a map indicating multiple species locations.

These data represent only those occurrences recorded by FWC staff and other affiliated researchers. The database does not necessarily contain records of all listed species that may occur in a given area. Also, data on certain species are not entered into the database on a site-specific basis. Therefore, one should not assume that an absence of occurrences in their database indicates that species of significance do not occur in the area. See Exhibit M.

The FWC recommends the review of management guidelines in the published FWC Gopher Tortoise Species Management Plan to guide management actions for the gopher tortoise (*Gopherus polyphemus*) on the forest. The FWC Gopher Tortoise Species Management Plan provides beneficial resource guidelines for habitat management and monitoring of the gopher tortoise. For reference, the FWC Gopher Tortoise Species Management Plan can be accessed at MyFWC.com.

The FWC recommends the review of management guidelines in FWC's published Species Action Plans for the management of imperiled, rare, and focal bird species. The FWC Species Action Plans provide beneficial resource guidelines for habitat management and monitoring of the respective species. For reference, the FWC Species Action Plans can be accessed at MyFWC.com.

4. Game Species and Other Wildlife

Wildlife is an important element of the WISF ecosystem. The forest is open to the public year-round except in portions of the forest where access is limited during wet periods, most notably the Watson Island Tract. There is currently no hunting at WISF; however, FWC is responsible for providing technical assistance for the biological aspect of the management of wildlife and fish populations and overall fish and wildlife law enforcement.

Notable wildlife species inhabiting the forest include bald eagle (*Haliaeetus leucocephalus*), osprey (*Pandion haliaetus*), pileated woodpecker (*Dryocopus pileatus*), wild turkey (*Meleagris gallopavo*), and yellow-bellied sapsucker (*Sphyrapicus varius*).

Non-game species will be managed and protected through the restoration and maintenance of native ecosystems found on the forest. The current State Forest Handbook gives additional details for such things as snag management and retention.

5. Survey and Monitoring

FFS may implement species-specific management plans developed by FWC and other agencies as applicable. FFS will cooperate with FWC and other agencies in the development of new wildlife management plans and monitoring protocols, as necessary. Such plans will be consistent with rule and statute promulgated for the management of such species.

a. Gopher Tortoises

Surveys for gopher tortoise burrows will be conducted as needed by FFS and FWC staff intermittently, as needed. All surveys are done in cooperation with FWC.

The FFS follows and utilizes the Best Management Practices for gopher tortoises to assist in meeting management objectives for both the species and the communities in which it is found.

b. Florida Black Bear

FFS will continue to cooperate with FWC to implement FWC's Florida Black Bear Management Plan, with emphasis on maintaining sustainable black bear populations in suitable habitats throughout Florida for the benefit of the species and people.

c. Listed Plant Species

All known locations of listed or rare flora are GIS mapped and location data are shared with FNAI.

d. Other Rare Biota Surveys

Surveys are done as time and staffing allow. High quality plant communities continue to incur ad hoc surveys for both invasive plants and animals. The FFS will utilize FWC Species Action Plans for guidance both monitoring populations and for habitat management recommendations for rare and imperiled species, where appropriate.

Most of the isolated WISF wetlands have received a cursory biological survey, with rare and significant plant and animal species observed and documented. Assistance

will be offered to FWC for gopher tortoise burrow commensals monitoring, as well as monitoring for other rare species, as appropriate.

During routine management activities, incidental sightings of rare animals and plants are GIS mapped by FFS staff. All rare species data is collected and sent to FNAI annually.

6. Gopher Tortoise Recipient Site Feasibility Assessment

The FFS has assessed the feasibility of establishing a gopher tortoise recipient site on WISF. The total size of the property is only 505 acres, existing in two non-adjacent parcels (Watson Island Tract, 275.5 acres; Warner Tract, 230 acres). The Watson Island Tract occurs directly adjacent to the St. John's River, which has no direct access, and consists of hydric and muck soils, which are incompatible with gopher tortoise habitat. The smaller Warner Tract also has limited access, and its soils are only marginally better than on the Watson Island Tract. Therefore, the FFS has determined that WISF is not a feasible location to establish a gopher tortoise recipient site.

D. Sustainable Forest Resources

FFS practices sustainable multiple-use forestry to meet the forest resource needs and values of the present without compromising the similar capability of the future. Sustainable forestry involves practicing a land stewardship ethic that integrates the reforestation, managing, growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water quality, wildlife and fish habitat, and aesthetics. This is accomplished by maintaining and updating accurate estimates of standing timber in order to assure that the timber resources retain their sustainability. Forest inventories will be updated on a continual basis according to guidelines established by the FFS Forest Management Bureau.

E. Beaches and Dune Resources

No beaches or dunes occur within WISF.

F. Mineral Resources

There are no mineral deposits of commercial value known to exist on WISF.

G. Unique Natural Features and Outstanding Native Landscapes

The most unique natural feature that exists on WISF is the pattern of wet flatwoods and bottomland forest interlaced amongst the marshes and swamps with meandering live oak hammocks dispersed throughout. On the Watson Island Tract there is a little over one mile of frontage on the St. Johns River.

H. Research Projects / Specimen Collection

Research projects may be performed on WISF on a temporary or permanent basis for the purpose of obtaining information that furthers the knowledge of forestry and related fields. FFS cooperates with other governmental agencies, non-profit organizations, and educational institutions, whenever feasible, on this type of research. FFS will consider assisting with research projects when funds and manpower are available.

All research to be considered on WISF must be in accordance with the guidelines stated in the

State Forest Handbook. Any requests for research should be submitted in writing to the appropriate field staff to be forwarded to the Forest Management Bureau for approval. Requests must include: a letter outlining the purpose, scope, methodology, and location of the proposed research. Requests are subject to review by FFS Foresters, Biologists, the Forest Health Section, and the Forest Hydrology Section, as appropriate. Authorization to conduct research will require that the investigator provide copies of any reports or studies generated from any research to the FFS and the WISF staff. Other special conditions may be applicable, and the authorization may be terminated at any point if the study is not in compliance.

There have been no research projects or specimen collections conducted on WISF.

I. Ground Disturbing Activities

Although the FFS's approach to handling ground disturbing activities is identified in other sections of this plan, the FFS's overall approach to this issue is summarized here. FFS recognizes the importance of managing and protecting sensitive resources and will take steps to ensure that such resources are not adversely impacted by ground disturbing activities. Sensitive resources include areas such as known sensitive species locations; archaeological, fossil, and historical sites; ecotones, wetlands, and water resources. The process for evaluating and obtaining approval for ground disturbing activities is outlined in Appendix 2.A.6. of the State Forest Handbook.

When new pre-suppression firelines, recreation trails, or other low-impact recreation site enhancements are necessary, their placement will be reviewed by State Forest field staff to avoid sensitive areas. For ground disturbing activities such as construction of buildings, parking lots, and new roads, the FFS will consult with FNAI, DHR, SJRWMD, and ARC, as appropriate.

V. Public Access and Recreation

The primary recreation objective is to provide the public with dispersed outdoor recreation activities that are dependent on the natural environment. FFS will continue to promote and encourage public access and recreation use while protecting resources and practicing multiple-use management.

The demand for resource-based outdoor recreation activities on WISF is expected to be low, considering that public access to the forest is limited by topography (Watson Island Tract), public roads access, proximity, and size (both tracts). Planned public access points and those public use improvements that can be accomplished in the short term are illustrated in Exhibit D.

The Warner Tract has public access via Oscar Ashton Road, located off of County Road 13-A. An unnamed service road (former logging road) and various types of relic trails (firelines, ATV, mowed) are scattered throughout the tract.

The Watson Island Tract currently has no public access via roads and is only accessible by boat. The tract is surrounded almost entirely by wetlands, and approximately one mile of the St. Johns River. There is one small upland area that abuts State Road 13 where access for parking could be provided via a pullout and small parking area. However, only foot access is possible from that point due to the immediate transition to the bottomland forest community which dominates the tract. Although a parking area is possible, it is not feasible due to the topography. Parking will be reassessed if or when additional land is purchased for the tract. It is especially critical on this tract that considerations to

develop public use improvements include management capacity (access and staff) to monitor impacts, provide maintenance, and or law enforcement needs associated with public use.

New recreation opportunities and facilities, which are compatible with the primary goals and responsibilities of the FFS, will be considered only after FFS determines their compatibility with other forest uses and forest resources.

A. Existing

The Watson Island Tract (276 acres) has public river access, but no designated trails or facilities. The Warner Tract (230 acres) has public access, but no designated trails or facilities. Firelines can be used as hiking trails. See Exhibit D for maps of access points and service roads, and proposed improvements for each tract.

B. Planned

FFS will assess plans for recreation opportunities based on demand, carrying capacity, demographics, and impact to the resources on the forest. All planned improvements may be completed as staff and funding permits. Both terrestrial and aquatic resources and related activities will be evaluated. Any plans will be incorporated into the Five-Year Outdoor Recreation Plan on file for WISF.

1. Public Access and Parking

During this ten-year planning period, FFS will coordinate with the State Road Crew to install a parking lot along Oscar Ashton Road within the Warner Tract. Trees must be removed and hauled off to establish the parking area. For the Watson Island Tract, establishing a parking area is possible, but not feasible, due to lack of vehicular access and very wet ground conditions. Therefore, unless the need increases or significant acreage is added to the Watson Island Tract, the only planned parking area at this time is for the Warner Tract.

Parking area(s) will be designated by appropriate FFS staff by location. Listed plants and animals, as well as known archeological sites, will be avoided. The size of parking area(s) and materials needed will be determined by location for public access. An estimated half-acre to one-acre parking area will be planned for Warner Tract. Signage for both tracts will be installed and may need to be updated during this ten-year planning period.

2. Recreation Trails

During this ten-year planning period, the construction of a hiking trail is planned for the Warner Tract. The proposed hiking trail will traverse approximately two (2) miles, most likely in a loop format, originating from the planned parking area described above. A kiosk will be installed near the trailhead. A trail will be blazed into the tract, utilizing existing firelines and service road. A short trail will need to be installed from the proposed parking area back to the fireline system and will necessitate establishment of a bridge or crossing to pass a low area. This crossing will abide by BMPs and both terrestrial and aquatic resources will be evaluated. Additional recreation infrastructure will be evaluated and assessed on the Warner Tract should additional land become available to add to the tract.

At this time, there are no plans to install recreation trails or other infrastructure on the Watson Island Tract due to the lack of vehicular access and wet ground conditions. Should additional land become available to add to this tract, recreation opportunities will be reevaluated.

3. Environmental Education

During this ten-year planning period, kiosks, educational materials, or displays will be installed on the Watson Island Tract or Warner Tract. Each may be installed, replaced, or repaired as needed. FFS may install displays on either tract with information that includes forest management, prescribed fire, wildlife, plants, or recreation. Environmental education for WISF may be conducted through guided tours and hands-on events by request. If a need is determined in the future, WISF may implement an environmental education program which may include guided tours, hands-on events, and more.

FFS may create partnerships with local K-12 schools and / or universities for the development and implementation of educational opportunities on WISF. The Five-Year Outdoor Recreation Plan on file for WISF may lend more insight to management activities as they pertain to future educational opportunities that the State Forest may provide to the public.

4. Equestrian, Hiker, Biker, and Hunter Education

During this ten-year planning period, FFS will install a kiosk at each tract of WISF. Each kiosk installed during this ten-year planning cycle will be used for display, education, and / or information on recreation activities on the State Forest. These tracts are not WMAs and are not open for hunting.

5. Amenities (Pavilions, Docks, Bathrooms, etc.)

During this ten-year planning period, FFS will assess the feasibility of installing gate(s), fencing, a vault toilet, a bicycle rack, benches, bridge(s), culvert(s), and viewing platform(s) on the Warner Tract of WISF. Materials for these projects will be determined by location and funding.

The Florida Forest Service will handle permitting requests for recreation activities.

VI. Forest Management Practices

A. Prescribed Fire

Forest management practices on WISF are important in the restoration and maintenance of forest ecosystems and provide a variety of socio-economic benefits to Floridians. Management practices on WISF include a prescribed fire program which is an effective tool in controlling the encroachment of shrubs and off-site hardwoods, stimulating the recovery of native herbaceous groundcover, and promoting the regeneration of native pines.

FFS utilizes a fire management program on State Forests that includes wildfire prevention, detection and suppression, and prescribed burning. This program is the responsibility of FFS's Bunnell District and is detailed in the Five-Year Prescribed Burning Management Plan. Emphasis will be placed on prescribed burning, wildfire prevention, and education to help reduce wildfire occurrence on the forest.

A Fire History chart detailing the recent history of prescribed burns and wildfires at WISF is available in Exhibit N.

FFS has 1 fire tower, 2 brush trucks, and 4 tractor-plow units located in St. Johns County. Additional support is available from neighboring counties. Personnel and equipment stationed at WISF will be used for pre-suppression practices, establishment of firebreaks, rehabilitation of existing firelines, construction of new firelines, maintenance of perimeter firebreaks, and prescribed burning.

The annual forest prescribed burning program produces multiple benefits. The purposes of prescribed burning on WISF are to facilitate forest management operations; enhance wildlife and listed species habitat; decrease fuel loading; enhance public safety; and restore, maintain, and protect all native ecosystems, ecotones, and their ecological processes. FFS personnel are responsible for planning and implementing the annual prescribed burn program for WISF, which will consist of dormant and growing season burns. An update to the Five-Year Prescribed Burning Management Plan is developed each year by FFS staff. All burns conducted on WISF are executed by Florida Certified Prescribed Burn Managers in accordance with Chapters 590.125, F.S. and 5I-2 F.A.C.

According to FNAI, historic, fire-dependent natural communities on WISF are estimated to have occupied approximately 221 acres and to have burned at approximately 2 to 15-year intervals. Current fire-dependent communities encompass 223 acres. Some historically fire-dependent communities have been altered through past land use practices, which inhibits the ability to meet objectives with prescribed fire alone. Based on current conditions and management objectives, WISF will plan for 56 to 112 acres to be prescribed burned annually. Priority ranking of burn units is used to keep fire return intervals maintained while slowly adding additional acreage. Meeting prescribed fire goals will be largely dependent on weather conditions, available personnel, and statewide emergency situations such as wildfires, hurricanes, and other natural disaster response and relief. Currently it is estimated that 141 acres of WISF are within the desired fire-return interval.

1. Fire Management

The WISF Fire Management Plan serves as a working tool and an informational document for WISF. The plan provides guidelines regarding wildfire suppression and prescribed fire management. It will specify burn units, burn unit prescriptions, appropriate fire return intervals, and fire pre-suppression planning. The plan may be reviewed and amended as necessary.

The use of prescribed fire in the management of timber, wildlife, and ecological resources on WISF is necessary if the FFS is to fulfill the goals and objectives stated in this plan including: enhancing and restoring native plant communities, managing protected species, managing timber, recreation, historical, and other resource values. The fire management plan and its objectives shall reflect and incorporate these multiple-resource objectives.

- a. Prescribed Fire:** Prescribed fire is the most important land management tool, both ecologically and economically, for managing vegetation and natural communities and perpetuating existing wildlife populations in Florida. Forest operation records and staff

experience should be combined with the FNAI inventory and assessment (2019) to identify areas that may require mechanical or chemical treatments in conjunction with prescribed fire to restore a more natural vegetative structure.

- b. Burn Unit Plans:** Each prescribed fire will be conducted in accordance with FFS regulations and state law (Rule Chapter 5I-2 F.A.C., Chapter 590 F.S.) and have a burn unit plan (or prescription). Each prescription will contain, at a minimum, the information, as required by Section 590.125(3), F.S., needed to complete the FFS Prescribed Burn Plan Form FDACS 11461.

Based upon available species survey data, burn units within a prescription that have listed wildlife species shall explicitly state their presence and any restrictions or requirements relative to prescribed burning in proximity to these species or habitats. These may include time of year, pre-burn preparation, fire return intervals, and other burn parameters.

Aerial ignition may be considered for large burn units where this tactic can be cost effective for larger acreages. Consideration should be given to rotating burn units between dormant and growing season burns over time. Fire return intervals for a burn unit are recommended to fall within the natural, historic range for the dominant natural community or communities within a given burn unit.

B. Wildfire Prevention and Mitigation Strategies

FFS utilizes a comprehensive wildfire management approach on State Forests that includes an ongoing program of wildfire prevention, detection and suppression, and prescribed burning. Implementation of this program is the responsibility of FFS's Bunnell District. Emphasis will be placed on consistent accomplishment of prescribed burning goals and community outreach to increase public understanding of wildfire prevention and the benefits of prescribed fire.

FFS has three paramount considerations regarding wildfires, and are established in priority order:

- 1) Protection of human lives
- 2) Protection of improvements
- 3) Protection of natural resources

All procedures regarding wildfire will follow the State Forest Handbook and the WISF Fire Management Plan.

1. Suppression Strategies

If a wildfire occurs on WISF there are two (2) alternative suppression strategies as defined below:

- a. Contain and Control** is defined as a suppression strategy where a fire is restricted to a certain area by using existing natural or constructed barriers that stop the fire's spread under the prevailing and forecasted weather until it is out. This strategy allows the use of environmentally sensitive tactics based on fuels, fire behavior, and weather conditions that keep a wildfire from burning a large area or for a long duration.

- b. Direct Suppression** is defined as a suppression strategy where aggressive suppression tactics are used to establish firelines around a fire to halt its spread and to extinguish all hotspots. This alternative is used whenever there is a threat to human life, property, private lands, and / or critical natural or cultural resources. This strategy should also be used when the total district fire load dictates that crews not be involved with individual fires for any longer than necessary.

Appropriate suppression action will be that which provides for the most reasonable probability of minimizing fire suppression cost and critical resource damage, consistent with probable fire behavior, total fire load, potential resource and environmental impacts, safety, and smoke management considerations. The Incident Command System (ICS) will be used for all suppression actions.

2. Smoke Management

Caution will be exercised to prevent a public safety or health hazard from the smoke of any prescribed burn or wildfire. Prescribed burns must pass the smoke screening procedure and be conducted by a certified burner. If smoke threatens to cause a safety hazard, then direct, immediate suppression action will be taken.

3. Fire Breaks and Firelines

A system of permanent fire breaks will be developed and maintained around and within the boundaries of WISF to guard against fires escaping from and entering the forest. Such fire breaks will consist of natural barriers, roads, trails, permanent grass strips, and where appropriate, well maintained harrowed lines. All pre-suppression fire breaks will meet the established Silvicultural BMP criteria.

During wildfire suppression, the use of water and foam, permanent fire breaks, natural barriers, and existing roads and trails for firelines can be used when human life, safety, property, and resource considerations allow. Plowed and / or bladed lines will be used for initial installation of firelines in heavy fuels and in cases where it's considered necessary to protect life, property, or resources and / or to minimize threats to firefighters. Plowed and bladed lines will be rehabilitated, and BMPs implemented as soon as practical after the fire is suppressed.

4. Sensitive Areas

WISF retains on file in the State Forest Headquarters an Environmentally Sensitive Area Map that identifies protected sites such as critical wetlands and archaeological and historical sites known to occur on the State Forest. FFS personnel are aware of these areas in the event of a wildfire. Special precautions will be followed when prescribed burning in sensitive areas on WISF. When possible, fire staff will avoid line construction in wetlands ecotones throughout the forest.

5. Firewise Communities

FFS has implemented a firewise community approach for prevention statewide. Specifically, in the area adjacent to or nearby WISF, efforts in this regard will continue to identify communities at risk and to contact their representatives.

6. Adjacent Neighbor Contacts

The FFS staff at the Bakersville Work Center maintains a list of neighbors that have requested they be notified in advance of prescribed burns. These families are contacted by telephone or email with potential sites and dates of anticipated prescribed burns.

7. Post-Burn Evaluations

A post-burn evaluation is required for each prescribed burn on the State Forest to assess impacts on timber and habitat. Based on the evaluations after prescribed fires in particular, decisions will be made on the effectiveness of the prescribed burn and improvements that can be made in the future. A historical fire record for all significant fires and prescribed burns will be maintained. This will be accomplished using completed burn plans and the maintenance of GIS data. These records are intended to provide data for future management decisions.

C. Sustainable Forestry and Silviculture

Timber is a valuable economic and ecological resource, and timber harvesting for the purposes of generating revenue, improving stand viability, forest health, wildlife, and ecological restoration and maintenance is critical to the silvicultural objectives on the State Forest.

1. Strategies

The following silvicultural strategies will apply to silvicultural practices on WISF:

- a. To restore and maintain forest health and vigor through timber harvesting, prescribed burning, and reforestation, both naturally and artificially, with species native to the site.
- b. To create, through natural or artificial regeneration, uneven-aged, and even-aged management, a forest with both young and old growth components that yields sustainable economic, ecological, and social benefits.

2. Silvicultural Operations

Silvicultural operations on WISF will be directed toward improving forest health, wildlife habitat, and ecological and economical sustainability, as well as toward recovery from past management practices that are not in accordance with the objectives of this plan. Stands of off-site species with merchantable volume will be scheduled for harvest, followed by reforestation with one or more appropriate tree species. Herbicide applications may be necessary to control woody competition and to re-establish desired natural species of both overstory and groundcover. Site preparation methods may include prescribed fire, mechanical vegetation control, and / or herbicide applications. Herbicides used will be registered for forestry use by the U.S. Environmental Protection Agency (EPA) and will not adversely affect water resources.

Prescribed fire is the most desirable method of vegetation control in fire-dependent ecosystems. However, due to the existence of areas where fuel loads have reached dangerous levels or urban interface dictates prescribed fire is not suitable, mechanical or chemical vegetation control may be used. Mechanical and / or chemical vegetation control will be utilized where appropriate as determined by FFS staff for wildlife enhancement, fuel mitigation, and reforestation.

Maintenance and restoration of timber stands and natural communities through timber harvesting will include thinning for maintenance, regeneration harvests applicable to the species present, and clear-cutting to remove off-site species.

All silvicultural activities, including timber harvesting and reforestation, will meet or exceed the standards in FFS's Silviculture BMPs and the State Forest Handbook, and will follow the Five-Year Silviculture Action Plan.

3. Forest Inventory

The purpose of a forest inventory is to provide FFS resource managers with information and tools for short and long-range resource management and planning. The WISF forest will be re-inventoried every 5-10 years to provide an accurate estimation of the standing timber and to ensure that stands will be managed sustainably.

Timber / forestry resources available on the property include longleaf and slash pine. In addition, there are mixed hardwoods and cypress found throughout the forest.

4. Timber Sales

Timber sales are generally advertised for competitive bids and sold on a per unit or lump sum basis. All timber sales are conducted according to guidelines specified in the State Forest Handbook.

5. Cattle Grazing

Cattle grazing activities can assist in maintaining pastures and controlling non-native plants. However, due to its small size and largely wetland habitats, WISF is unlikely to provide a cost-effective lease site for cattle.

There are currently no cattle leases on WISF.

D. Non-Native Invasive Species Control

FFS employees continually monitor the forest for non-native invasive species while conducting management activities. FFS will locate, identify, and apply control measures with the intent to eradicate or control non-native invasive species. Table 5 lists the general treatment strategy, acres impacted, and population stability trend for non-native invasive plant species occurring on WISF. Also see Exhibit O.

On-going maintenance and monitoring strategies are outlined in the Five-Year Ecological Management Plan, which is developed to locate, identify, and control non-native invasive plant species. Occurrences of non-native invasive species are recorded in the WISF GIS database and are monitored and treated annually as funding permits. The GIS database is updated as new infestations are discovered.

Adjacent landowners who are known to have these species on their property will be approached to cooperate on control measures. FFS works to control the spread of non-native invasive species by decontaminating agency equipment and equipment used by private contractors according to

the State Forest Handbook.

FFS will enlist support from FWC in efforts to control non-native invasive animals. FWC has issued a feral hog control permit to FFS for all State Forests and FFS will allow for feral hog removal through trapping and hunting as necessary. There is currently no evidence of feral hogs (*Sus scrofa*) inhabiting WISF.

Training in the identification and control of invasive species will be scheduled for personnel as time and resources permit. Training concerning non-native invasive plants will be coordinated with the Forest Management Bureau's Forest Health Section. Control of non-native invasive species will be target specific and use a variety of methods including appropriately labeled and efficacious herbicides.

Table 5. Non-Native Invasive Plant Species Occurring on WISF

Common Name	Scientific Name	Treatment Strategy	Acres Impacted	Increasing /Decreasing
Wild taro	(<i>Colocasia esculenta</i>)	Due to the remoteness of the infestation and large infestations on adjacent property along the river, currently the infestation is only being monitored.	2.5	Stable
Chinese tallow	(<i>Triadica sebifera</i>)	Basal bark treatment with 20% triclopyr or cut stump application of 20% triclopyr and hand pull seedlings or 2% triclopyr foliar application.	0.1	Decreasing
Japanese climbing fern	(<i>Lygodium japonicum</i>)	Foliar application with 2% glyphosate mixed in water with surfactant and applied immediately when plants are found.	0.1	Decreasing
Cogongrass	(<i>Imperata cylindrica</i>)	Foliar application of 2% glyphosate with 1% imazapyr and 2% triclopyr on dry sites only.	0.1	Decreasing
Coral ardisia	(<i>Ardisia crenata</i>)	Foliar application of 2% glyphosate mixed in water with a surfactant or basal bark of 20% triclopyr mixed in carrier oil cut stump treatment with 20% triclopyr.	0.1	Stable

E. Insects, Disease and Forest Health

Currently there are no significant insect or disease problems on WISF. In the event of a forest pest outbreak, WISF resource managers will consult with the Forest Management Bureau's Forest Health Section to formulate an appropriate and effective response.

In compliance with Section 388.4111, F.S. and in Section 5E-13.042, F.A.C., all lands have been evaluated and subsequently designated as environmentally sensitive and biologically highly productive. Such designation is appropriate and consistent with the previously documented natural resources and ecosystem values and affords the appropriate protection for these resources from arthropod control practices that would impose a potential hazard to fish, wildlife, and other natural resources existing on this property. The local arthropod control agencies in St. Johns County will be notified of the approval of this plan documenting this designation.

As a result, prior to conducting any arthropod control activities on WISF, the local agency must prepare a public lands control plan that addresses all concerns that FFS may have for protecting the natural resources and ecosystem values on the State Forest. In this regard, FFS will provide the local agency details on the management objectives for WISF. This public lands control plan must comply with FDACS guidelines and use the appropriate FDACS form. The plan must then be approved and mutually adopted by the county, FFS, and FDACS, prior to initiation of any mosquito control work. Should the local mosquito control district not propose any mosquito control operations on the property, no arthropod control plan is required. See Exhibit V.

F. Use of Private Land Contractors

The forest manager makes ongoing evaluations of the use of private contractors and consultants to facilitate the total resource management activities of this State Forest. The opportunities for outsourcing land management work include, or are anticipated to include:

1. Herbicide applications
2. Restoration
3. Site preparation
4. Reforestation
5. Timber harvesting
6. Biological assessments and mapping
7. Fixed capital and infrastructure improvements

VII. Proposed Management Activities for Natural Communities

In 2019, FNAI completed an inventory and natural community mapping project on WISF. Current and historic natural community cover types can be found in Exhibits P and Q, and Table 6. The inventory included altered community types which are habitats that have been impacted by humans and do not fit into FNAI's Natural Community Classification. See Tables 7 and 8.

Table 6. Natural Community Types

Community Type	Historic acres*	Current acres*
Basin swamp	19	19
Bottomland forest	87	87
Dome swamp	2	2
Floodplain swamp	142	142
Mesic flatwoods	32	22
Mesic hammock	28	35
Scrubby flatwoods	3	3
Wet flatwoods	106	157
Wet prairie	59	0
Managed and other altered landcover types***	0	13
TOTAL	478**	480**

* Rounding errors exist

** A 25-acre area has not been surveyed

*** See Tables 7 & 8

Table 7. Managed Community Types

Community Type*	Current acres**
Pine Plantation	10

* Protocol as described in Appendix 2 of FNAI's "Guide to the Natural Communities of Florida", 2010 Edition.

** Note rounding errors exist

Table 8. Other Altered Landcover Types

Altered Landcover Type*	Current Acres**
Developed	1
Road	2

* Protocol as described in Appendix 2 of FNAI's "Guide to the Natural Communities of Florida", 2010 Edition.

** Note rounding errors exist.

For the purposes of this management plan, restoration is defined as the process of returning ecosystems to the appropriate structure and species composition, based on soil type. Management during this ten-year period will begin with a forest-wide assessment of the fuel loading, timber densities, reforestation needs, and groundcover in order to develop a five-year comprehensive operational plan for prescribed burning and other management activities across the forest. Strategies may include thinning pine plantations, mowing or chopping in areas of heavy fuel buildup, application of both dormant and growing season fires, and / or the use of herbicides to control hardwoods and / or hardwood regeneration. Site preparation and reforestation may be required to increase pine stocking in stands with very poor stocking or in restoration efforts. Fire return intervals are included as a guide and may vary depending upon specific conditions and are intended to attain desired forest and resource management goals. See Table 9.

Table 9. Prescribed Fire Interval Guide on WISF

Habitat Type	Historic Fire Return Intervals*	WISF Fire Frequency Goal (Local)	Comments
Basin swamp	2 – 5	3 – 4	Fire intervals in basin swamps are highly variable. The lowest portions of basin swamps rarely, if ever, burn. Fire is more frequent in cypress dominated swamps and may be absent or rare in hardwood swamps.
Bottomland forest	N / A	N / A	Fire is not a significant factor in bottomland forest and is primarily limited to individual trees affected by lightning strikes.
Dome swamp	3 – 5	3 – 4	Fire on the edges of dome swamp is essential for limiting hardwood encroachment and peat buildup while encouraging herbaceous growth.
Floodplain swamp	N / A	N / A	This community is typically too wet to carry a fire.
Mesic flatwoods	2 – 4	3 – 4	Frequent, low intensity fires in the dormant or growing seasons, as appropriate, are critical for preserving the structure of the flatwoods, preventing woody encroachment, and reducing weedy competition.
Mesic hammock	N / A	N / A	Mesic conditions dampen fires throughout the year.

Habitat Type	Historic Fire Return Intervals*	WISF Fire Frequency Goal (Local)	Comments
Pine Plantation	2 – 10	3 – 4	Pine plantations are burned on the same frequency as the surrounding and/or historic natural community as appropriate.
Scrubby flatwoods	5 – 15	3 – 4	Variability in season and frequency of prescribed fires should produce a mosaic of burned and unburned patches desirable for maintaining high biotic diversity.
Wet flatwoods	3 – 10	3 – 4	Prescribed fires applied on a 3 to 4-year cycle reduces woody encroachment, sustains herbaceous species, and aids in preventing heavy fuel loads that can lead to catastrophic wildfires.
Wet prairie	2 – 3	3 – 4	Frequent fires (2 to 3 years) prevent the invasion of weedy shrubs and trees that shade out the herbaceous species.

* Years, as determined by FNAI

The following community descriptions, existing condition descriptions, and management recommendations are taken from a 2019 FNAI mapping project report and the Guide to the Natural Communities of Florida (FNAI 2010), as well as from the knowledge and experience gained by FFS during forest inventory efforts and routine field work on WISF.

To achieve the objectives outlined in this plan, the following management activities will be performed in the natural and managed communities at WISF during the next ten-year planning period. Goals, desired conditions, standards, and guidelines provide management area direction. These goals and desired conditions may take many planning cycles to attain.

A. Basin Swamp

Description:

Basin swamps are forested depressions that are typically large and/or embedded in a non-pyrogenic community and thus are not heavily influenced by frequent fires in the surrounding landscape. The soils are generally acidic, nutrient-poor peats overlying an impervious soil layer. This community type is dominated by hydrophytic trees and shrubs that can withstand inundation for most or all of the year, including bald (or pond) cypress (*Taxodium distichum*) and/or swamp tupelo (*Nyssa sylvatica* var. *biflora*). Slash pine (*Pinus elliottii*) may be found on hummocks within the swamp. Basin swamps have variable shrub layers and sparse to dense herbaceous species cover. A mature canopy is usually closed and dominated by pond cypress, swamp tupelo, slash pine, and to a lesser extent, red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanicus*), diamond leaf oak (*Quercus laurifolia*), loblolly bay (*Gordonia lasianthus*), swamp bay (*Persea palustris*), and sweetbay (*Magnolia virginiana*). In most cases, shrubs do not form a dense layer below the canopy or in the ecotones of the swamps but are typically scattered throughout the swamp. In densely forested portions of basin swamps, herbs are sparse. Epiphytes and vines may be common.

Basin swamps appear much the same as baygall communities on the 1943 aerial photographs, as medium to dark gray forested patches, and are difficult to distinguish in the complex mosaic that

also includes wet flatwoods and basin marsh. Ecotones between the basin swamp and adjacent flatwoods communities were historically occupied by a wet prairie community.

Current Conditions:

Basin swamps at WISF are primarily found on the Warner Tract. The tree canopy and subcanopy of basin swamps on WISF consist of red maple, titi (*Cyrilla racemiflora*), sweetgum (*Liquidambar styraciflua*), fetterbush (*Lyonia lucida*), sweetbay, cabbage palm (*Sabal palmetto*), and pond cypress (*Taxodium ascendens*).

Fire Regimes:

Fire intervals in basin swamps are highly variable. The lowest portions of basin swamps rarely, if ever, burn. Graminoid-dominated ecotones often burn in conjunction with the adjacent uplands, and these may burn as frequently as every 2 to 5 years.

Fire is more frequent in cypress dominated swamps and may be absent or rare in hardwood swamps. Slash pine, pond pine, and cypress can establish in these areas immediately after a fire, benefiting from ample sunlight and available bare mineral soils; they are also tolerant of moderate fires once past a certain size, thus systems dominated by these two species may have been subjected to fires every 10 to 20 years.

Management Needs:

Little active management is needed for this community type. Where it can be done safely, prescribed fires should be allowed to burn into the edges of the basin swamp, to restrict the encroachment of shrubs. Infrequent low intensity ground fires within basin swamps may also be used to maintain the cypress component.

This community is thought to be very stable if hydrological conditions and water quality are maintained.

B. Bottomland Forest

Description:

Bottomland forest is a deciduous, or mixed deciduous/evergreen, closed-canopy forest on terraces and levees within riverine floodplains and in shallow depressions. Found in situations intermediate between swamps (which are flooded most of the time) and uplands, the canopy may be quite diverse with both deciduous and evergreen hydrophytic to mesophytic trees such as live oak (*Quercus virginiana*), swamp laurel oak (*Quercus laurifolia*), sweetbay, swamp tupelo, sweetgum, bald cypress, and red maple. A subcanopy of younger canopy species should be present. Understory species composition should remain as variable as the canopy, with shrubs being the dominant component. Shrubs should include saw palmetto (*Serenoa repens*), American beautyberry (*Callicarpa americana*), coastal doghobble (*Leucothoe axillaris*), wax myrtle (*Myrica cerifera*), fetterbush, and highbush blueberry (*Vaccinium corymbosum*), among others. Herbs should be generally sparse due to the closed canopy and dense shrub layer. Species may include woods grass (*Oplismenus hirtellus*), bracken fern (*Pteridium aquilinum*), Virginia chain fern (*Woodwardia virginica*), woodoats (*Chasmanthium laxum*), and lizard's tail (*Saururus cernuus*). Epiphytes should be infrequent to occasional and include Spanish moss (*Tillandsia usneoides*), resurrection fern (*Pleopeltis polypodioides*), and ball moss (*Tillandsia recurvata*).

Vines should be infrequent to common and include muscadine (*Vitis rotundifolia*) and poison ivy (*Toxicodendron radicans*).

Current Conditions:

Bottomland forests include a canopy and subcanopy of red maple, loblolly bay, dahoon (*Ilex cassine*), sweetgum, southern bayberry (*Morella cerifera*), swamp bay, slash pine, and swamp laurel oak. The shrub layer includes smaller canopy species and fireweed (*Erechtites hieraciifolius*) and saw palmetto. Herbs are sparse and include Virginia chain fern.

Fire Regimes:

Fire is not a significant factor in bottomland forest and is primarily limited to individual trees affected by lightning strikes.

Management Needs:

Management activities should focus on maintaining natural hydrologic patterns and allowing prescribed fires from adjacent communities to burn into the edges of the community. Fire breaks should not be created to isolate this community. Activities that alter the surrounding hydrology, including ditches and canals, should be avoided.

C. Dome Swamp

Description:

Dome swamps are isolated, shallow, forested wetland basins that are imbedded in a pyrogenic matrix community such as pine flatwoods. These swamps often have domed profiles resulting from smaller trees growing around the edges and larger trees growing in the interior. Dome swamps have peat soils that are thickest toward the center and are generally underlain with acidic soils. Dome swamps are distinguished from basin swamps principally by their often more circular shape, smaller size, and higher historical fire frequency due to landscape position.

The mature canopy is dominated by pond cypress and / or swamp tupelo and may also have a mixture of bay species such as sweetbay as well as a midstory of scattered tall shrubs including dahoon, fetterbush, wax myrtle, and swamp bay. The herbaceous layer is sparse in the interior, becoming denser on the edges, and dominated by various hydrophytic herbs. Species composition and hydroperiods are similar to basin swamps, but generally with fewer shrubs and greater herbaceous cover and diversity. Dome swamps usually have a diverse herbaceous ecotone with the surrounding pine dominated community, created through frequent fires that extinguish naturally along the edge of the dome.

A small, isolated dome swamp can be found embedded in flatwoods and wet prairie on the Warner Tract. Dome swamps usually appear on the 1943 aerial photographs as a slightly lighter, textured signature, although they can be difficult to distinguish from non-forested depression marshes due to the faint color of the cypress.

Current Conditions:

There is a small dome swamp on the Warner Tract surrounded by flatwoods and pine plantation. This is a shallow depressional area that is isolated from surface water drainage except during periods of flooding. The canopy and subcanopy of dome swamps at WISF contains pond cypress

and slash pine. The shrub layer of the dome swamp community includes myrtle-leaved holly (*Ilex cassine* var. *myrtifolia*), sweetbay, and pond cypress.

Fire Regimes:

Fire is essential for the maintenance of dome swamps, limiting hardwood encroachment, particularly by bay species, and peat buildup while encouraging herbaceous growth. The fire frequency is greatest at the periphery of the dome swamp where a normal fire cycle might be as short as 3 to 5 years. The interior of large dome swamps may burn less frequently because of standing water or soil saturation.

Management Needs:

Dome swamps on WISF would benefit from groundcover restoration. Prescribed fire will be the main tool used to restore and manage dome swamps. Prescribed fires from neighboring flatwoods communities will be allowed to burn into dome swamps and extinguish naturally at the ecotone or burn through the swamp, as conditions permit. Existing fire breaks around dome swamps should be rehabilitated whenever possible, and new lines will only be established in extreme situations.

D. Floodplain Swamp

Description:

Floodplain swamp is a closed-canopy forest of hydrophytic trees occurring on frequently or permanently flooded hydric soils adjacent to stream and river channels and in depressions and oxbows within floodplains. The canopy is typically closed and dominated by pond cypress and / or bald cypress, water tupelo (*Nyssa aquatica*), and swamp tupelo (*Nyssa biflora*) with occasional Carolina ash (*Fraxinus caroliniana*), and swamp laurel oak. Shrubs and smaller trees such as titi, green ash (*Fraxinus pennsylvanica*), Virginia willow (*Itea virginica*), common buttonbush (*Cephalanthus occidentalis*), cabbage palm, and dahoon may be present. A groundcover of flood tolerant ferns and herbs such as royal fern (*Osmunda regalis* var. *spectabilis*), netted chain fern (*Woodwardia areolata*), swamp dock (*Rumex verticillatus*), and lizard's tail may be occasional.

At WISF, floodplain swamp occurs in a mosaic with bottomland forest. The two communities are indistinguishable on the historic aerials. Current aerial photography and ground-truthing were used to delineate both communities.

Current Conditions:

The floodplain swamps at WISF have a canopy of red maple, sweetbay, and pond cypress. The subcanopy and taller shrubs include smaller canopy species and Carolina ash, and sweetgum. The understory shrub layer contains smaller subcanopy species and groundsel tree (*Baccharis halimifolia*) and common buttonbush. The herbaceous layer includes snow squarestem (*Melanthera nivea*), savannah panicum (*Phanopyrum gymnocarpon*), pickerelweed (*Pontederia cordata*), hottentot fern (*Thelypteris interrupta*), and Virginia chain fern. There are occasionally vines and epiphytes growing into the canopy, including Bartram's air-plant (*Tillandsia bartramii*), Spanish moss, trumpet creeper (*Campsis radicans*), and eastern poison ivy.

Fire Regimes:

Fire is not necessary to maintain floodplain swamp. This community is typically too wet to carry a fire. If floodplain swamps experience drought, fires may occur and cause damage to the

understory.

Management Needs:

The maintenance of natural hydrologic regimes is critical to the health of floodplain swamps and to the downstream systems with which they are connected. Where it can be done safely, prescribed fires should be allowed to burn into floodplain swamp edges to restrict encroaching shrubs. Where possible, eliminate plowed firebreaks and ditches through or around floodplain swamps to restore hydrology to its natural state.

E. Mesic Flatwoods

Description:

Mesic flatwoods are relatively open-canopy forests of southern yellow pines, but most notably longleaf pine (*Pinus palustris*). Slash pine is present more frequently in transitions to adjacent wetlands or on more calcareous soils. There is little or no subcanopy and tall shrub layer other than pine recruitment. The shrub layer is moderately dense with an average height that does not generally exceed four feet. Typical species include saw palmetto, gallberry (*Ilex glabra*), tarflower (*Bejaria racemosa*), coastalplain staggerbush (*Lyonia fruticosa*), wax myrtle, winged sumac (*Rhus copallinum*), netted pawpaw (*Asimina reticulata*), running oak (*Quercus elliotii*), dwarf live oak (*Quercus minima*), shiny blueberry (*Vaccinium myrsinites*), and a diversity of other low shrubs. Herb cover is also moderately dense and dominated by grasses which help to carry frequent fires, especially wiregrass (*Aristida stricta*). Herbaceous species diversity is high in good quality mesic flatwoods. Vines occur rarely. Community types embedded within mesic flatwoods include dome swamp, basin swamp, depression marshes, wet flatwoods, and hydric hammocks.

Current Conditions:

Typical vegetation in the mesic flatwoods at WISF includes an open canopy of longleaf pine, slash pine, and water oak (*Quercus nigra*). A subcanopy and tall shrub layer of titi, loblolly bay, sweetgum, swamp laurel oak, and water oak indicate a need for increased prescribed fire. Short shrubs include blue huckleberry (*Gaylussacia frondosa* var. *tomentosa*), coastalplain staggerbush, fetterbush, and saw palmetto. The sparse herbaceous layer includes bluestem (*Andropogon* sp.), bracken fern, sweet goldenrod (*Solidago odora*), and Virginia chain fern.

Fire Regimes:

Historically, fires ignited by lightning during the early wet season (April - June) would have burned the mesic flatwoods/wet flatwoods complex. These fires are critical for preserving the structure of the flatwoods, for preventing woody encroachment, and for reducing weedy competition. Frequent, low-intensity fires help maintain a diverse herbaceous layer and provide mineral soils for longleaf pine regeneration. For management purposes, prescribed fires should be applied on a 2 to 4-year interval to keep fuel levels manageable and maintain maximum native biodiversity. If fuel loads are high, this community will be burned during the dormant season, transitioning to early growing season burns as fuels and weather conditions allow.

Management Needs:

Management goals for mesic flatwoods at WISF should focus on reducing heavy fuel loading and the reduction of woody vegetation in the mid-story and understory. These goals will be

accomplished using mechanical fuel reduction techniques and frequent prescribed fires. In areas where fuel loads are too high to safely conduct prescribed fires, mechanical fuel reduction, such as mowing, roller chopping, or thinning operations will be used to reduce fuel levels. Dormant season fires will first be used to reduce the fuel load and establish a fire return interval. After fuels have been reduced to a manageable level and a fire return interval has been established, prescribed fire will ideally be conducted during the early lightning season or as close to this period as possible. Roller chopping should be avoided in areas that support wiregrass and other native species. Although chopping may reduce shrub cover in problem areas, it also reduces wiregrass cover and increases weedy species that are less likely to carry a fire.

The secondary management goal for mesic flatwoods at WISF should focus on the creation of an uneven-aged stand consisting of longleaf pine, slash pine, and scattered oak species. This goal will be accomplished with the use of selective thinning operations that will create an open forest canopy and stimulate the regeneration of native ground cover. The basal area of the pine will be managed over time to allow more adequate sunlight to penetrate the forest canopy.

F. Mesic Hammock

Description:

Mesic hammock is a well-developed evergreen hardwood and/or palm forest on soils that are rarely inundated. Mesic hammock typically has a closed canopy of live oak with cabbage palm generally common in the canopy and subcanopy. Southern magnolia (*Magnolia grandiflora*) and pignut hickory (*Carya glabra*) may be occasional in the subcanopy. The shrubby understory may be dense or open, tall or short, and is typically composed of a mix of saw palmetto, American beautyberry, American holly (*Ilex opaca*), gallberry, sparkleberry (*Vaccinium arboreum*), hog plum (*Ximenia americana*), common persimmon (*Diospyros virginiana*), highbush blueberry, wild olive (*Osmanthus americanus*), and Carolina laurelcherry (*Prunus caroliniana*). The groundcover is often sparse or patchy and includes a variety of herbaceous species. Mesic hammock occurs on moderately poorly drained soils in areas that receive infrequent fire. They are typically associated with wetland communities that inhibit the spread of fire on the landscape.

Current Conditions:

At WISF, the mesic hammock community is located along the St. Johns River on the Watson Island Tract and is surrounded by bottomland forest and floodplain swamp. The canopy of mesic hammock is dominated by live oak, southern magnolia, sand live oak (*Quercus geminata*), swamp laurel oak, and water oak. Additional shrubs and herbs found in mesic hammock include wild olive (*Cartrema americanum*), dahoon, American holly, coastalplain staggerbush, bluestem palmetto (*Sabal minor*), whip nutrush (*Scleria triglomerata*), saw palmetto, and the invasive coral ardisia (*Ardisia crenata*). Occasionally, epiphytes and vines are found growing on the canopy species. The mesic hammock community has been relatively undisturbed due to its remoteness and is currently in good condition.

Fire Regimes:

Fire is infrequent in mesic hammock. In most cases, leaf litter and mesic conditions dampen fires throughout the year. Fires from adjacent pyrogenic communities can be allowed to burn into the edges of mesic hammock.

Management Needs:

Due to the remote location of the community, few management opportunities are available for this community. Management in mesic hammocks should be focused on removal of invasive species.

G. Scrubby Flatwoods**Description:**

Scrubby flatwoods are a well-drained, pine-dominated forests intermediate between scrub and mesic flatwoods. Good quality scrubby flatwoods have a relatively open canopy of southern yellow pines, most notably longleaf pine, and a low, shrubby understory dominated by scrub oaks and saw palmetto, often interspersed with areas of barren white sand. The shrub layer consists of a variety of mesophytic and xerophytic species, including rusty staggerbush (*Lyonia ferruginea*), coastalplain staggerbush, fetterbush, Chapman's oak (*Quercus chapmanii*), sand live oak, myrtle oak (*Quercus myrtifolia*), winged sumac, saw palmetto, and shiny blueberry. Unlike scrub, a herbaceous layer dominated by wiregrass is present and helps carry fire through the community more regularly than in scrub. Typical herbs include witchgrass (*Dichanthelium* sp.), tall elephantsfoot (*Elephantopus elatus*), narrowleaf silkgrass (*Pityopsis graminifolia*), blackroot (*Pterocaulon pycnostachyum*), and lopsided indiagrass (*Sorghastrum secundum*).

Current Conditions:

Scrubby flatwoods at WISF are primarily found on the Warner Tract. These communities are characterized by a canopy of slash pine and a shrub stratum dominated by wild olive, coastalplain staggerbush, wild pennyroyal (*Piloblephis rigida*), Chapman's oak, sand live oak, saw palmetto, and shiny blueberry. The herbaceous groundcover is patchy and includes bracken fern and sweet goldenrod. Due to the absence of fire, the fuel loads have steadily increased over the years, and the woody vegetation has become very thick.

Fire Regimes:

Scrubby flatwoods natural fire regime ranges from 5 to 15 years. Sparse groundcover and incombustible scrub oak leaf litter may reduce the occurrence of fires leading to a slightly longer average fire-return interval than is the case for mesic flatwoods. Variability in season and frequency of prescribed fires should produce a mosaic of burned and unburned patches desirable for maintaining high biotic diversity in this community.

Management Needs:

Management goals for scrubby flatwoods at WISF should focus on reducing heavy fuel loading and the reduction of woody vegetation in the mid and understory. These goals will be accomplished using mechanical fuel reduction and frequent prescribed fires. In areas where fuel loads are too high to safely conduct prescribed fires, mechanical fuel reduction, such as mowing, roller chopping, or thinning operations will be used to reduce fuel levels. Dormant season fires will first be used to reduce the fuel load and establish a fire rotation. After fuels have been reduced to a manageable level and a fire rotation has been established, prescribed fire will ideally be conducted during the early lightning season or as close to this period as possible. Roller chopping should be avoided in areas that support wiregrass and other native species. Although chopping may reduce shrub cover in problem areas, it also reduces wiregrass cover and increases weedy species that are less likely to carry a fire.

H. Wet Flatwoods

Description:

Wet flatwoods are characterized as relatively open-canopy forests of pines with a thick shrubby understory and very sparse groundcover, or a fire-maintained, sparse understory and a dense groundcover of hydrophytic herbs and shrubs. Vegetation may be very similar to mesic flatwoods, but often with little or no saw palmetto. The canopy is typically longleaf pine or slash pine.

Current Conditions:

The canopy in the wet flatwoods at WISF consists of slash pine, longleaf pine, and sweetbay with a subcanopy and tall shrub layer that includes red maple, and water oak, titi, swamp bay, and sweetgum. The hardwood presence in the shrub layer and subcanopy is indicative of the need for increased prescribed fire. Short-statured shrubs are common and include roundpod St. John's wort (*Hypericum cistifolium*), gallberry, and southern bayberry. In general, the native herbaceous groundcover of wet flatwoods is made up of wiregrass, witchgrass, tenangle pipewort (*Eriocaulon decangulare*), Carolina redroot (*Lachnanthes caroliana*), rosy camphorweed (*Pluchea baccharis*), whip nutrush, Virginia chain fern, and yellow-eyed grass (*Xyris* sp.). Most of the wet flatwoods found on the Warner Tract has been impacted by past land management activities. There are remnants of intact groundcover scattered through the community, but, due to the lack of fire, most of the understory is dominated by woody/hardwood vegetation and heavy fuels.

Fire Regimes:

Historically, natural fires may have occurred every 3 to 10 years in wet flatwood communities. For management purposes, prescribed fires are applied on a 3 to 4-year cycle. This reduces woody encroachment, sustains herbaceous species, and aids in preventing heavy fuel loads that can lead to catastrophic wildfires.

Management Needs:

Management goals for wet flatwoods should focus on reducing heavy fuel loading and the reduction of woody vegetation. To accomplish this goal, mechanical fuel reduction and frequent prescribed fires will be the primary tools used. In areas where fuel loads are too high to safely conduct prescribed fires, mechanical fuel reduction, such as mowing, roller chopping, or thinning operations will be used to reduce fuel levels. Dormant season fires will first be used to reduce the fuel load and establish a fire rotation. After fuels have been reduced to a manageable level and a fire rotation has been established, prescribed fire will ideally be conducted during the early lightning season or as close to this period as possible. Roller chopping should be avoided in areas that support wiregrass and other native species.

The use of plowed firebreaks and other practices that disturb the soil should be minimized; existing roads and wetlands should be used for firebreaks whenever possible. New ground disturbances should be avoided to prevent elimination of the natural groundcover and establishment of weedy species. Depth of plowed firebreaks should be minimized to prevent hydrologic alteration within the surrounding community.

I. Wet Prairie

Description:

Wet prairie is an herbaceous community found on continuously wet, but not inundated, soils on somewhat flat or gentle slopes between lower lying depression marshes, shrub bogs, or dome swamps and slightly higher wet or mesic flatwoods. Trees and shrubs are absent or very sparse. It is typically dominated by dense wiregrass in the drier portions, along with foxtail club-moss (*Lycopodiella alopecuroides*), cutover muhly (*Muhlenbergia expansa*), yellow butterwort (*Pinguicula lutea*), and savannah meadowbeauty (*Rhexia alifanus*). In the wetter portions, wiregrass may occur with, or be replaced by, species in the sedge family, such as plumed beaksedge (*Rhynchospora plumosa*), featherbristle beaksedge (*Rhynchospora oligantha*), Baldwin's nutrush (*Scleria baldwinii*), or slenderfruit nutrush (*Scleria georgiana*), plus longleaved threeawn (*Aristida palustris*). Also common in wetter areas are carnivorous species, such as pitcher plants (*Sarracenia* spp.), sundews (*Drosera* spp.), butterworts (*Pinguicula* spp.), and bladderworts (*Utricularia* spp.). Other characteristic species in this community include toothache grass (*Ctenium aromaticum*), pineland rayless goldenrod (*Bigelowia nudata*), flattened pipewort (*Eriocaulon compressum*), water cowbane (*Oxypolis filifolia*), and coastalplain yellow-eyed grass (*Xyris ambigua*). Laurel greenbrier (*Smilax laurifolia*) is a common vine in wet prairie.

Current Conditions:

There are currently no mapped wet prairies at WISF due to fire exclusion and shrub encroachment. A canopy of slash pine is present with shrubs including gallberry and roundpod St. John's wort. The herbaceous layer contains blue maidencane (*Amphicarpum muehlenbergianum*), wiregrass, and the state-listed hooded pitcherplant (*Sarracenia minor*).

Fire Regimes:

Historically, the fire-return interval in wet prairie is 2 to 3 years. These frequent fires prevent the invasion of weedy shrubs and trees that shade out the herbaceous species.

Management Needs:

As with the flatwoods, restoration and management goals for the wet prairies of WISF should focus implementing frequent prescribed fires. Timing of fires ideally should be during the early lightning season or as close to this period as practicable. Prescribed fires should also be applied to disturbed areas (mostly old agriculture areas) to reduce the dense shrub cover and encourage native species recruitment and colonization. Any trees established in wet prairies should be harvested as part of the restoration process. Chopping these areas may be an option, but exposed soil may encourage colonization by weedy and exotic species. Seeding or planting of wiregrass and other native, pyrogenic species will allow these areas to burn more readily which will help reduce weedy and exotic species. Roller chopping should be avoided in areas that support wiregrass and other native species. Although chopping may reduce shrub cover in problem areas, it also reduces wiregrass cover and increases weedy species that are less likely to carry a fire and may alter the hydrology of these sensitive communities.

J. Managed Community Types

Pine plantations and pastures represent vegetative communities that the FFS manages as integral components of the agency's multi-use management approach. These managed communities provide both ecological benefits, such as wildlife habitat and ground and surface water filtration,

as well as opportunities for generating revenue that can be used to help offset management costs. Management of plantations and pastures within the State Forests is conducted at a low-level of intensity that further ensures compatibility with other management goals and objectives.

1. Pine Plantation

Description:

Pine plantation on WISF has been established on historic wet prairie, mesic flatwoods, and wet flatwoods, and is burned according to the fire return interval for the surrounding and adjacent natural communities. This plantation consists of planted slash pine that was established utilizing intensive site preparation techniques.

Current Conditions:

Approximately 2% of the total acreage of WISF consists of pine plantation. The age of the plantation is 35 years.

The pine plantation on the Warner Tract has a dense canopy of slash pine. Subcanopy species may include younger slash pine and water oak. Other shrubs include gallberry, fetterbush, saw palmetto, and shiny blueberry. The herbaceous layer is sparse.

Fire Regimes:

Refer to the historic community.

Management Needs:

Due to the small size of the pine plantation, this community will be managed in conjunction with the surrounding flatwoods communities. The management strategy will focus on reducing heavy fuel loading and the reduction of woody vegetation. This will be accomplished by using mechanical fuel reduction and prescribed fire. In areas where fuel loads are too high to safely conduct prescribed fires, mechanical fuel reduction, such as mowing, roller chopping, or thinning operations will be used to reduce fuel levels. Dormant season fires will first be used to reduce the fuel load and establish a fire rotation. After fuels have been reduced to a manageable level and a fire rotation has been established, prescribed fire will ideally be conducted during the early lightning season or as close to this period as possible. Roller chopping should be avoided in areas that support wiregrass and other native species.

K. Altered Landcover Types

Description:

Altered landcover types are mapped where the natural communities have been overwhelmingly altered as a result of human activity. The altered landcover types described in this section are often not appropriate areas for restoration. If restoration is desired, the target future condition of the ruderal habitat is dependent on the historic community. Refer to the appropriate community type for a more specific explanation of the desired future condition.

Current Conditions:

Altered landcover types on WISF comprise developed areas and roads.

Developed (1 acres) – Check stations, ORV use areas, parking lots, buildings, maintained lawns (as part of recreation, business, or residential areas), botanical or ornamental gardens, campgrounds, recreation, industrial, and residential areas.

Road (2 acres) – Paved or unpaved

Fire Regimes:

Not fire-dependent.

Management Needs:

How ruderal areas should be managed depends on the specific site under consideration. These areas may be useful for placement of support facilities or may be targeted for restoration of the historic natural community. If left alone, most of these areas are likely to remain in a ruderal state. It may not be practical or desirable to restore some of the altered landcover types (e.g., developed land, roads, etc.) to the historic natural community.

VIII. References

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IX. Glossary of Abbreviations

ARC	Acquisition and Restoration Council
BMP	Best Management Practice
CAMA.....	Division of Coastal and Aquatic Managed Areas
CARL.....	Conservation and Recreation Lands Acquisition Program
DEP	Florida Department of Environmental Protection
DHR	Florida Division of Historical Resources
DRP.....	Florida Division of Recreation and Parks
F.A.C.....	Florida Administrative Code
FDACS.....	Florida Department of Agriculture and Consumer Services
FFS.....	Florida Forest Service
FNAI	Florida Natural Areas Inventory
F.S.	Florida Statutes
FWC.....	Florida Fish and Wildlife Conservation Commission
FWRI.....	Florida Fish and Wildlife Research Institute
NRCS	Natural Resources Conservation Service
SJRWMD.....	St. Johns River Water Management District
SOR.....	Save Our Rivers
OALE.....	DACS Office of Agricultural Law Enforcement
OFW.....	Outstanding Florida Waters
P2000	Preservation 2000
WISF	Watson Island State Forest
TIITF.....	Board of Trustees of the Internal Improvement Trust Fund
USFWS	United States Fish and Wildlife Service
WMA	Wildlife Management Area

WATSON ISLAND STATE FOREST 2023 LAND MANAGEMENT PLAN

EXHIBITS

Exhibit A

Ten-Year Management Accomplishments Summary

Watson Island State Forest
10-Year Accomplishments Summary

Timber Inventory	Inventory Update	Acres	599
	Plots	Number	56
Invasive Species Control	Wild taro	Acres	2.5
	Chinese tallow	Acres	0.1
	Cogangrass	Acres	0.1
	Coral ardisia	Acres	0.1
	Japanese climbing fern	Acres	0.1
Fire	Wildfire	No.	1
		Acres	76
	Prescribed Burning	No.	6
		Acres	383
Roadwork	Culverts Installed	No.	1
Boundary Maintenance	Maintenance/Marking	Miles	9
Other Activities	Firelines Disked	Miles	11
	Perimeter firebreaks	Miles	3

Exhibit B

Boundary and Road Map



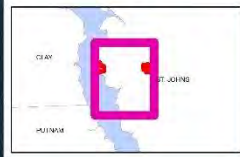
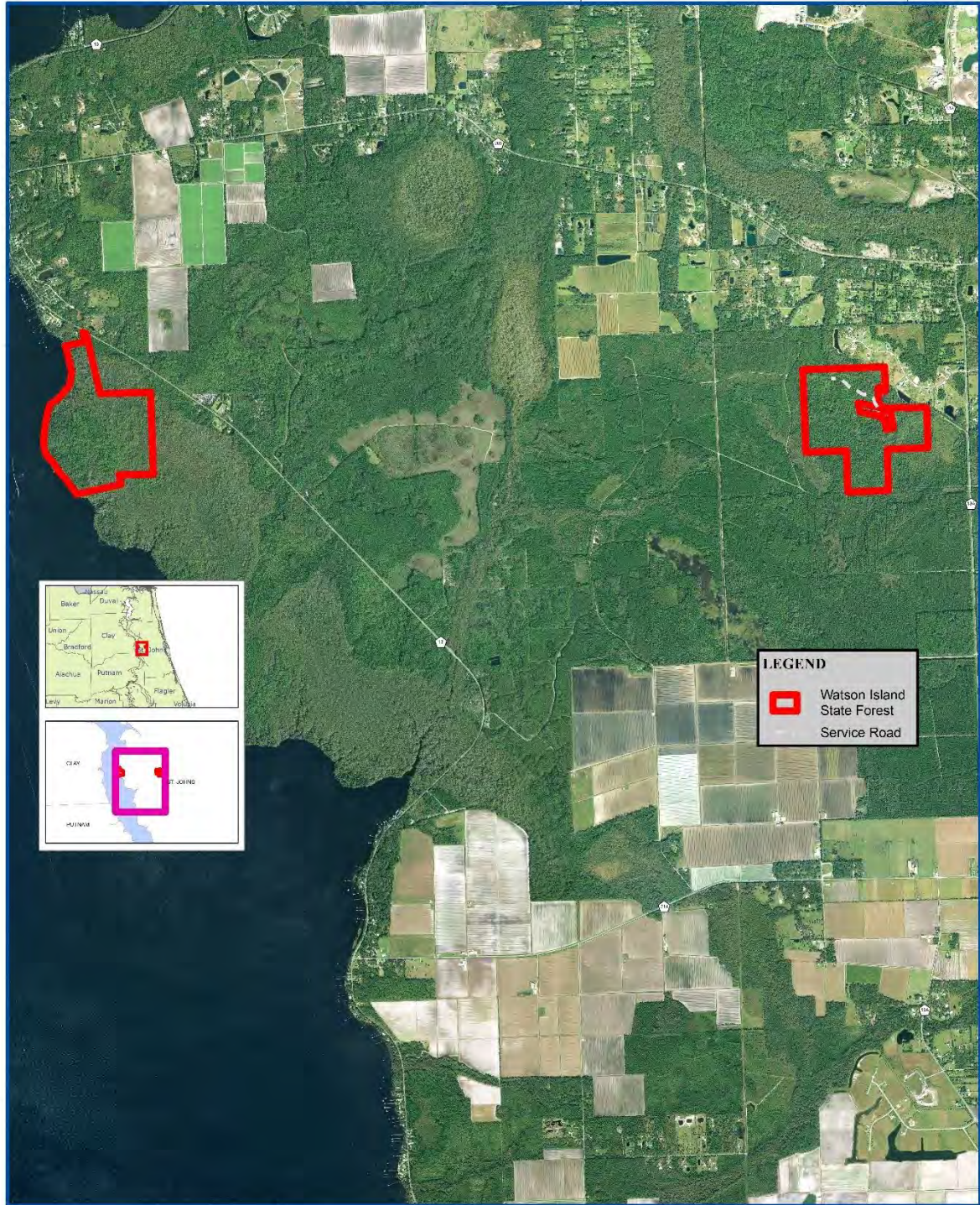
Florida Forest Service

Watson Island State Forest Boundary & Road Map

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

DISCLAIMER:
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Watson Island State Forest as located at the base of the Florida National Forest (Watson Island State Forest) formerly State Forest, 19100's. From the US Army Corps of Engineers (USACE) 61100's.



LEGEND

- Watson Island State Forest
- Service Road



Map Month/Year: June 2020



Exhibit C

Optimal Management Boundary Map



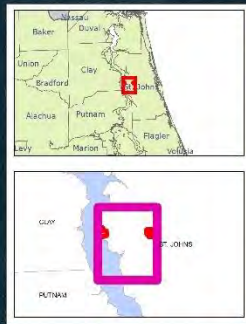
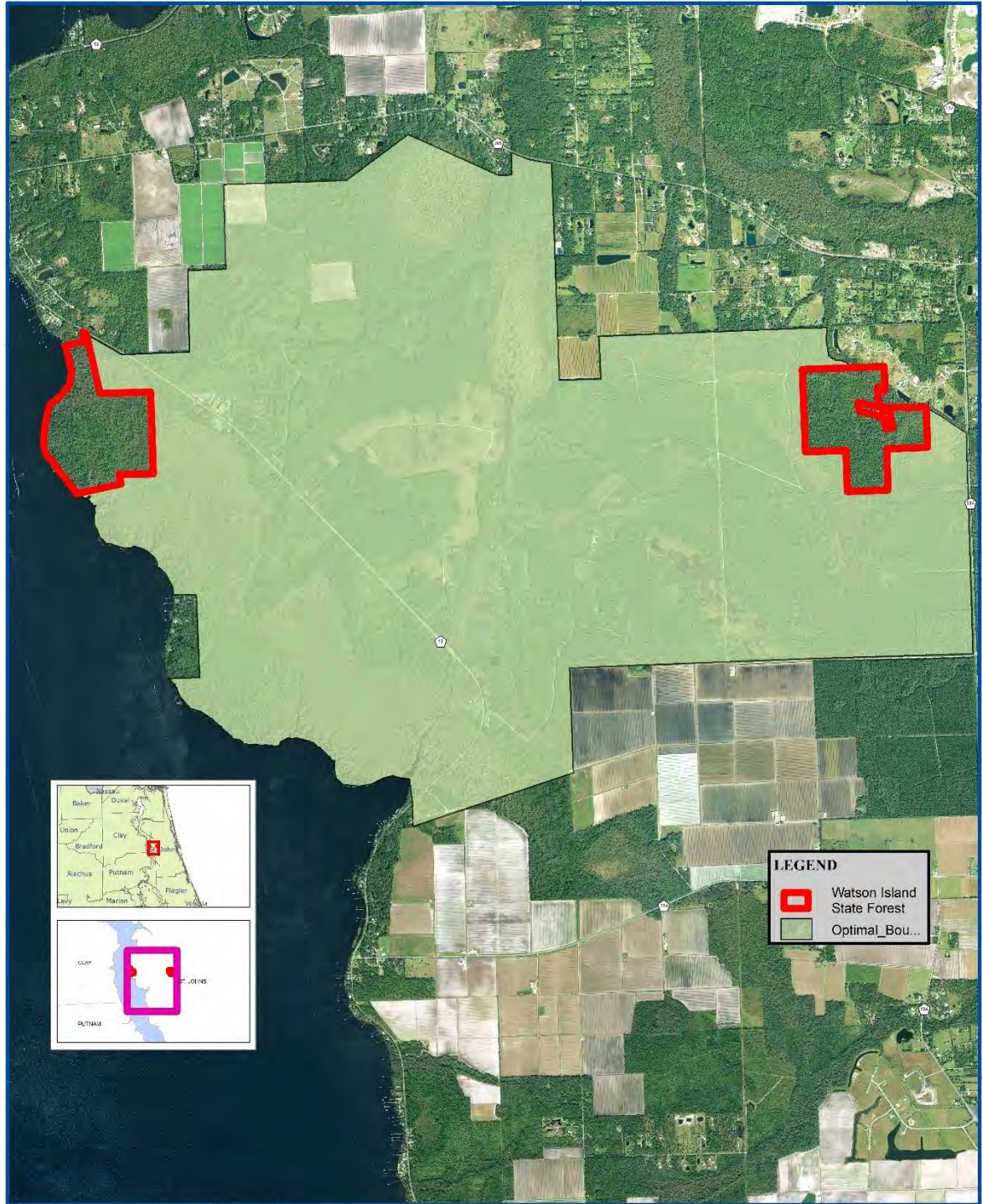
Florida Forest Service

Watson Island State Forest Optimal Management Boundary Map

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

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Watson Island State Forest is located on the east side of the Florida Albers State Forest. It is bounded by the US Army Corps of Engineers (USACE) to the south and the USACE to the east. The map was prepared by the FFS in June 2020.



LEGEND

- Watson Island State Forest
- Optimal_Bou...



Map Month/Year: June 2020



Exhibit D

Facilities, Recreation, and Improvements Maps

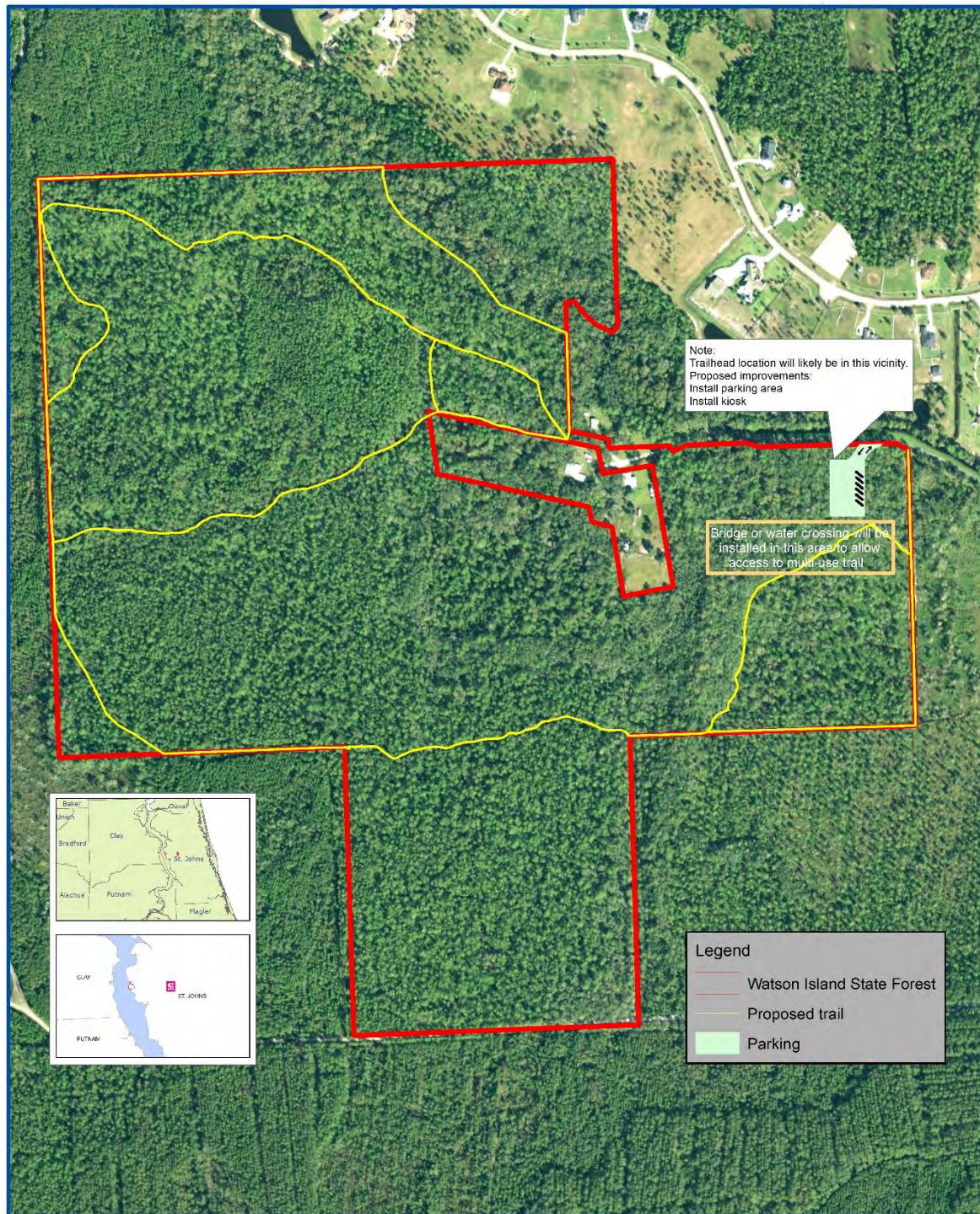


Watson Island State Forest
Warner Tract
Facilities, Recreation and Improvements Map

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

研究の意義
This study was conducted by the Japanese Agency for Food and Drug Safety (Health Science Research Project 2002), which aims to establish a safe and effective use of medical products, improve patients' and medical professionals' understanding of the products.

Managed Area boundaries courtesy of the Florida Natural Areas Inventory
formerly used Defense Area (DUA)
from the US Army Corps of Engineers

81³⁰

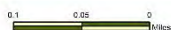
Note:
Trailhead location will likely be in this vicinity.
Proposed improvements:
Install parking area
Install kiosk

Bridge or water crossing will be installed in this area to allow access to multi-use trail

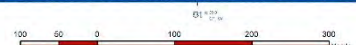


Legend

- Watson Island State Forest
- Proposed trail
- Parking



Map Month/Year: June 2021





Florida Forest Service

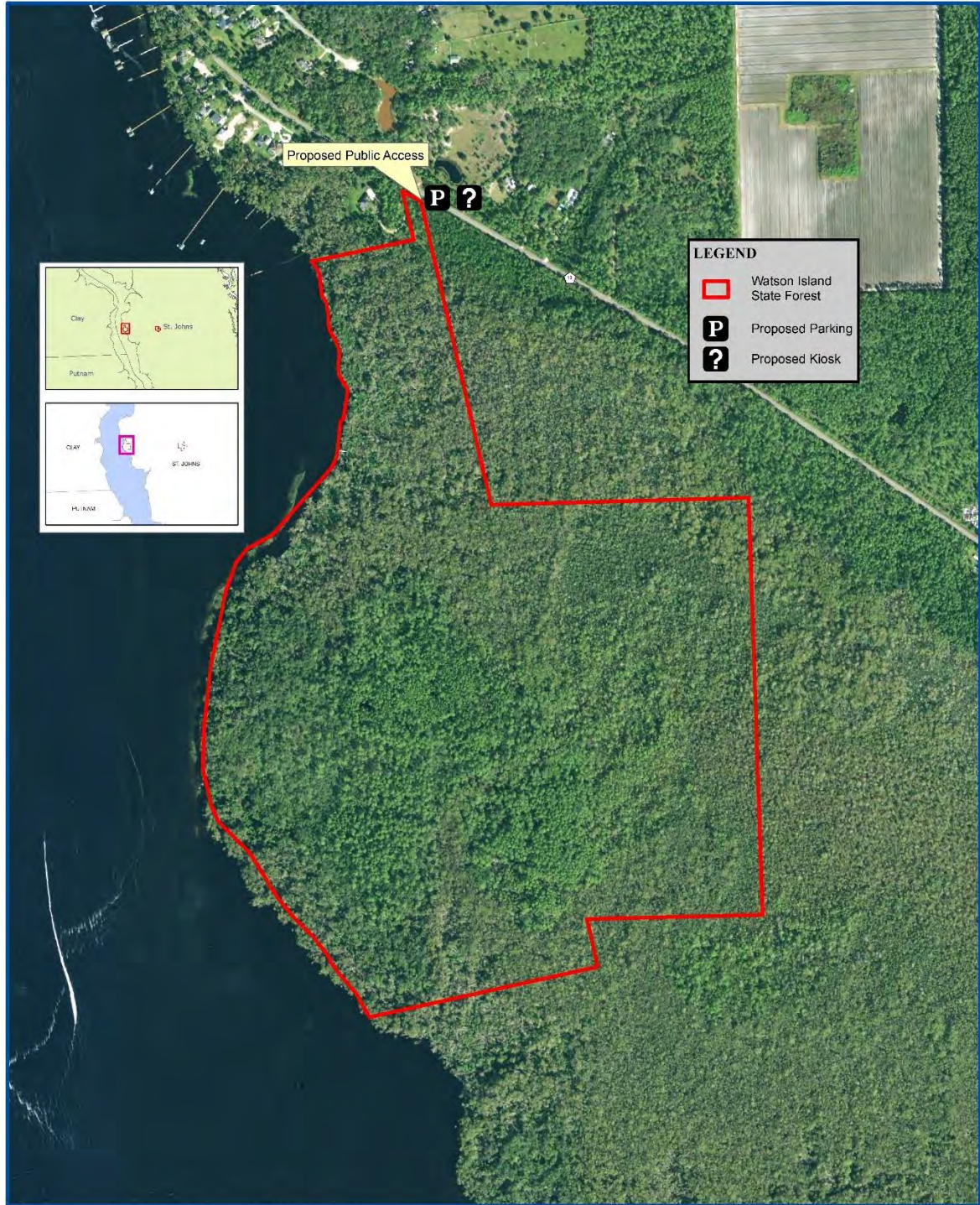
Watson Island State Forest

Watson Island Tract Facilities, Recreation and Improvements Map

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

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Service is not responsible for any damages
resulting from the use of this map.

Revised Area: General as surveyed of
the Watson Island State Forest
Formerly State of Florida, 1900
From the US Army Corps of Engineers



- LEGEND**
- Watson Island State Forest
 - Proposed Parking
 - Proposed Kiosk

0.1 0.05 0 0.1 Miles



Map Month/Year: November 2020

100 50 0 100 200 300 400 500 Yards

Exhibit E

Tract Maps



Florida Forest Service

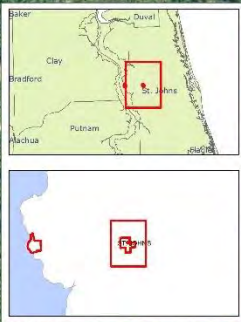
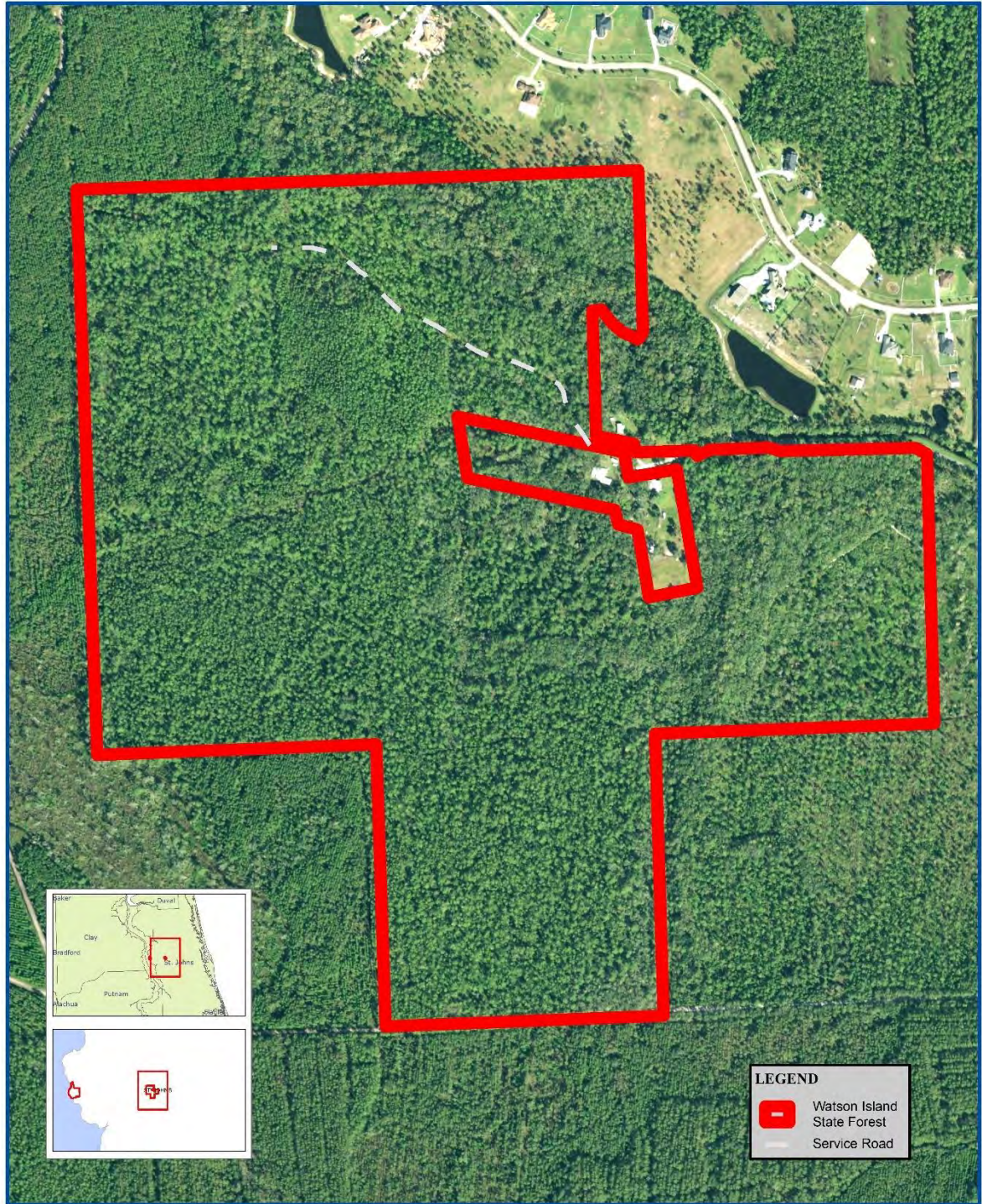
Watson Island State Forest

Warner Tract Map

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

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Revised Area Located at the base of the Watson Island State Forest, formerly known as the Warner Tract, from the US Army Corps of Engineers. 8/1/2010



LEGEND

- Watson Island State Forest
- Service Road



Map Month/Year: June 2020



Watson Island State Forest
Watson Island Tract Map

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

DISCLAIMER:
This paper was submitted as the Personal Financial Statement (PFD) for the 2006-2007 Personal Income Tax Return (PIT). The information was prepared by the author and is not intended to be used as a substitute for professional advice. The author is not a professional and is not responsible for any errors or omissions. The author is not a professional and is not responsible for any errors or omissions. The author is not a professional and is not responsible for any errors or omissions.

Managed Area boundary as courtesy of
the Florida Natural Area Inventory
formally used Defense Lines (DLIN)
from the US Army Corps of Engineers



0.1 0.05 0 Miles



Map Month/Year: June 2020

Exhibit F

Proximity to Significant Managed Lands

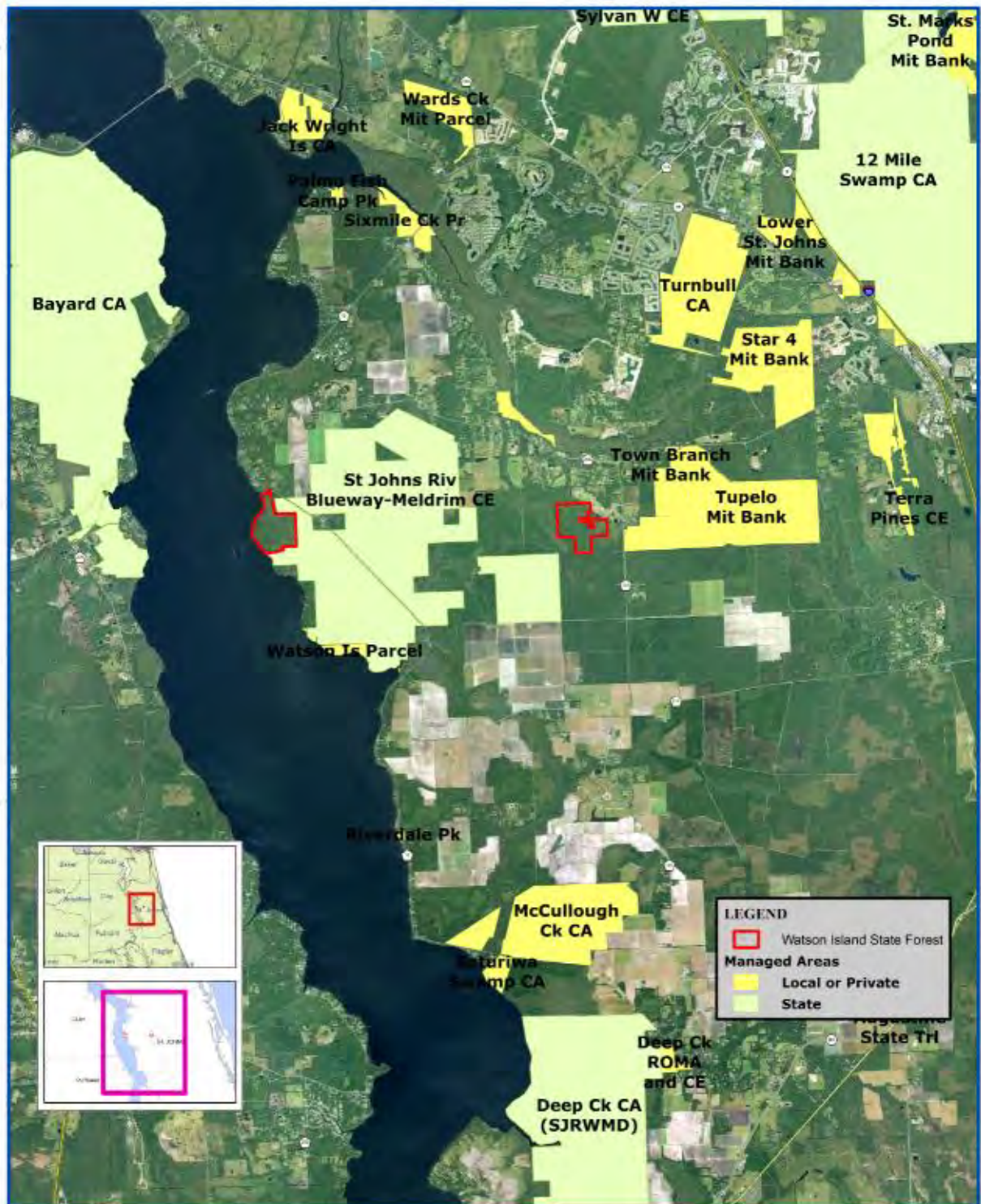


Florida Forest Service

Watson Island State Forest Proximity to Significant Managed Lands

Source: National Wetlands Inventory
Map Accuracy: Best Available (2000) - Vector

Legend:
Watson Island State Forest
Managed Areas
Local or Private
State



Scale: 0 0.5 1 1.5 2 Miles



Map Month/Year: October 2022

Scale: 0 1,000 2,000 3,000 4,000 5,000 6,000 Feet

Exhibit G

Department of State Report on Archeological Sites and Historical Sites



This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333 for project review information.

October 17, 2019



Patti Anderson

OPS Land Management Planner

Florida Forest Service

Florida Department of Agriculture and Consumer Services

Phone: (850) 681-5889

E-mail: Patricia.Anderson@FDACS.gov

In response to your inquiry of October 16, 2019, the Florida Master Site File lists no archeological sites and no other cultural resources found at **Watson Island State Forest** in St.-Johns County, Florida

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

- This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.
- Federal, State and local laws require formal environmental review for most projects. This search **DOES NOT** constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333.

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

Kind Regards,

Eman M. Vovsi

Data Base Analyst

Florida Master Site File

Eman.Vovsi@DOS.MyFlorida.com

Exhibit H

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

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

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

A. Historic Property Definition

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

B. Agency Responsibilities

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

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

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

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

C. Statutory Authority

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

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

D. Management Implementation

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

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

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

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

E. Archaeological Resource Management (ARM) Training

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

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

F. Matrix for Ground Disturbance on State Lands

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

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

G. Human Remains Treatment

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

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

H. Division of Historical Resources Review Procedure

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

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

* * *

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

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

StateLandsCompliance@dos.myflorida.com

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

Exhibit I

Soil Survey Maps and Descriptions



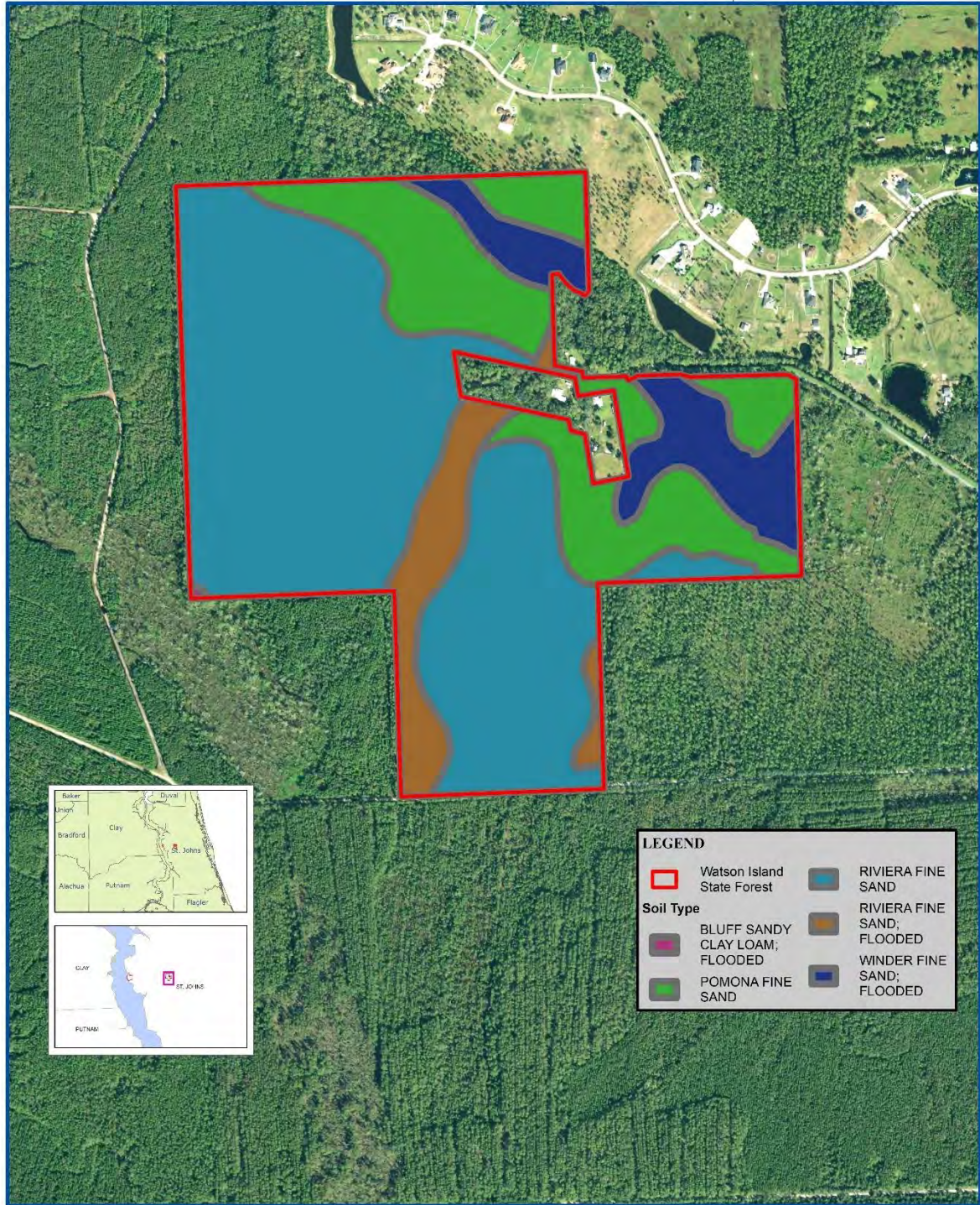
Florida Forest Service

Watson Island State Forest

Warner Tract Soils

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

DISCLAIMER:
This map was prepared by the Florida Forest Service
and is not intended to be used for any purpose other than
general information. It is not a legal document and should
not be used for any legal purpose. The Florida Forest
Service does not warrant the accuracy or completeness
of the information contained herein. The Florida Forest
Service is not responsible for any errors or omissions
in this map. The Florida Forest Service is not
responsible for any damages, including consequential
damages, arising from the use of this map.
Prepared from data collected by the
Florida Forest Service, University
of Florida, Gainesville, FL 32611.
Internally Check Date: 11/11/2020
From: US Army Corps of Engineers



LEGEND	
	Watson Island State Forest
	RIVIERA FINE SAND
	RIVIERA FINE SAND; FLOODED
	BLUFF SANDY CLAY LOAM; FLOODED
	POMONA FINE SAND
	WINDIER FINE SAND; FLOODED

0.1 0.05 0 0.1 Miles



Map Month/Year: November 2020

0 50 100 200 300 400 500 Yards

Component Legend

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

Report—Component Legend

Component Legend--St. Johns County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
9—Pomona fine sand	32,020						
		70	Pomona, nonhydric	Series	0.0	1.0	2.0
		20	Pomona, hydric	Series	0.0	1.0	2.0
14—Cassia fine sand, 0 to 2 percent slopes	4,660						
		80	Cassia	Series	0.0	1.0	2.0
18—Floridana fine sand, 0 to 2 percent slopes, frequently flooded	4,975						
		86	Floridana, frequently flooded	Series	0.0	0.5	1.0
26—Samsula muck, frequently ponded, 0 to 1 percent slopes	4,390						
		85	Samsula	Series	0.0	0.5	1.0
36—Riviera fine sand, frequently flooded	26,530						
		85	Riviera, frequently flooded	Series	0.0	1.0	1.0
42—Bluff sandy clay loam, frequently flooded	3,670						
		85	Bluff	Series	0.0	0.6	1.0
48—Winder fine sand, frequently flooded	2,530						
		85	Winder, frequently flooded	Series	0.0	1.0	2.0
62—Floridana fine sand, 0 to 2 percent slopes	9,255						
		92	Floridana	Series	0.0	1.0	2.0
65—Riviera fine sand	15,860						
		60	Riviera, nonhydric	Series	0.0	1.0	2.0
		25	Riviera, hydric	Series	0.0	1.0	2.0
66—Terra Ceia muck, 0 to 1 percent slopes, frequently flooded	10,425						
		90	Terra ceia	Series	0.0	0.5	1.0

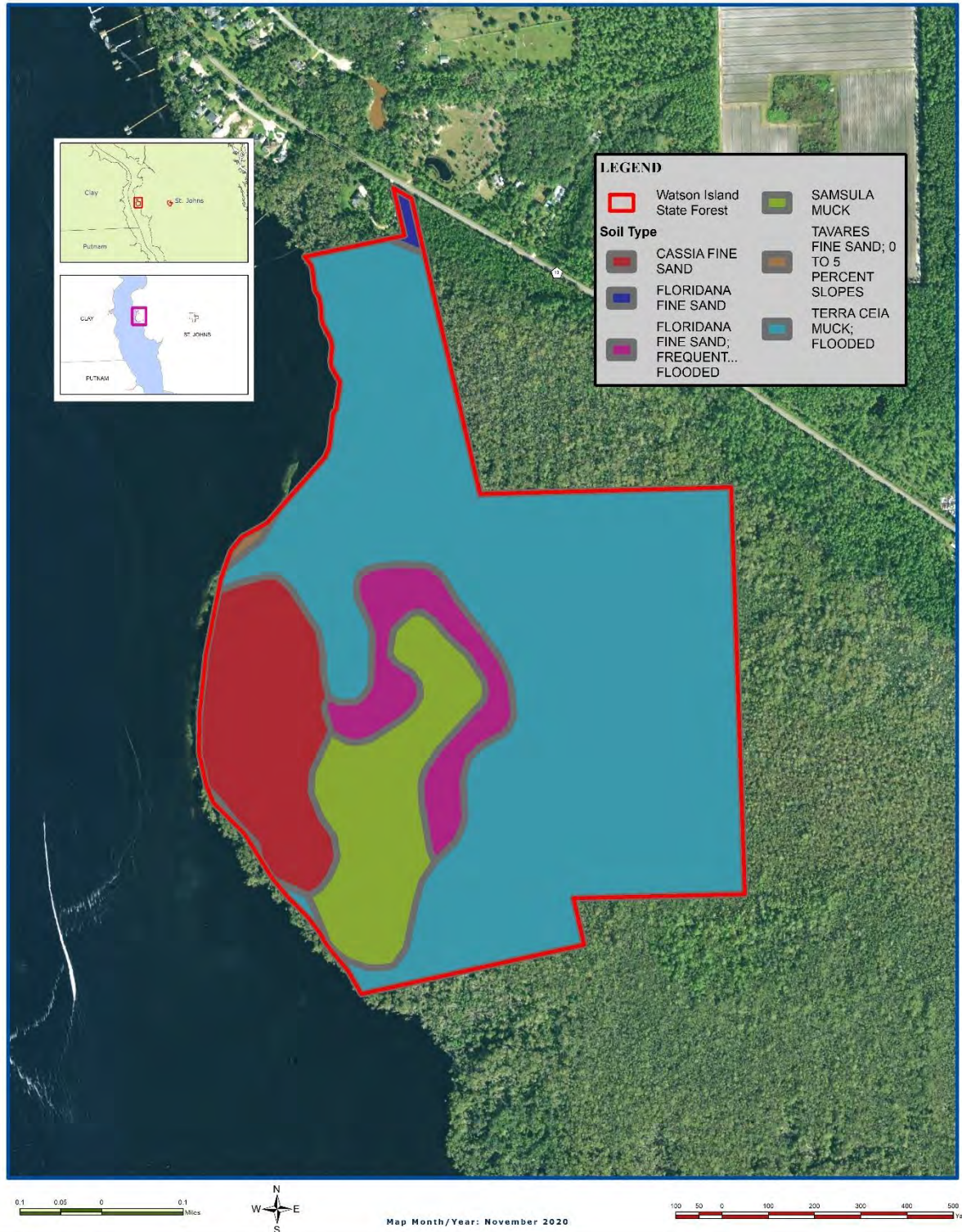
Component Legend—St. Johns County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
99—Water	34,220						
		100	Water	Miscellaneous area			

Data Source Information

Soil Survey Area: St. Johns County, Florida
 Survey Area Data: Version 18, Sep 17, 2019

Watson Island State Forest
Watson Island Tract Soils

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

[illegible]

Component Legend

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

Report--Component Legend

Component Legend--St. Johns County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
9--Pomona fine sand	32,020						
		70	Pomona, nonhydric	Series	0.0	1.0	2.0
		20	Pomona, hydric	Series	0.0	1.0	2.0
14--Cassia fine sand, 0 to 2 percent slopes	4,660						
		80	Cassia	Series	0.0	1.0	2.0
18--Floridana fine sand, 0 to 2 percent slopes, frequently flooded	4,975						
		86	Floridana, frequently flooded	Series	0.0	0.5	1.0
26--Samsula muck, frequently ponded, 0 to 1 percent slopes	4,390						
		85	Samsula	Series	0.0	0.5	1.0
36--Riviera fine sand, frequently flooded	26,530						
		85	Riviera, frequently flooded	Series	0.0	1.0	1.0
42--Bluff sandy clay loam, frequently flooded	3,670						
		85	Bluff	Series	0.0	0.6	1.0
48--Winder fine sand, frequently flooded	2,530						
		85	Winder, frequently flooded	Series	0.0	1.0	2.0
62--Floridana fine sand, 0 to 2 percent slopes	9,255						
		92	Floridana	Series	0.0	1.0	2.0
65--Riviera fine sand	15,860						
		60	Riviera, nonhydric	Series	0.0	1.0	2.0
		25	Riviera, hydric	Series	0.0	1.0	2.0
66--Terra Ceia muck, 0 to 1 percent slopes, frequently flooded	10,425						
		90	Terra ceia	Series	0.0	0.5	1.0

Component Legend—St. Johns County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
99—Water	34,220						
		100	Water	Miscellaneous area			

Data Source Information

Soil Survey Area: St. Johns County, Florida
 Survey Area Data: Version 18, Sep 17, 2019

Map Unit Description (Brief, Generated)

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

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

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

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

Report—Map Unit Description (Brief, Generated)

St. Johns County, Florida

Map Unit: 9—Pomona fine sand

Component: Pomona, nonhydric (70%)

The Pomona, nonhydric component makes up 70 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during July, August, September. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pomona, hydric (20%)

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

Component: Bakersville (2%)

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

Component: EauGallie, nonhydric (2%)

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

Component: Myakka, nonhydric (2%)

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

Component: Wesconnett (2%)

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

Component: St. Johns, hydric (2%)

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

Map Unit: 14—Cassia fine sand, 0 to 2 percent slopes**Component: Cassia (80%)**

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

Component: Myakka (7%)

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

Component: Pomello (6%)

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

Component: Satellite (4%)

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

Component: Jonathan (3%)

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

Map Unit: 18—Floridana fine sand, 0 to 2 percent slopes, frequently flooded

Component: Floridana, frequently flooded (86%)

The Floridana, frequently flooded component makes up 86 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Holopaw (6%)

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

Component: Riviera (6%)

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

Component: Gator (2%)

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

Map Unit: 26—Samsula muck, frequently ponded, 0 to 1 percent slopes**Component: Samsula (85%)**

The Samsula component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material over sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Basinger (3%)

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

Component: Kaliga (3%)

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

Component: Myakka (3%)

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

Component: Anclote (2%)

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

Component: Sanibel (2%)

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

Component: Floridana (2%)

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

Map Unit: 36—Riviera fine sand, frequently flooded

Component: Riviera, frequently flooded (85%)

The Riviera, frequently flooded component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains on marine terraces on coastal plains, drainageways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Manatee (3%)

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

Component: Winder, frequently flooded (3%)

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

Component: Holopaw, frequently flooded (3%)

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

Component: Bluff (3%)

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

Component: Floridana, frequently flooded (3%)

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

Map Unit: 42—Bluff sandy clay loam, frequently flooded**Component:** Bluff (85%)

The Bluff component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains on marine terraces on coastal plains, drainageways on marine terraces on coastal plains. The parent material consists of loamy and clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is high. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 38 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 11 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Manatee (5%)

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

Component: Parkwood (5%)

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

Component: Floridana, frequently flooded (5%)

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

Map Unit: 48—Winder fine sand, frequently flooded**Component:** Winder, frequently flooded (85%)

The Winder, frequently flooded component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on marine terraces on coastal plains, drainageways on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Holopaw, frequently flooded (4%)

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

Component: Bluff (4%)

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

Component: Manatee (4%)

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

Component: Riviera, frequently flooded (3%)

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

Map Unit: 62—Floridana fine sand, 0 to 2 percent slopes

Component: Floridana (92%)

The Floridana component makes up 92 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Felda (4%)

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

Component: Wabasso (2%)

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

Component: Samsula (2%)

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

Map Unit: 65—Riviera fine sand**Component: Riviera, nonhydric (60%)**

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

Component: Riviera, hydric (25%)

The Riviera, hydric component makes up 25 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pompano, nonhydric (5%)

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

Component: Floridana, hydric (5%)

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

Component: Holopaw, hydric (5%)

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

Map Unit: 66—Terra Ceia muck, 0 to 1 percent slopes, frequently flooded

Component: Terra Ceia (90%)

The Terra Ceia component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on flood plains on marine terraces on coastal plains. The parent material consists of herbaceous organic material. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during June, July, August, September, October. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Gator (3%)

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

Component: Samsula (2%)

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

Component: Riviera (2%)

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

Component: Okeelanta (1%)

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

Component: Bluff (1%)

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

Component: Favoretta (1%)

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

Map Unit: 99—Water

Component: Water (100%)

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

Data Source Information

Soil Survey Area: St. Johns County, Florida
Survey Area Data: Version 18, Sep 17, 2019

Exhibit J

Department of Environmental Protection
Outstanding Florida Waters



FLORIDA DEPARTMENT OF Environmental Protection

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

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

January 10, 2019

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

RE: Watson Island State Forest

Dear Ms. Anderson:

Thank you for your inquiry regarding the surface water quality classification of waters on and near Watson Island State Forest in St. Johns County, west of St. Augustine. There are no waters on or near the site listed as exceptions to Class III in subparagraph 62-302.400(17)(b)55., Florida Administrative Code (F.A.C.); therefore, all of the surface waters on or adjacent to the site are classified as Class III waters (Fish Consumption; Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife), which is the statewide default classification under subsection 62-302.400(15), F.A.C.

As requested, we also checked to see if there are any Outstanding Florida Waters (OFWs) near the state forest. According to subsection 62-302.700(9), F.A.C., there are no OFWs on, adjacent to, or near the state forest. While there are several other parcels on, adjacent, or nearby that are considered conservation lands at a Federal, State or Local level (according to the Florida Natural Areas Inventory Managed Areas data layer), they have not been designated as OFWs.

If you have any questions or need additional information, please feel free to contact me at the letterhead address (mail station 6511), by phone at 850-245-8427, or via E-mail at Janet.Klemm@FloridaDEP.gov.

Sincerely,

A handwritten signature in blue ink that reads "Janet Klemm".

Janet Klemm
Environmental Specialist
DEP Water Quality Standards Program

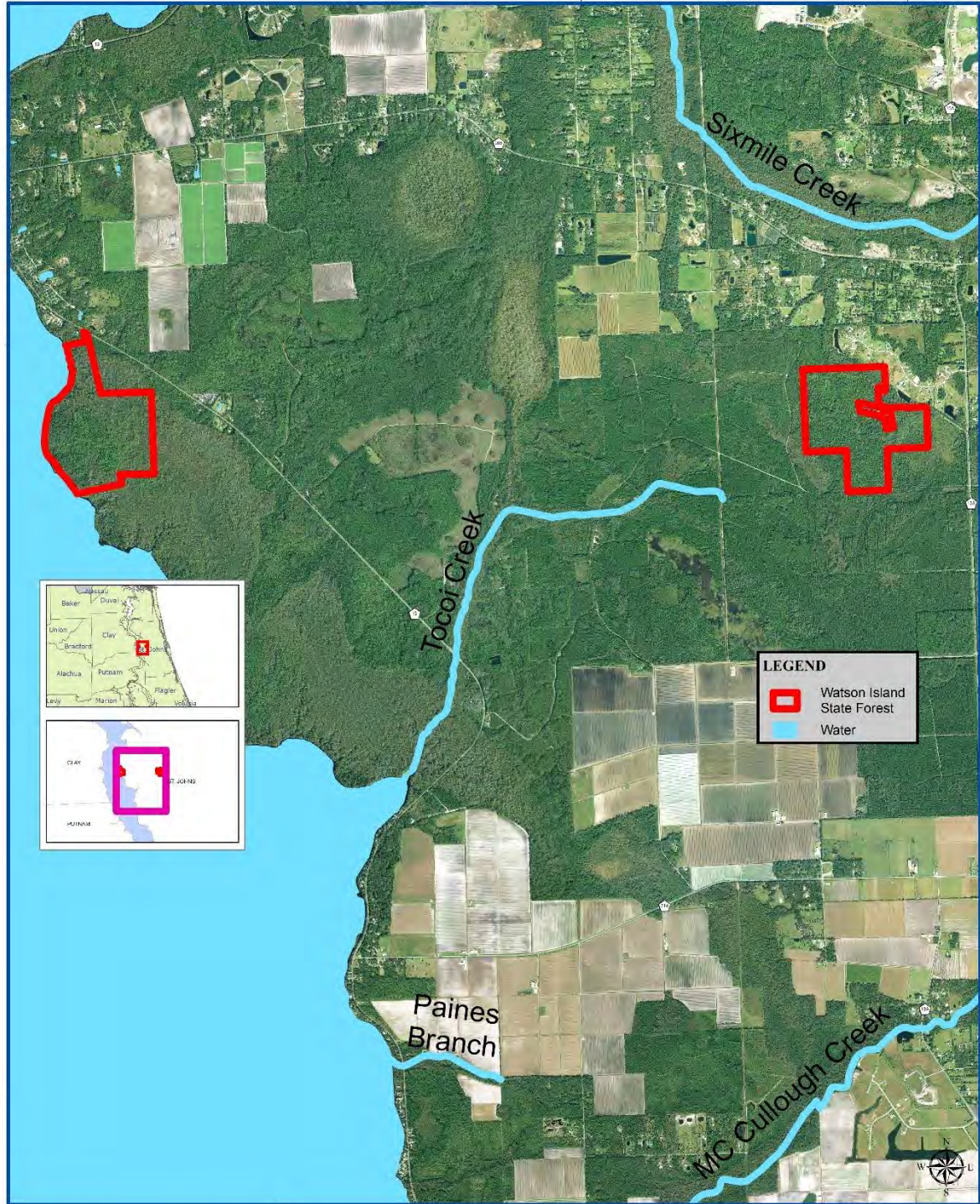
Exhibit K

Water Resources and BMAP Maps

Watson Island State Forest
Water Resources Map

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

The first was a collection of the Pioneer Press (January 1975). One original document (January 1975) about a local paper from Louisville, Kentucky, published by TTS, are described in the document area and are used to illustrate published information about products. The Pioneer Press is another example of the electronic journals, which, availability, if available, with documents will be available. The Pioneer Press is another example of the electronic journals, which, availability, if available, with documents will be available. It is also an example of the electronic journals, which, availability, if available, with documents will be available.



Map Month/Year: November 2020



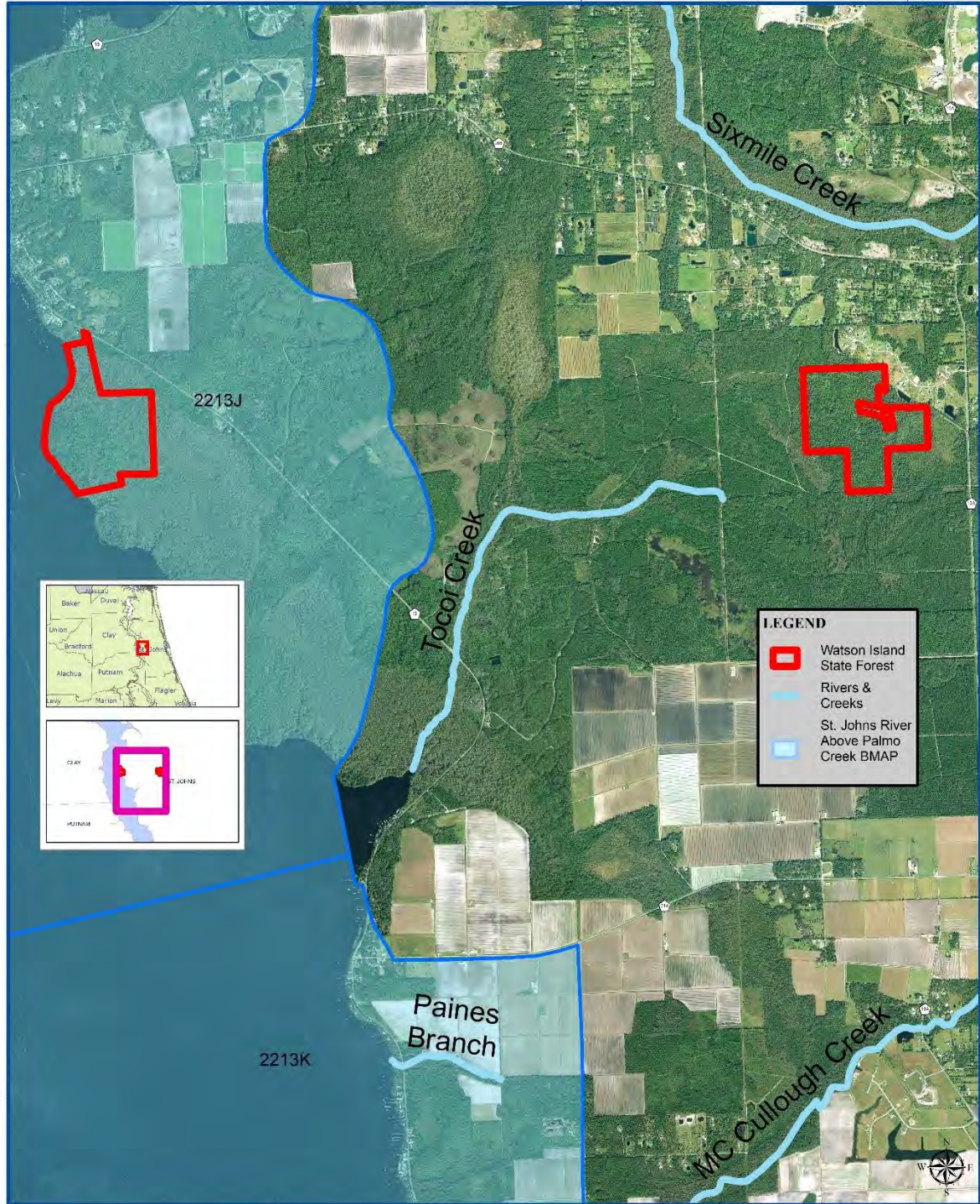
Florida Forest Service

Watson Island State Forest

Water Resources Map - BMAP

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

DISCLAIMER:
This map was prepared by the Florida Forest Service
and is intended for general informational purposes only.
The Florida Forest Service does not warrant the accuracy
of the information shown on this map. The Florida Forest
Service is not responsible for any errors or omissions
on this map. The Florida Forest Service is not
responsible for any damages, including consequential
damages, arising from the use of this map.
Prepared from aerial photography courtesy of
the Florida Aerial Photography Service,
Florida Department of Transportation (FDOT),
from the US Army Corps of Engineers
6/1/2020



0.5 0.25 0 0.5 Miles



Map Month/Year: November 2020

1,000 500 0 1,000 2,000 Yards

Exhibit L

Florida Natural Areas Inventory Managed Area Tracking Record



Florida Natural Areas Inventory
Managed Area Element Summary
Watson Island State Forest



SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status
BIRDS					
<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N
MAMMALS					
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T4	S4	N	N

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



Florida Natural Areas Inventory

Managed Area Element Summary

Watson Island State Forest



SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status
-----------------	-------------	-------------	------------	----------------	--------------

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

FNAI GLOBAL ELEMENT RANK

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

FNAI STATE ELEMENT RANK

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

FEDERAL LEGAL STATUS

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



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

Florida Natural Areas Inventory

Managed Area Element Summary

Watson Island State Forest



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

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

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

STATE LEGAL STATUS

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

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

FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
F(XN) = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future. (ST* for *Ursus americanus floridanus* (Florida black bear) indicates that this status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. ST* for *Neovison vison* pop.1 (Southern mink, South Florida population) indicates that this status applies to the Everglades population only.)
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* indicates that a species has SSC status only in selected portions of its range in Florida. SSC* for *Pandion haliaetus* (Osprey) indicates that this status applies in Monroe county only.)
N = Not currently listed, nor currently being considered for listing.

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

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



Florida Natural Areas Inventory
Managed Area Element Summary
Watson Island State Forest



to the U.S. Endangered Species Act

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

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

Exhibit M

Florida Fish and Wildlife Conservation Commission Listed Species Occurrence Records



**Florida Fish
and Wildlife
Conservation
Commission**

Commissioners

Bo Rivard
Chairman
Panama City

Robert A. Spottswood
Vice Chairman
Key West

Joshua Kellam
Palm Beach Gardens

Gary Lester
Oxford

Gary Nicklaus
Jupiter

Sonya Rood
St. Augustine

Michael W. Sole
Tequesta

**Office of the
Executive Director**
Eric Sutton
Executive Director

Thomas H. Eason, Ph.D.
Assistant Executive Director

Jennifer Fitzwater
Chief of Staff

850-487-3796
850-921-5786 FAX

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

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

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

MyFWC.com

01/08/2019

Patti Anderson
Land Planning Coordinator
Florida Forest Service
3125 Conner Boulevard
Tallahassee, FL
32399

Dear Patti Anderson:

This letter is in response to your request for listed species occurrence records and Strategic Habitat Conservation Areas (SHCA's), on the following properties: Little-Big Econ, Charles H. Bronson, Holopaw, Pine log, Carl Duval Moore, Watson Island, Tiger Bay, and Myakka. Records from The Florida Fish and Wildlife Conservation Commission's database indicate that listed species occurrence data and critical habitats are located within the project areas. The Florida Fish and Wildlife Conservation Commission's database indicates that SHCA's for short-tailed hawk occur on Carl Duval Moore. SHCA's for Cooper's hawk, swallow-tailed kite, and short-tailed hawk occur in Charles H. Bronson. SHCA's for Cooper's hawk and Florida black bear were found on Pine Log, and SHCA's for Cooper's hawk and Florida black bear occur on Tiger Bay. Enclosed are 8.5 x 11 maps showing prioritized SHCA's, priority wetlands, landcover, species richness, and species locations for all projects. Additional species records were found on, or within a 1-mile distance of, the properties will be included in a spreadsheet; these species records are maintained by FNAI and cannot be distributed through FWC.

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

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

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

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

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

Because FNAI is funded to provide information to public agencies only, you may be required to pay a fee for this information. County-wide listed species information can be located at their website (<http://www.fnai.org>).

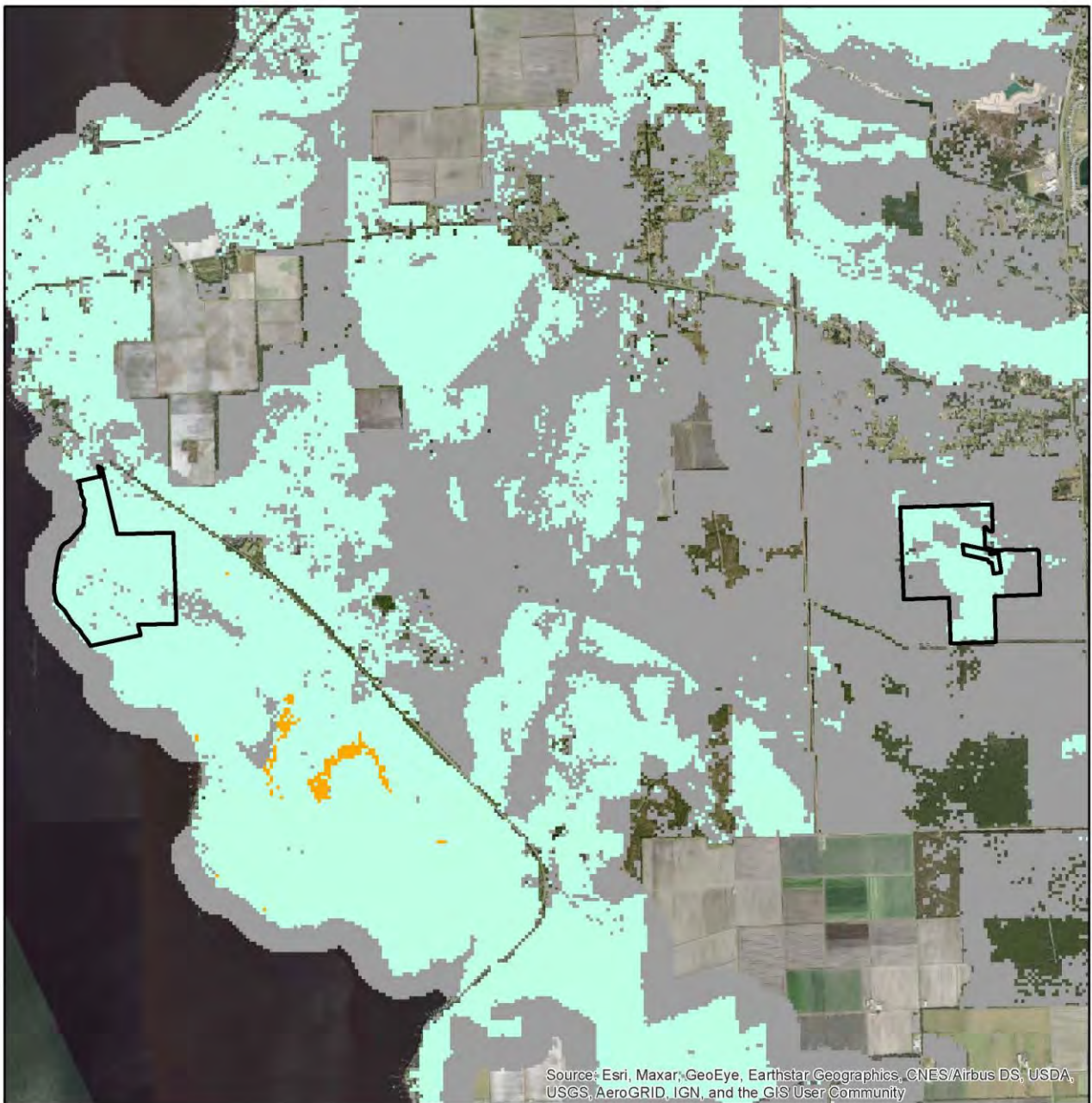
Please credit the Florida Fish and Wildlife Conservation Commission in any publication or presentation of these data. If you have any questions or further requests, please contact me at (850) 488-0588 or gisrequests@myfwc.com.

Sincerely,

A handwritten signature in black ink, appearing to be 'E. Salinas'.

Eva Salinas
Research Assistant

ES
2019_6326
Enclosures



Species Richness



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

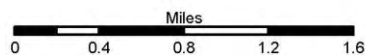


Watson Island

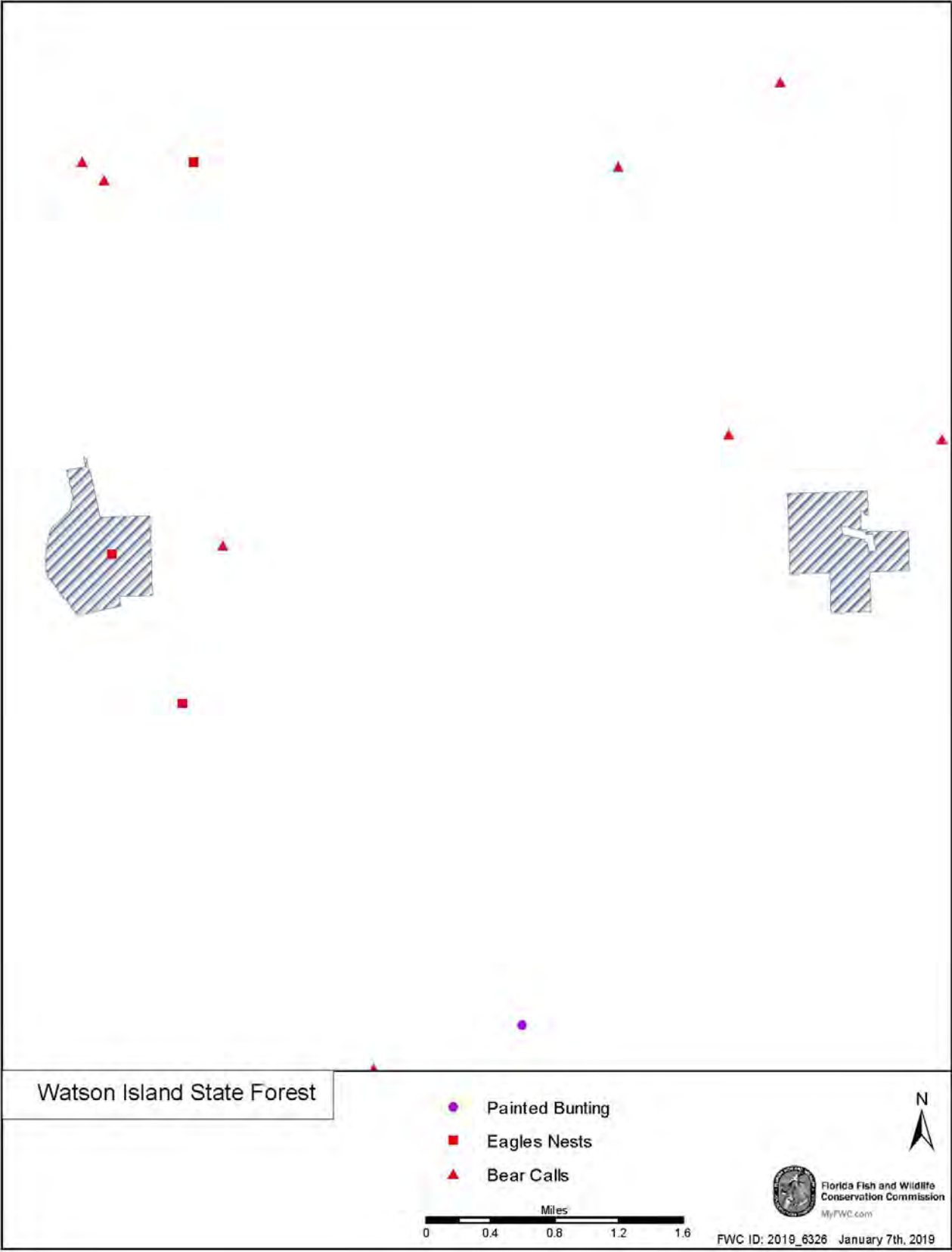
This dataset represents the richness of potential habitat for selected focal species in Florida. Potential habitat includes areas that have been occupied by the species and areas where occupancy is unknown based on available occurrence records. We combined the potential habitats generated for Florida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

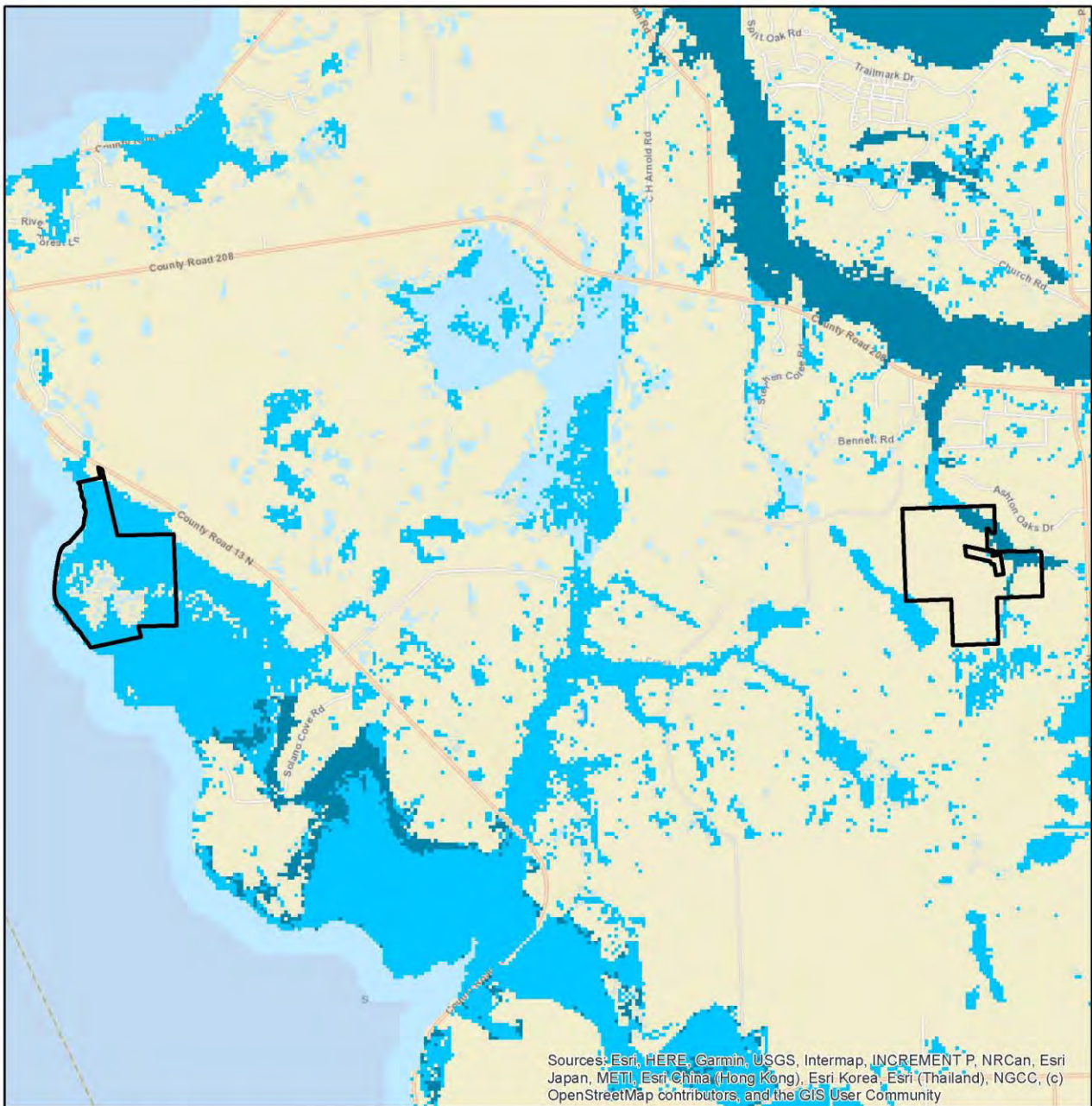


Florida Fish and Wildlife
Conservation Commission
MyFWC.com



FWC ID: 2019_6326 January 7th, 2019





Priority Wetlands

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

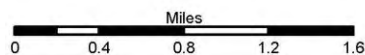


Florida Fish and Wildlife
Conservation Commission
MyFWC.com

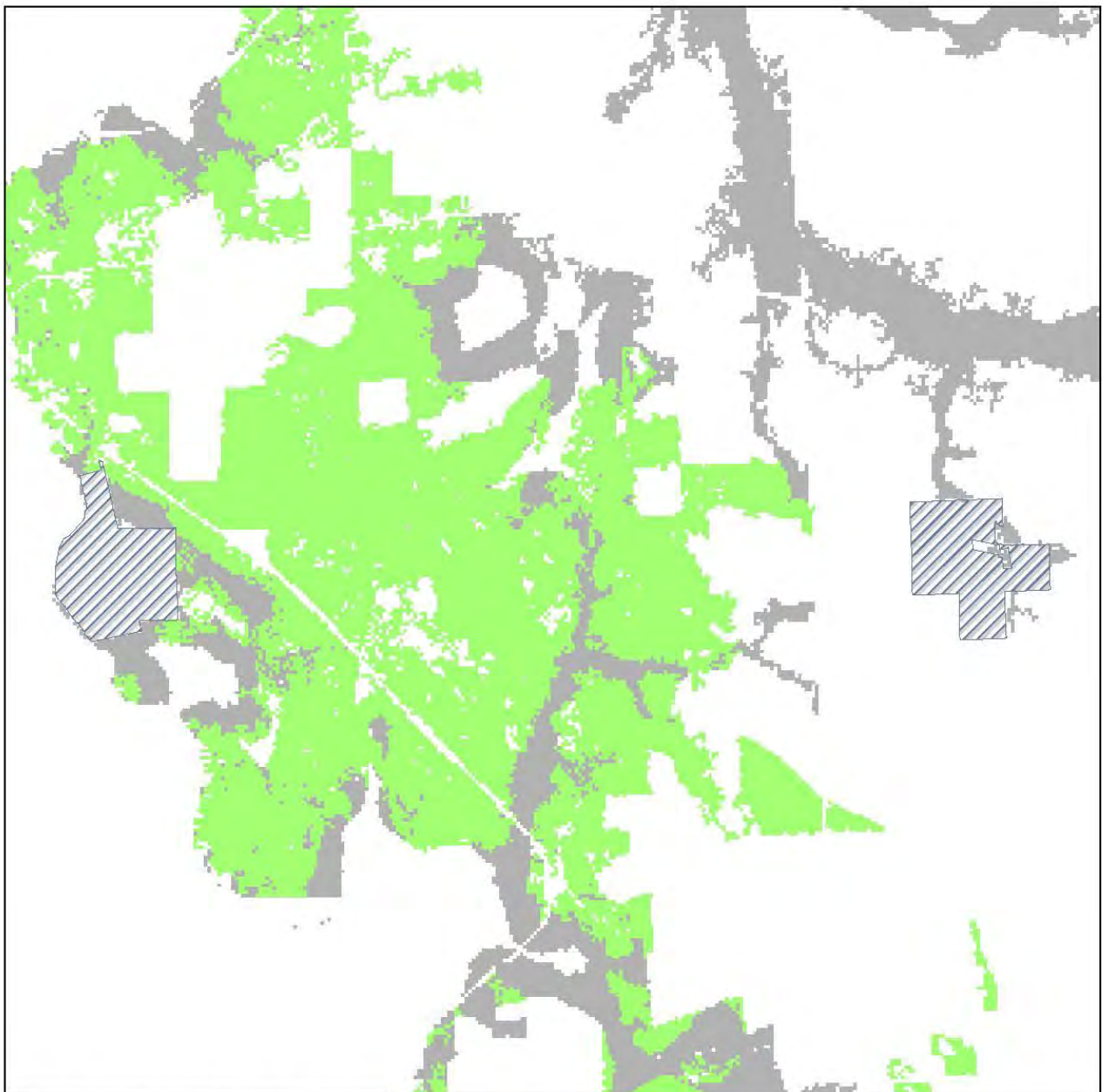


Watson Island

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



FWC ID: 2019_6326 January 7th, 2019



Watson Island State Forest

Prioritized SHCA's



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



Florida Fish and Wildlife
Conservation Commission
MyFWC.com

FWC ID: 2019_6326 January 7th, 2019

Exhibit N

Fire History

Watson Island State Forest Burn Acres by Fiscal Year

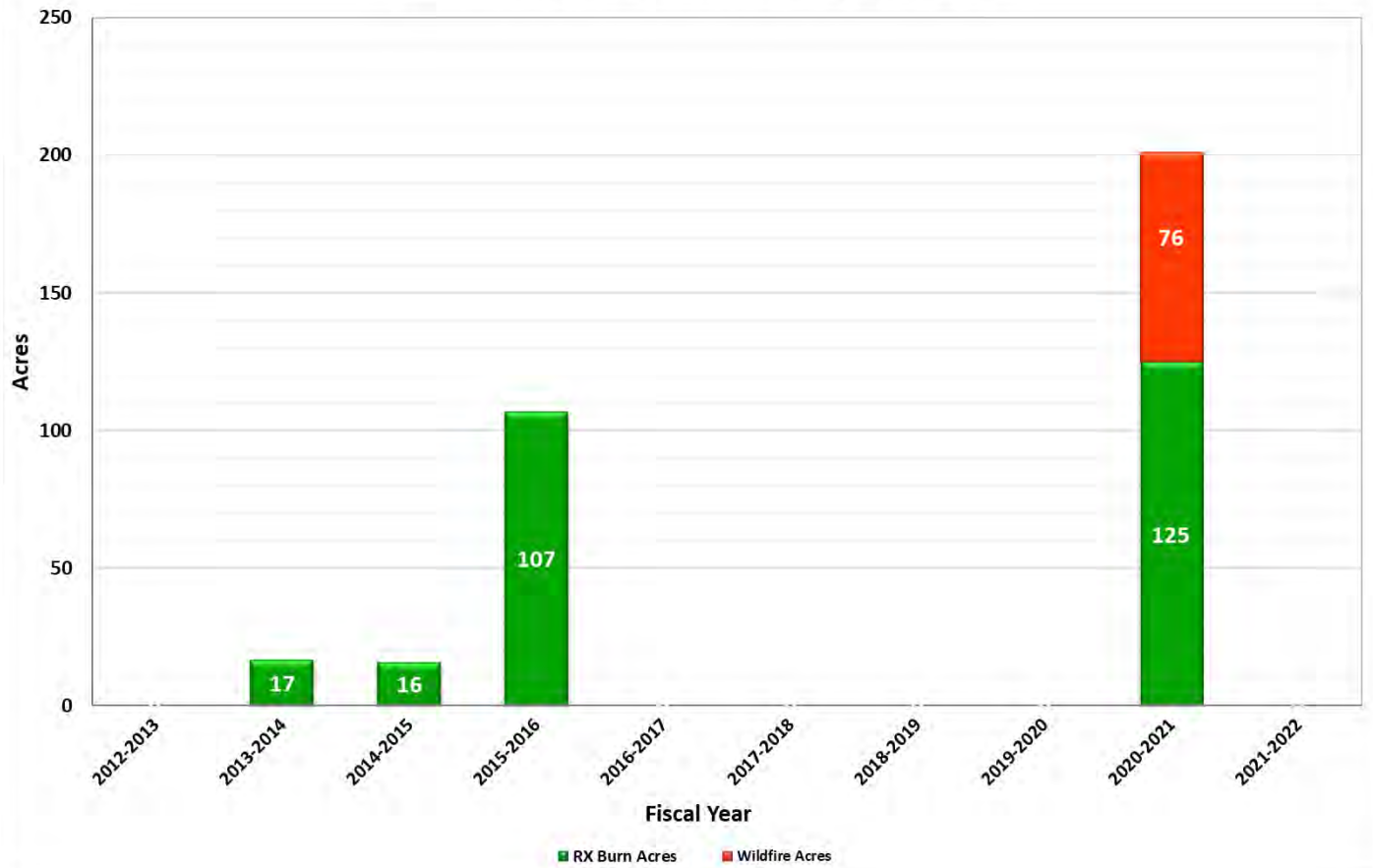


Exhibit O

Non-Native Invasive Species Map



Florida Forest Service

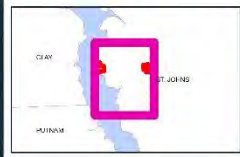
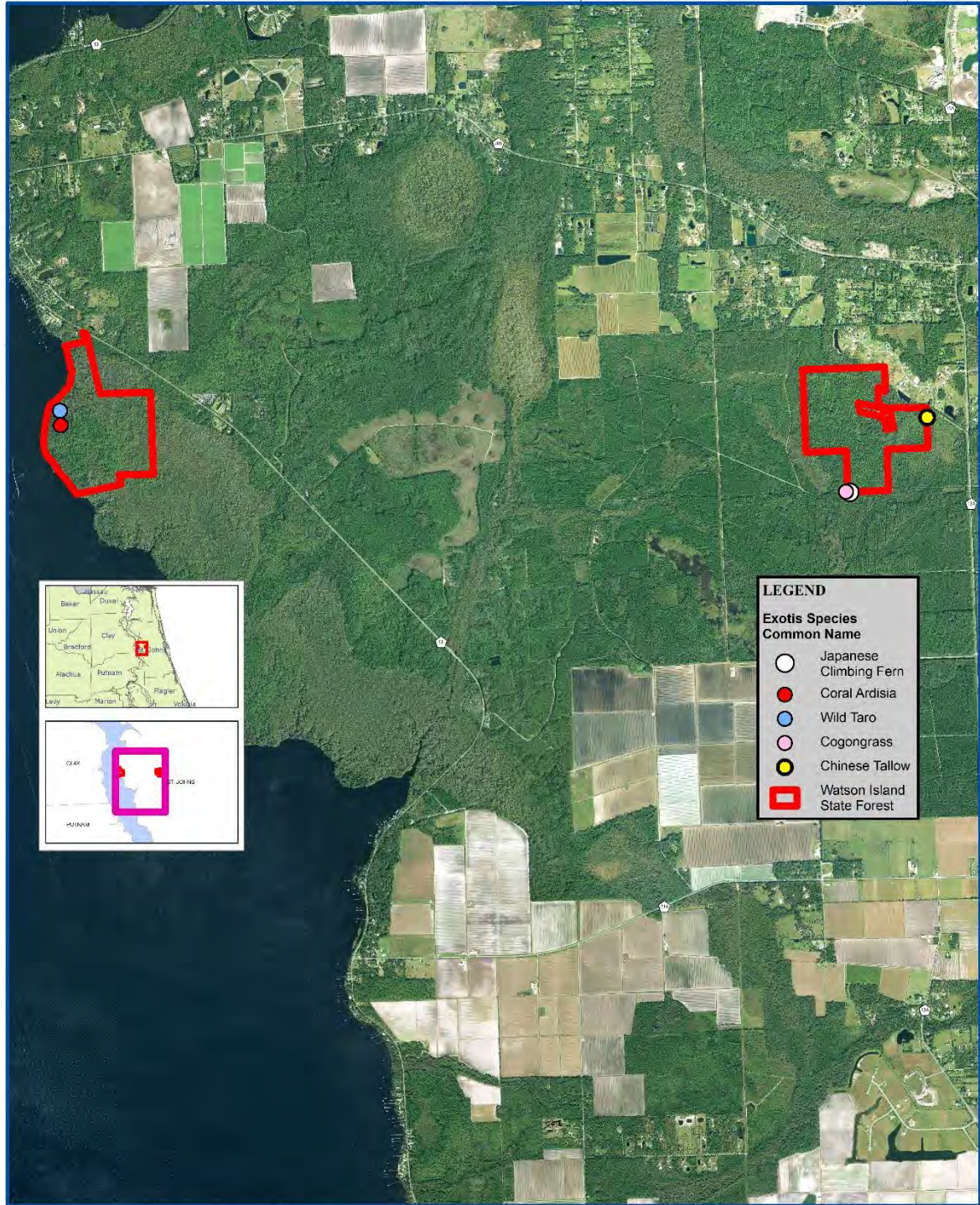
Watson Island State Forest

Non-Native Invasive Species Map (FNAI)

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

DISCLAIMER:
This map was created by the Florida Forest Service
and is not intended to be used for any other purpose.
The Florida Forest Service does not warrant the
accuracy or completeness of the information
presented on this map. The Florida Forest Service
does not assume any liability for any errors or
omissions, or for any consequences arising from
the use of the information presented on this map.

Watson Island State Forest is located on
the Florida Atlantic coast, between
Fort Pierce and St. John's River.
From the US Army Corps of Engineers
B111111



LEGEND	
Exotic Species	
Common Name	
	Japanese Climbing Fern
	Coral Ardisia
	Wild Taro
	Cogongrass
	Chinese Tallow
	Watson Island State Forest

0.5 0.25 0 0.5 Miles



Map Month/Year: December 2020

1,000 500 0 1,000 2,000 Yards

Exhibit P

Current Natural Communities Map

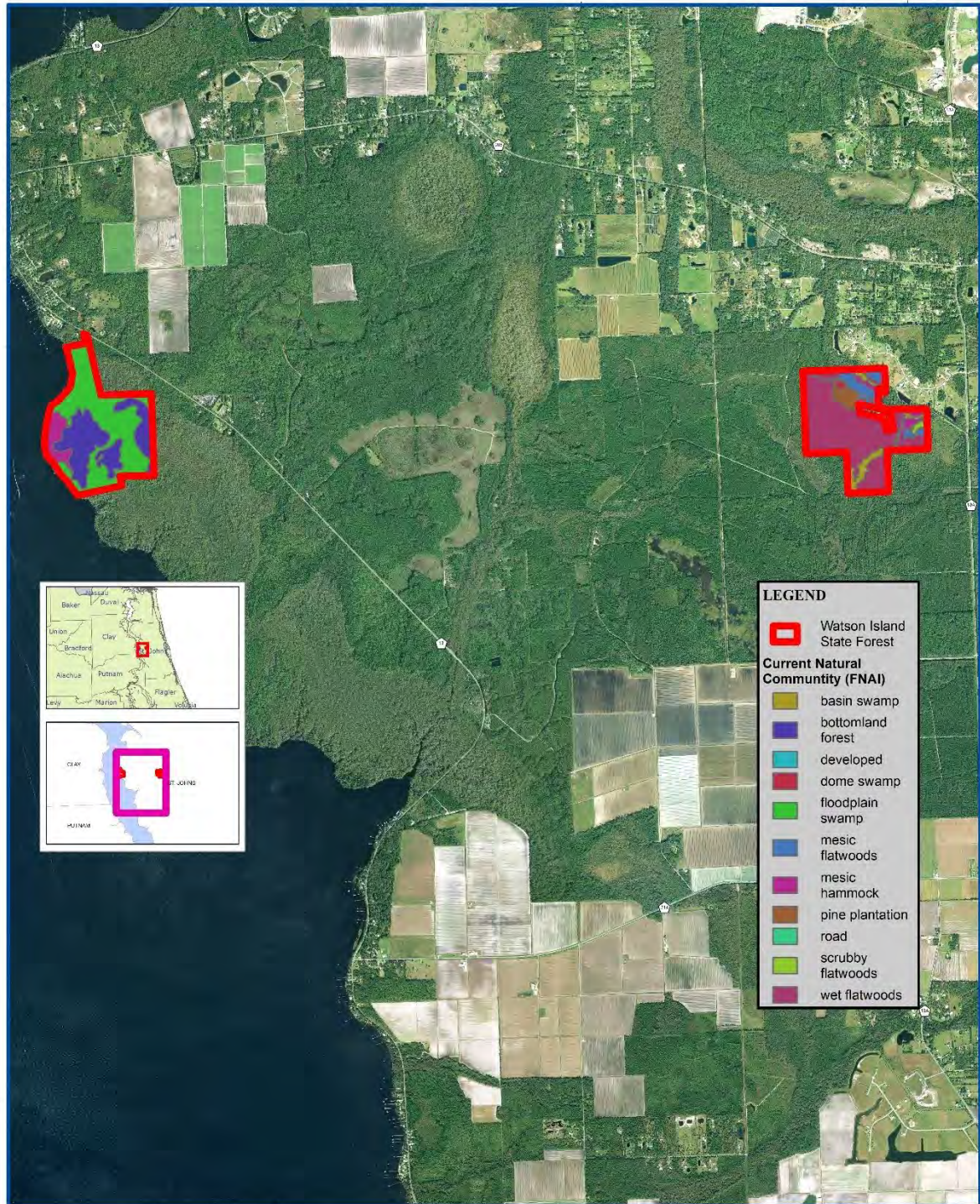
Watson Island State Forest
Current FNAI Natural Communities Map

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

DISCLAIMER:
This study was conducted on the Florida Natural Areas Inventory (FNAI) data. The data was collected by the Florida Department of Natural Resources (FDNR) and is the property of the FDNR. The data was used for the purpose of the study and is not to be used for any other purpose without the permission of the FDNR.

Managed Area Database as Component of the Florida Natural Areas Inventory
Formally titled Natural Areas System (FNAIS), from the US Army Corps of Engineers

30
Step 2

29th Dec

29%



Map Month/Year: June 2020



Exhibit Q

Historic Natural Communities Map



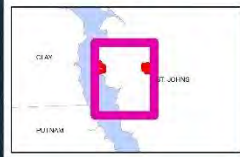
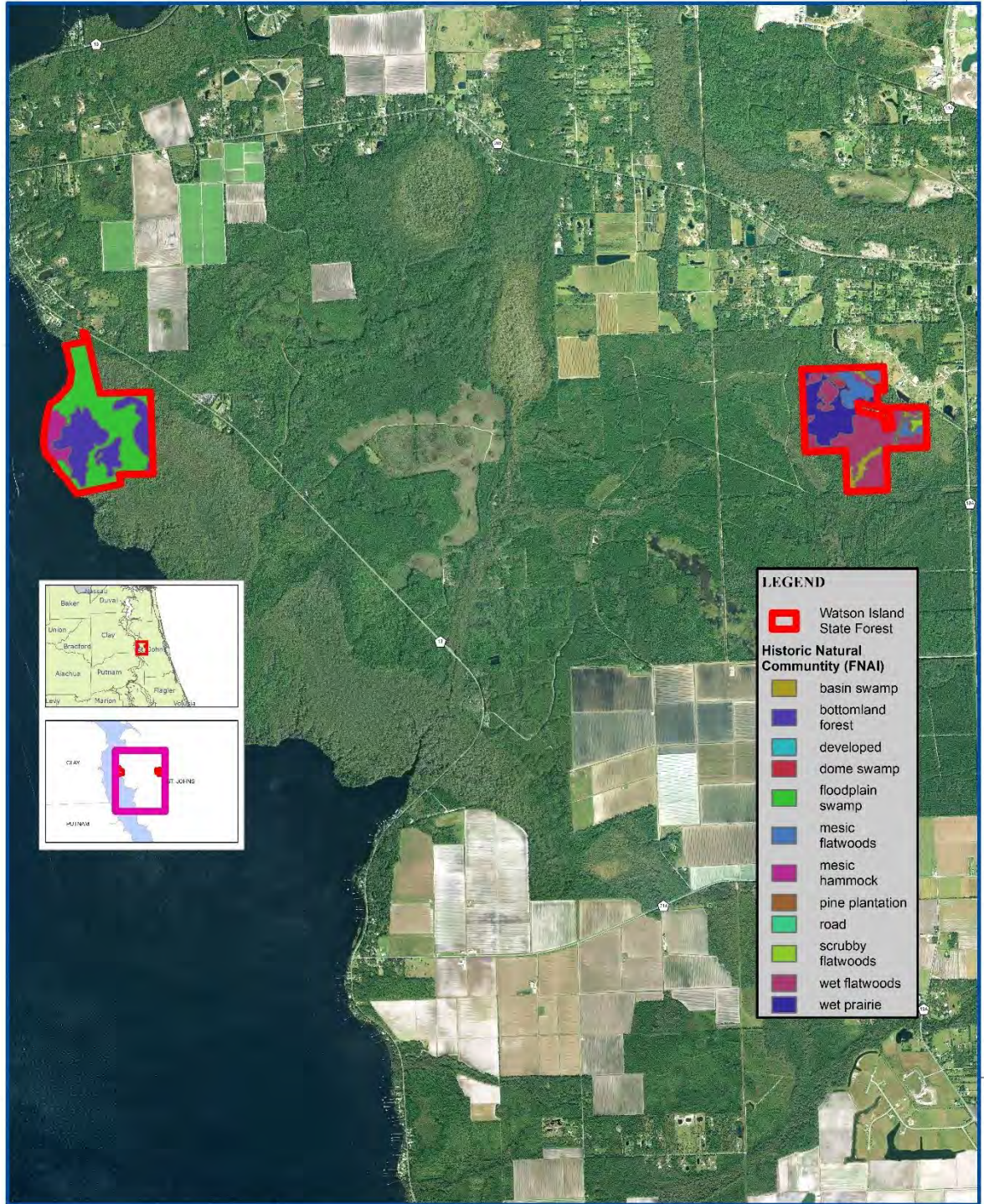
Florida Forest Service

Watson Island State Forest Historic FNAI Natural Communities Map

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

DISCLAIMER:
This map was prepared by the Florida Forest Service (FFS) as a service to the public. It is not intended to be used as a legal document. The FFS does not warrant the accuracy or completeness of the information contained herein. The FFS is not responsible for any errors or omissions, or for any consequences arising from the use of the information contained herein. The FFS is not responsible for any damages, including consequential damages, arising from the use of the information contained herein. The FFS is not responsible for any claims, damages, losses, or expenses, including reasonable attorneys' fees, arising from the use of the information contained herein. The FFS is not responsible for any claims, damages, losses, or expenses, including reasonable attorneys' fees, arising from the use of the information contained herein.

Map was prepared as a service to the public of the Florida Forest Service (FFS) by the FFS. The FFS is not responsible for any claims, damages, losses, or expenses, including reasonable attorneys' fees, arising from the use of the information contained herein. The FFS is not responsible for any claims, damages, losses, or expenses, including reasonable attorneys' fees, arising from the use of the information contained herein.



- LEGEND**
- Watson Island State Forest
 - Historic Natural Community (FNAI)**
 - basin swamp
 - bottomland forest
 - developed
 - dome swamp
 - floodplain swamp
 - mesic flatwoods
 - mesic hammock
 - pine plantation
 - road
 - scrubby flatwoods
 - wet flatwoods
 - wet prairie

0.5 0.25 0 0.5 Miles



Map Month/Year: June 2020

1,200 500 0 1,200 2,000 Yards

Exhibit R

Management Prospectus



St. Johns River Blueway

St. Johns

Climate Change Lands

Project-at-a-Glance

<i>Placed on List</i>	2002
<i>Project Area</i>	26,229
<i>Acres Acquired</i>	8,562
<i>at a Cost of</i>	\$3,112,640
<i>Acres Remaining</i>	17,667

Purpose for State Acquisition

This project is located in one of the fastest growing areas in the state. The project is designed to preserve the last remaining shorelines of the St. Johns River and several of its tributaries. The project also has numerous recorded archaeological and historical resources, with the potential for more.

Manager(s)

The Florida Forest Service (FFS) proposes managing part of the site as part of Watson Island State Forest, and the rest as a new state forest. Bunnell District personnel will manage the site and coordinate public access and use for all areas.

General Description

The St. Johns River Blueway runs along the eastern shore of the St. Johns River between Green Cove Springs and Palatka. It includes considerable forested wetlands by the river and around six tributary creeks, plus mesic flatwoods, freshwater marsh, and a portion of disturbed uplands. The project also bounds the Watson Island State Forest on the west bank of the St. Johns River.

FNAI Element Occurrence Summary 2019

<u><i>FNAI Element</i></u>	<u><i>Score</i></u>
Florida Black Bear	G5T4/S4
Canby's wild indigo	G3T1/S1
Creek Siltsnail	G2/S2
Thorne's beaksedge	G3/S1S2
Bartram's ixia	G2G3/S2S3
Bachman's Sparrow	G3/S3
Bald Eagle	G5/S3
Osprey	G5/S3S4
Little Blue Heron	G5/S4

9 rare species are associated with the project

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

Public Use

The degree of ownership acquired and whether there are usable uplands to have resource-based recreation will determine the degree of public access and use that can be assured. Both fee and less-than-fee acquisition approaches are recommended in the proposal. The resource-based recreation potential for the project is considered low to moderate, depending on what title rights and uplands can be obtained.

Much of the project area is wetland or floodplain adjacent to the St. Johns River and its tributary creeks. These public waterways have boating and canoeing opportunities. Acquiring adjacent lands will help to ensure preservation of the quality recreation experience that presently exists. If upland sites along these waterways are acquired, these uplands could have access for the boating public and/or opportunities for environmental education and wildlife viewing. Success in acquiring lands with relatively dry upland areas will determine the ability to provide any kind of comprehensive hiking or bicycle trail system, or facilities to have camping or picnicking. Creating a comprehensive bicycle trail system between parcels will require use of the public road system. Lands adjacent to existing public areas may enhance access, usability and the recreation experience of those public areas.

Acquisition Planning

On December 5, 2002, the Acquisition and Restoration Council (ARC) added the St. Johns River Blueway project to Group A of the Florida Forever (FF) 2003 Priority list. This fee-simple and less-than-fee acquisition, sponsored by St. Johns County, consisted of approximately 27,997 acres and 290 landowners. Six entities own more than 15,000 of the acres in the project: Rayonier, Meldrim, SJ Land Associates LLC, Klaerich, Ringhaver, and Plum Creek Timberlands LP.

On June 16, 2005, the Board of Trustees (BOT) approved buying 231.8 acres (Warner). The BOT also acquired 736 acres (Lambert) in August 2005. On June 11, 2010, the ARC placed this project in the Climate Change Lands category for the August priority list. On December 9, 2011 the ARC

recommended a 1656-acre reduction to the project, removing residential development, commercial buildings or infrastructure from the boundary.

On August 16, 2016, the 5,237-acre Meldrim ownership was acquired as a perpetual conservation easement at a cost of \$5,991,803.

Coordination

Portions of the project may be acquired in partnership with St. Johns County. The St. Johns River WMD is also interested in the acquisition of the project. The acquisition partnership may include local and state funding sources. Contribution percentages have not been determined.

Management Policy Statement

The FFS proposes managing the project under a multiple use management regime for the State Forest system. Management would be designed to accomplish the goals and measures for this project. These goals and measures are referenced later in this prospectus. The primary land management goal for the FFS is to restore, maintain and protect in perpetuity all native ecosystems; to integrate compatible human use; and to insure long-term viability of populations and species considered rare. This ecosystem approach will guide the FFS's management activities on this project. Perpetuity all native ecosystems; to integrate compatible human use; and to insure long-term viability of populations and species considered rare. This ecosystem approach will guide the FFS's management activities on this project.

Management Prospectus

Qualifications for state designation

The project's location, size, and diversity make it desirable for use and management as a state forest. State Forest designation requires that certain criteria be met, such as public access and acreage available for many types of recreational activities. Designation as a state forest is contingent upon acquiring property rights which are consistent with these criteria.

Manager

The FFS proposes to manage a portion of the site as part of Watson Island State Forest, and the remainder as a new state forest. Bunnell District personnel manage the site and coordinate public access and use for all areas.

Conditions affecting intensity of management

Much of the project's upland areas have been disturbed and will require various levels of restoration. Natural communities that have been converted to pine plantation will require removal of off-site species and reforestation with native species. Protecting and restoring wetland communities will be a priority for the FFS. Restoration efforts will concentrate on removing and filling ditches and corrections of other

hydrological alterations. Public use will be limited to activities that are compatible with any sensitive resources.

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

Once the project area is acquired and assigned to the FFS, public access will be provided for low intensity outdoor recreation activities. Initial and intermediate management efforts will concentrate on resource inventory, restoring and reforestation areas where harvesting has occurred, hydrologic restoration, as well as site security, public and fire management access. Inventories of the site's natural resources, threatened and endangered flora and fauna, will be conducted to provide a basis for formulation of a management plan.

Revenue-generating potential

Timber sales will be conducted as needed to improve or maintain desirable ecosystem conditions. These sales will primarily take place in pine stands and will provide a variable source of revenue dependent upon a variety of factors. Due to the existing condition of the timber resource on the property, revenue generating potential of this project is expected to be low-medium. It is anticipated that management funding will come from the CARL trust fund.

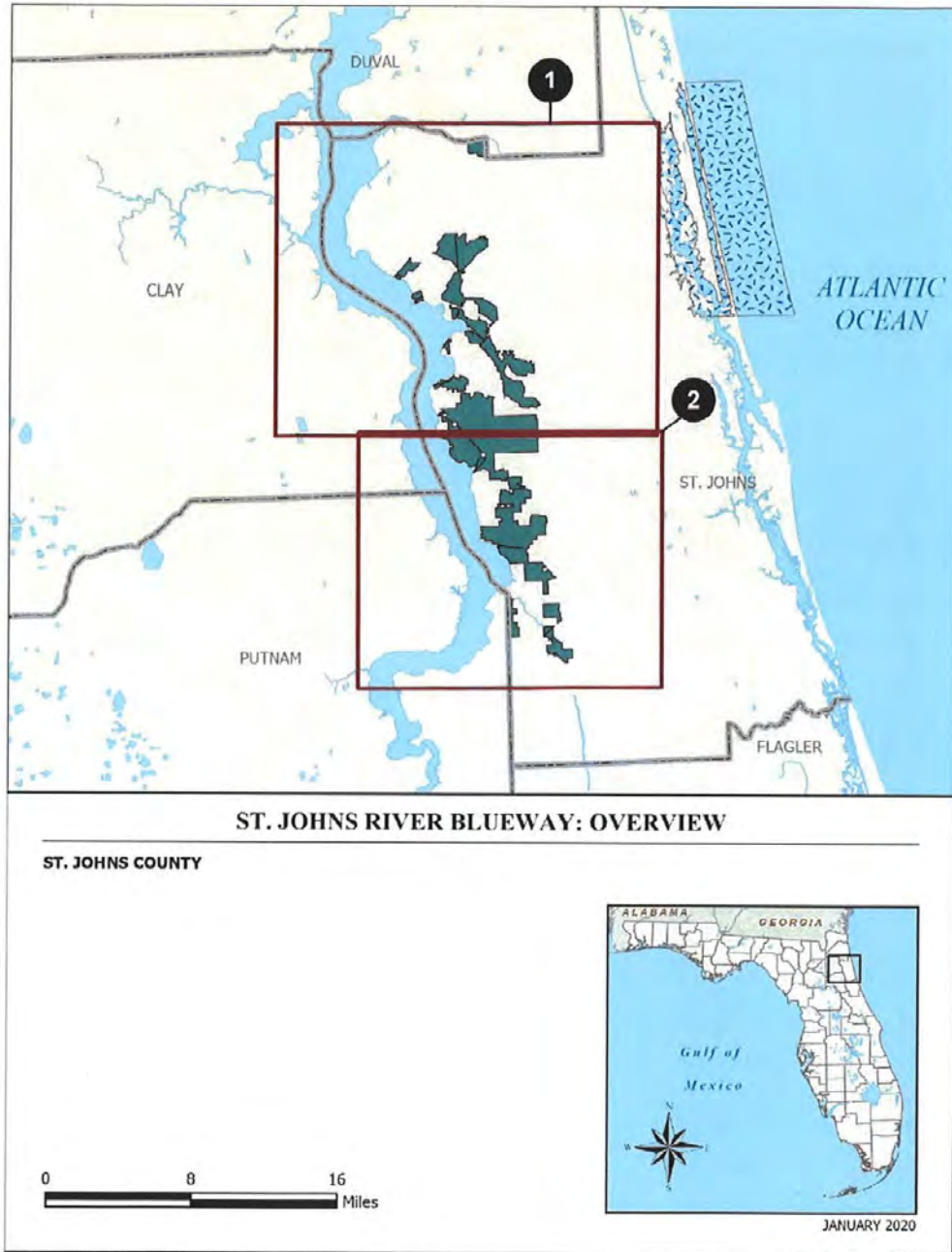
Cooperators in management activities

FFS will cooperate with and seek the assistance of other state agencies, local government entities and interested parties as appropriate.

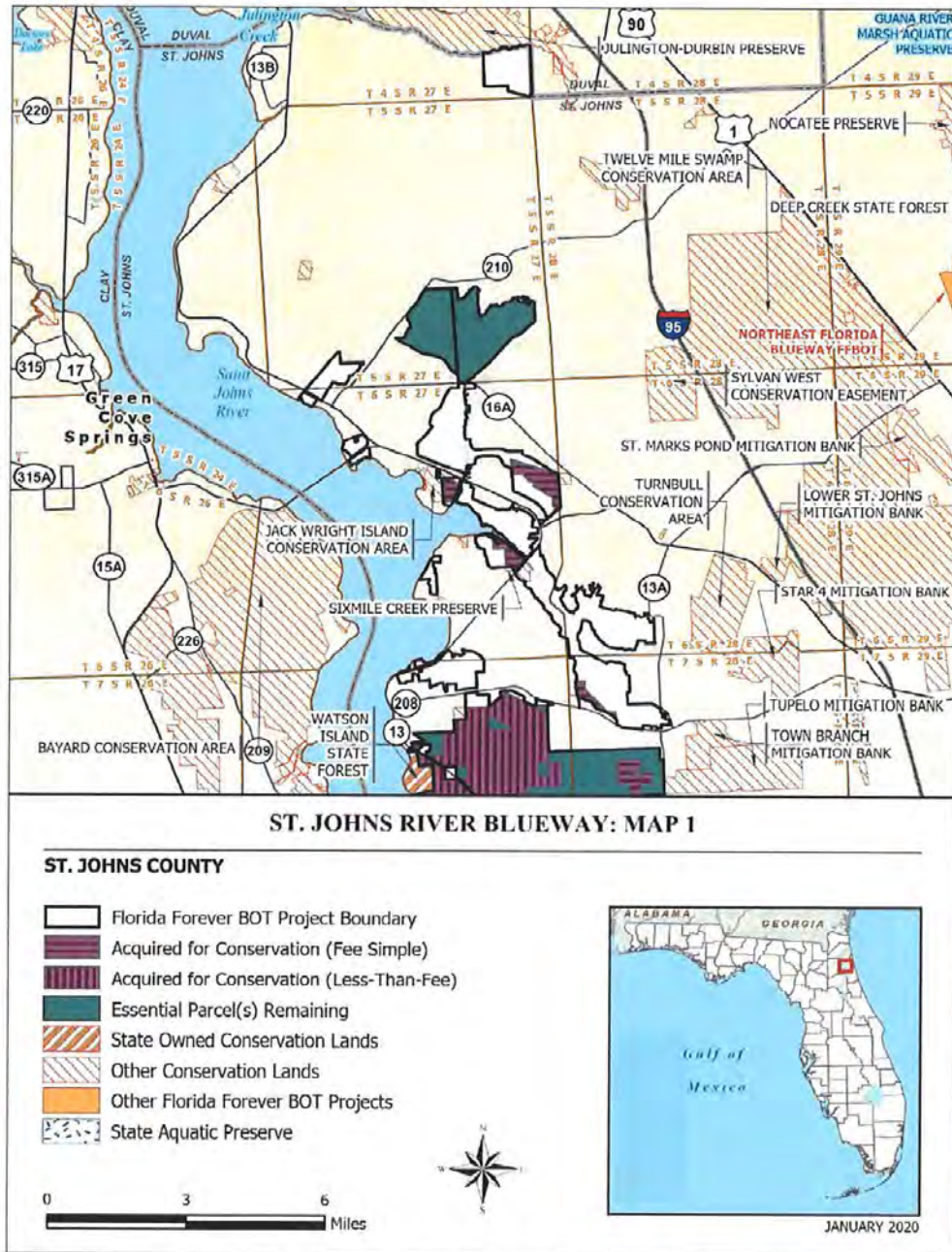
Management Cost Summary

<i>FFS</i>	<i>Startup</i>	<i>Recurring</i>
<i>Source of Funds</i>	<i>CARL</i>	<i>not provided</i>
<i>Salary (X FTE)</i>	<i>\$173,346</i>	<i>not provided</i>
<i>Expense</i>	<i>\$125,000</i>	<i>not provided</i>
<i>OCO</i>	<i>\$361,000</i>	<i>not provided</i>
<i>TOTAL</i>	<i>\$659,346</i>	<i>not provided</i>

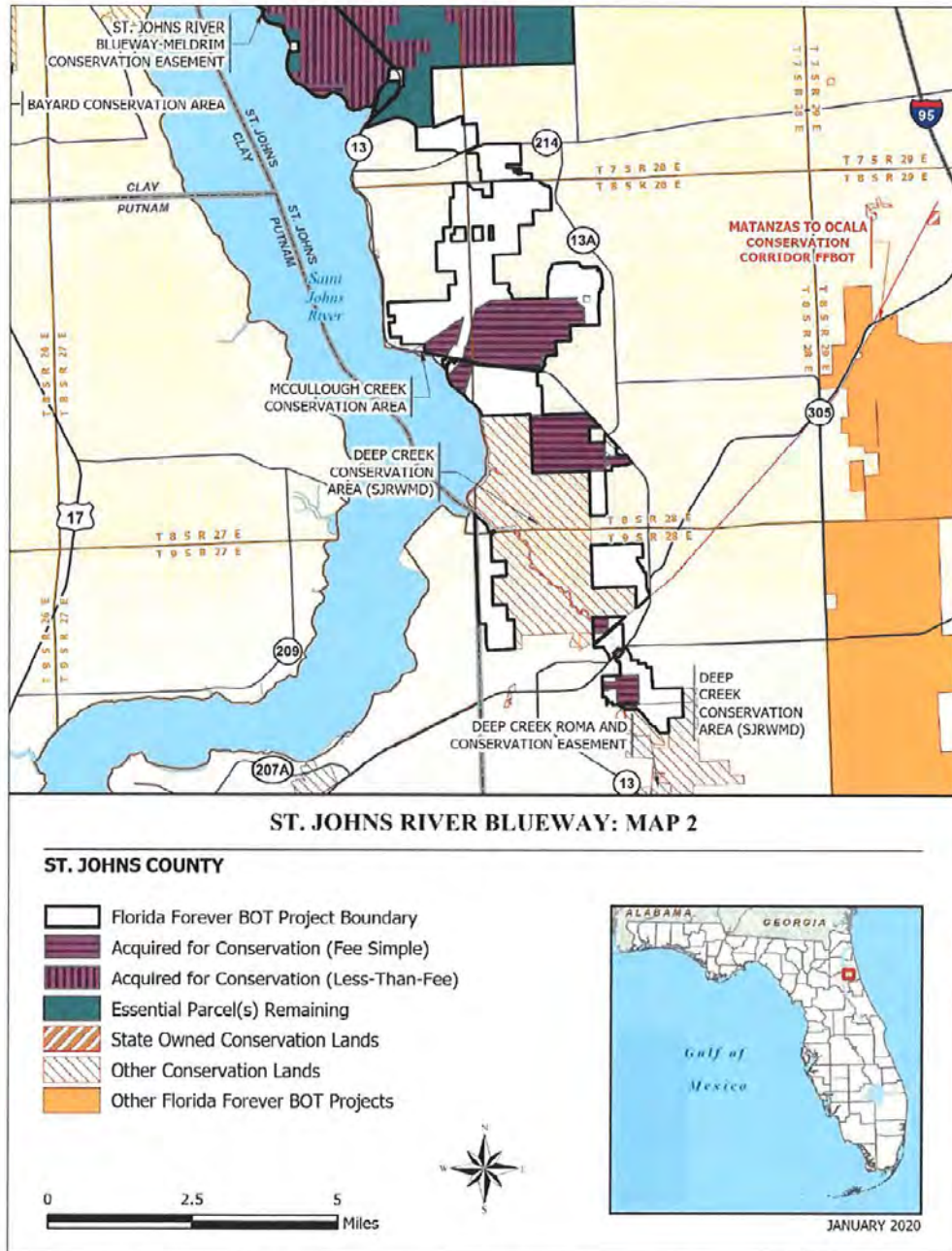
Source: Management Prospectus as originally submitted



Project Map 232: Source → Florida Natural Areas Inventory (FNAI, January 2020)



Project Map 233: Source → Florida Natural Areas Inventory (FNAI, January 2020)



Project Map 234: Source → Florida Natural Areas Inventory (FNAI, January 2020)

Exhibit S

Land Management Review (2018)

1.1. Property Reviewed in this Report

Name of Site: Watson Island State Forest

Managed by: Florida Forest Service

Acres: 729.33

County: St. Johns

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

Acquisition Program(s): P2000/CARL, Florida Forever, Farm Bill **Original Acquisition Date:** 1976

Area Reviewed: Entire Property

Last Management Plan Approval Date: 6/15/10

Review Date: 7/13/18

Agency Manager and Key Staff Present:

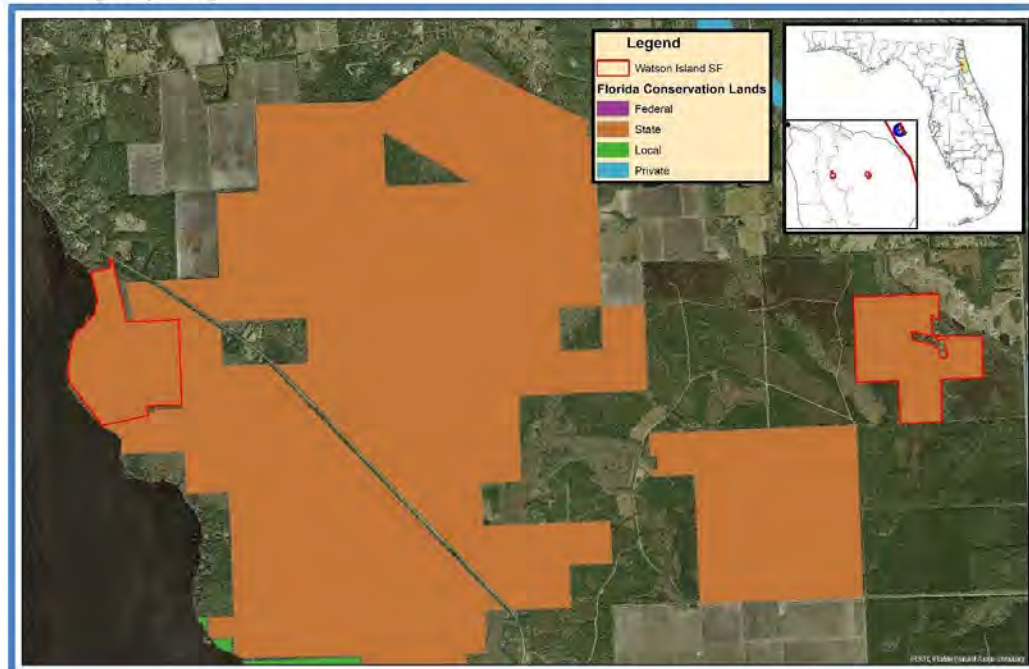
- Justina Jones, Manager
- Gary Carpenter, FFS
- Jeff Darr, FFS
- Anthony Petellat, FFS
- John Kern, FFS
- Conrad Wysocki

Review Team Members Present (voting)

- Eric Powell, Conservation Org.
- Jeremy Cooper, Local Representative
- Wade Brenner, FWC
- Dante Dartigunare, DEP District
- Heather Schmiede, FFS
- Heather Venter, SJRWMD
- Elizabeth Guthrie, Private Land Manager
- Chris Matson, DRP District

Other Non-Team Members Present (attending)

1.2 Property Map



1.3. Overview of Land Management Review Results

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

Yes = 8, No = 0

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

Yes = 8, No = 0

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

Table 1: Results at a glance.

Major Land Management Categories	Field Review	Management Plan Review
Natural Communities / Forest Management	4.18	4.25
Prescribed Fire / Habitat Restoration	3.67	4.08
Hydrology	3.06	3.31
Imperiled Species	2.77	2.52
Exotic / Invasive Species	3.61	3.07
Cultural Resources	3.84	3.79
Public Access / Education / Law Enforcement	3.25	3.55
Infrastructure / Equipment / Staffing	2.63	N/A

Color Code (See Appendix A for detail)

Excellent	Above Average	Below Average	Poor
-----------	---------------	---------------	------

1.3.1 Consensus Commendations for the Managing Agency

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

1. The team commends the Florida Forest Service (FFS) for efforts made to burn flatwoods according to the appropriate fire return interval despite challenges inherent to the site. (8+, 0-)
2. The team commends the FFS for initiating the prescribed fire program on the Warner tract, despite limited access and the current fuels buildup (8+, 0-)

1.3.2. Consensus Recommendations to the Managing Agency

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

1. The team recommends the FFS have sites surveyed for FNAI community types. (8+, 0-)

Managing Agency Response: *The FFS will pursue opportunities to map natural communities on Watson Island State Forest (WISF).*

2. The team recommends the FFS identify and establish an appropriately-sized parking facility to allow limited public access. (8+, 0-)

Managing Agency Response: *The FFS will evaluate several alternatives for appropriately located parking areas to facilitate public access and meet management objectives.*

3. The team recommends the FFS identify mountain mint populations and manage sandhill fire to benefit this species. (8+, 0-)

Managing Agency Response: The FFS will document mountain mint populations as they are identified in the field. The FFS will continue to prescribe burn to benefit the ecosystem as a whole and reduce fuel loading.

4. The team recommends the FFS survey for listed plants and animals. (8+, 0-)

Managing Agency Response: The FFS will seek opportunities to survey for listed plants and animals.

5. The team recommends the FFS conduct a thorough survey of bottomland forest and alluvial forest in the dry season for invasive woody plants and climbing fern. (8+, 0-)

Managing Agency Response: The FFS will survey bottomland forest and alluvial forest during the dry season for invasive plant species as time and funding allow.

2. Field Review Details

2.1 Field Review Checklist Findings

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

1. Natural communities, specifically bottomland forest, alluvial forest, baygall, and dome swamp.
2. Cultural Resources, specifically protection and preservation.
3. Resource management (prescribed fire), specifically quality.
4. Forest Management, specifically timber inventory/assessment.
5. Resource protection, specifically boundary survey and law enforcement presence.
6. Adjacent property concerns, specifically expanding development.

2.2. Items Requiring Improvement Actions in the Field

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

1. *The maintenance condition of the Natural Communities, specifically mesic flatwoods received a below average score. The review team is asked to evaluate, based on their perspective, what percent of the natural community is in maintenance condition. The scores range from 1 to 5, with 1 being 0-20% in maintenance condition, 2 being 21-40%, 3 being 41-60%, 4 being 61-80% and 5 being 81-100%.*

Managing Agency Response: Location and access constraints are contributing factors to the current condition of the mesic flatwoods community. This is a work in progress. Management strategies are in place to thin and burn and will continue to assist in restoring this community over the long term.

2. *Listed species, specifically Florida mountain mint, received a below average score. The review team is asked to evaluate, based on their perspective, whether management actions are sufficient for protection and preservation of the species.*

Managing Agency Response: A listed species survey has not been conducted on the property; therefore, the FFS was not aware that Florida mountain mint occurred on WISF. The FFS will seek opportunities for a listed species survey to be conducted on the property.

3. *Natural Resources Survey, specifically other non-game species or their habitat monitoring, received a below average score. The review team is asked to evaluate, based on information provided by the managing agency, whether survey and monitoring of the resources or their habitats are sufficient.*

Managing Agency Response: The FFS will coordinate with FWC and other cooperating agencies to seek opportunities for a non-game species survey.

4. *Public Access & Education, specifically roads, parking, and recreational opportunities, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether public access and education are sufficient.*

Managing Agency Response: Public access alternatives will be evaluated and implemented as practical.

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

Managing Agency Response: Funding is determined by the legislature. The FFS will pursue additional funding opportunities as they become available.

3. Land Management Plan Review Details

3.1 Items Requiring Improvements in the Management Plan

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

1. *Listed Species, protection and preservation, specifically Florida mountain mint, received a below average score. This is an indication that the management plan does not sufficiently address protection of listed species.*

Managing Agency Response: The FFS will include an outline in the next management plan update for the management and preservation of listed plant species once a survey is completed.

2. *Natural Resources Survey and Monitoring Resources, specifically other non-game species or their habitat monitoring and fire effects monitoring, received below average scores. This is an indication that the management plan does not sufficiently address survey or monitoring.*

Managing Agency Response: The FFS will include a discussion in the next management plan update about non-game species and their habitat monitoring. The FFS utilizes a prescribed burn evaluation system and will be sure to include more detailed information about this in the next management plan update.

3. **Non-native, Invasive & Problem Species, specifically prevention of animals, received a below average score. This is an indication that the management plan does not sufficiently address prevention of invasive species.**

Managing Agency Response: The FFS will include a discussion of non-native invasive animal prevention in the next management plan update.

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

Managing Agency Response: Discussion of all adjacent property concerns and potential surplus land determination will be included in the next management plan update.

Exhibit T

Compliance with Local Comprehensive Plan

FLORIDA FOREST SERVICE
(850) 681-5800



THE CONNER BUILDING
3125 CONNER BOULEVARD
TALLAHASSEE, FLORIDA 32399-1650

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
COMMISSIONER NICOLE "NIKKI" FRIED

December 1, 2022

St. Johns County Planning and Zoning
4040 Lewis Speedway
St. Augustine, FL 32084
(904) 209-0675
plandep@sjcfl.us

RE: Watson Island State Forest 10-Year Land Management Plan

To Whom it May Concern:

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

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

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

Sincerely,

Patti Anderson
FFS Land Management Planner

cc: Jeff Darr, FFS Bunnell District Forester



St. Johns County Board of County Commissioners

Growth Management Department

December 7, 2022

Patti Anderson, Land Management Planner
Florida Forest Service
Florida Department of Agriculture & Consumer Services
3125 Conner Boulevard
Suite I-258, Mail Stop C-25
Tallahassee, FL 32399-1650
Patricia.Anderson@FDACS.gov

RE: Confirmation Letter Request (CLTR 2022-288)
Watson Island State Forest Land Management Plan

Dear Ms. Anderson:

This letter is in response to your request dated December 1, 2022, requesting confirmation the 2023 Watson Island State Forest Ten-Year Land Management Plan is consistent with the St. Johns County Comprehensive Plan. According to the submitted documentation, the Watson Island State Forest consists of two separate tracts of land, known as Watson Island Tract and Warner Tract.

The **Watson Island Tract** is designated Parks and Open Space on the Future Land Use Map and zoned Open Rural(OR). St. Johns County Comprehensive Plan Policy A.1.11.1.k provides:

Parks and Open Space shall mean active and passive recreation areas, or lands permanently maintained as open space. Permitted uses shall include: active and passive parks and recreational facilities, together with permitted accessory uses; and Public safety government facilities such as police, fire, and emergency medical facilities; and Uses and activities allowed by an approved Federal, State, regional or local Management Plan governing activities allowed on such public lands.

The **Warner Tract** is designated Rural Silviculture (R/S) on the Future Land Use Map and zoned Open Rural(OR). St. Johns County Comprehensive Plan Policy A.1.11.1.a provides for Outdoor/Passive Uses, which allow for parks, natural preserves and game preserves.

The Watson Island Tract and Warner Tract, comprising the Watson Island State Forest, is under public ownership.

The 2023 Ten-Year Land Management Plan is consistent with the St. Johns County Comprehensive Plan, Future Land Use Map and Zoning.

Sincerely,


Teresa Bishop, AICP
Planning Division Manager

Exhibit U

State Forest Management Plan Advisory Group Summary

Management Plan Advisory Group Public Hearing
Watson Island State Forest
10-Year Land Management Plan

October 28, 2022

10:30 A.M.

Meeting Minutes

MPAG Members Present:

- | | |
|--------------------|---|
| • Anthony Petellat | Bunnell District Manager, Florida Forest Service (FFS) |
| • Nicholas Smith | Representing Tyler Mosteller of St. Johns River Water Management District |
| • Nicole Crosby | St. Johns Soil & Water District |
| • Ricky Lackey | National Wild Turkey Federation |
| • Matt Donovan | Local Property Owner |

MPAG Members Not Present:

- | | |
|-------------------------------|--------------------------------------|
| • Wade Brenner | Florida Fish and Wildlife Commission |
| • Billy Lipthrott | Local Property Manager |
| • Representative Sarah Arnold | County Commissioner |

FFS Staff:

- | | |
|-------------------|--|
| • Alan Davis | Land Planning Coordinator |
| • Brian Camposano | Forest Management Assistant Bureau Chief |
| • Justina Jones | Bunnell District Forestry Resource Administrator |
| • Jeff Darr | Bunnell District Forester |
| • Donald King | Bunnell District Forestry Supervisor II |
| • Patti Anderson | Land Management Planner |

Guests:

- Janelle Barriero
- Michael Bishop

Public Meeting Start Time: 10:34 A.M.

- Land Planning Coordinator, Alan Davis (FFS) opened the meeting by introducing himself and explained the purpose and statutory framework for the Watson Island State Forest 10-Year Land Management Plan process. He explained that the Plan is not an annual work plan or detailed operational plan but provides general and conceptual guidance for management of Watson Island State Forest (WISF) for the next 10-year period.
- Mr. Davis confirmed compliance with the Florida Sunshine Law advising MPAG members to not discuss the draft outside of the public meetings. He stated that the meetings are open to the public, recorded, and minutes taken.
- Mr. Davis stated that both MPAG meetings are open to the public and proper notice was given. The meetings were advertised in the St. Augustine Record on October 21, 2022; Florida Administrative Register, FFS webpage, as well as posted at the kiosks in the Bunnell District. The meetings were announced at the St. Johns County Commissioners meeting on October 18, 2022. He noted that the draft plan goes through various approvals before and after the MPAG meetings but that the FFS Director is granted final authority on changes to the draft plan. He described the day's two meetings: The first meeting is informational and

provides opportunity for public comment; the 1:00 p.m. Workshop meeting provides opportunity for the MPAG members to discuss the public input and to share their personal comments on the draft plan. The public is welcome to attend the Workshop, but participation is limited to MPAG members.

- Mr. Davis introduced Brian Camposano (FFS) who explained the webinar features and how to share comments.
- Mr. Davis then requested MPAG Member introductions and attendance was taken.
- Mr. Davis asked the advisory group to elect an MPAG chairperson. Anthony Petellat was elected to serve as chairperson.
- Mr. Davis reiterated the purpose of this meeting is to receive public input which would be later discussed in the Workshop. He acknowledged the in-person location and asked the FFS administrators to apprise of any persons attending. Justina Jones stated that no attendees were present.
- Mr. Davis then introduced Forester Jeff Darr who presented a PowerPoint presentation of the 10-Year Plan. Mr. Davis asked if there were any clarifying questions regarding the presentation. Ms. Crosby stated that she had observed the forest boundary depicted on a presentation map but did not recognize the second outlined parcel. Mr. Darr explained that the forest is divided into two separate tracts, the Watson Island tract to the west and the Warner tract to the east; together being distinguished as one forest. He added that the Watson Island tract is predominantly swamp thus the Warner tract receives the majority of management activities such as road maintenance and prescribed burns.
- Ms. Crosby asked for the surrounding forests to be pointed out. Mr. Darr identified several conservation lands on the map that are protected from development.
- Mr. Davis asked if there are any further questions.
- Mr. Davis then thanked everyone for participating and adjourned the public hearing portion of the meetings.

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

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

October 28, 2022

1:00 P.M.

Meeting Minutes

MPAG Members Present:

- | | |
|--------------------|---|
| • Anthony Petellat | Bunnell District Manager, Florida Forest Service (FFS) |
| • Nicholas Smith | Representing Tyler Mosteller of St. Johns River Water Management District |
| • Wade Brenner | Florida Fish and Wildlife Commission |
| • Nicole Crosby | St. Johns Soil & Water District |
| • Ricky Lackey | National Wild Turkey Federation |
| • Matt Donovan | Local Property Manager |

MPAG Members Not Present:

- | | |
|-------------------------------|-------------------------------|
| • Billy Lipthrott | Local Property Manager |
| • Representative Sarah Arnold | St. Johns County Commissioner |

FFS Staff:

- | | |
|-------------------|--|
| • Alan Davis | Land Planning Coordinator |
| • Brian Camposano | Forest Management Assistant Bureau Chief |
| • Justina Jones | Bunnell District Forestry Resource Administrator |
| • Jeff Darr | Bunnell District Forester |
| • Donald King | Bunnell District Forestry Supervisor II |
| • Patti Anderson | Land Management Planner |

Guests:

- Tonianne Attard
- Michael Bishop

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

- Land Planning Coordinator, Alan Davis introduced himself and opened the WISF MPAG Workshop by conducting an MPAG member sound check. He reminded the MPAG members of the Florida Sunshine law and that the purpose of the workshop is to review and discuss the draft and that any edits made to the draft would be presented to the FFS Director for approval. He noted that minutes will be recorded and emailed to the MPAG members and will be approved via negative response review. MPAG member appointment will terminate when the final draft is submitted to the Acquisition Restoration Council. Forester Jeff Darr was available to make proposed changes to the draft during the page-by-page review.
- Mr. Davis asked if any MPAG members had comments regarding the public hearing conducted earlier. None followed. No attendees were reported at the in-person venue.
- Page 10: Mr. Donovan observed palmettos in a presentation photo and asked if FFS had considered palmetto berry sales. Ms. Jones replied that across all Florida State Forests, palmetto berry sales are not a designated revenue source at this time.
- Page 12: Mr. Darr noted that Durban is no longer a fire tower site.

- Mr. Davis asked if there were any questions or comments on the exhibits. Ms. Crosby asked on behalf of the Land Acquisition Management Program (LAMP) if FFS or the MPAG members have knowledge of any properties available for acquisition to expand current conservation lands, including Watson Island State Forest. Mr. Davis acknowledged the Florida Forever acquisition program and noted the FFS's interest in acquiring properties and the need for willing sellers. Ms. Crosby indicated her familiarity with Florida Forever and recommended LAMP's matching funds opportunities. Mr. Davis advised Ms. Crosby to contact Mr. Darr, Ms. Jones, or himself should property adjacent to The Forest come available. Ms. Crosby asked if there are any sellers that he is aware of. Mr. Davis replied that he would have to research current projects adjacent to WISF. Ms. Crosby asked to keep LAMP in mind as a resource.
- Mr. Donovan noted that the north end of the Watson Island tract borders SR 13 and access to the river from the road is difficult. His interpretation of the plan is that conditions are not conducive to making a path. Mr. Petellat answered that that upland portion is so small that it couldn't contain a parking area. The small area immediately drops into swamp so constructing a boardwalk to the river would require a lot of resources and extensive tree-clearing.
- He then asked each MPAG member to comment on the draft plan. Mr. Brenner concurred with the plan in recommending improvement of public access and prescribed fire; acknowledging limited resources and funding for smaller properties, but that FFS is doing what they can. Ms. Crosby added that she believes public access should be a priority. Mr. Donovan supports the multiple-use concept. All remaining present MPAG members commented favorably.
- Mr. Davis noted that the draft will be submitted to the Acquisition and Restoration Council for review. Consideration by the Council will likely occur at the April 2023 public meeting.
- Mr. Davis thanked everyone for their time and participation and adjourned the meeting.

Workshop Meeting End Time: 1:25 P.M.

Exhibit V

Arthropod Control Plan St. Johns County



Florida Department of Agriculture and Consumer Services
Division of Agricultural Environmental Services

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

NICOLE "NIKKI" FRIED
COMMISSIONER

Section 388.4111, F.S.
Telephone: (850) 617-7995

Return to:
Mosquito Control Program
3125 Conner Blvd, Bldg 6,
Tallahassee, Florida 32399-1650

For use in documenting an Arthropod Control Plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein. Fill this form out if control work is necessary or planned.

Name of Designated Land: Watson Island State Forest

Is Control Work Necessary: ☒ Yes ☐ No

Location:

Land Management Agency: Forest Management Bureau

Are Arthropod Surveillance Activities Necessary? ☒ Yes ☐ No
If "Yes", please explain:

According to the Florida Administration Code 5E-13 surveillance shall be conducted to determine the species and numbers of both pestiferous and disease bearing arthropods. After an emergence of mosquitoes, they will affect citizens, business, and tourists.

Which Surveillance Techniques Are Proposed?
Please Check All That Apply:

☒ Landing Rate Counts	☒ Light Traps	☐ Sentinel Chickens
☒ Citizen Complaints	☒ Larval Dips	☐ Other

If "Other", please explain:

Arthropod Species for Which Control is Proposed:

Culex restuans, *Cx. erraticus*, *Cx. nigripalpus* (WNV), *Cx. quinquefasciatus* (SLE), *Coquilleltidia perturbans* (EEE)

Proposed Larval Control:

Proposed larval monitoring procedure:

Are post treatment counts being obtained:

☒ Yes

☐ No

Biological Control of Larvae:

Might predacious fish be stocked:

☒ Yes

☐ No

Other biological controls that might be used:

Material to be Used for Larvaciding Applications:

(Please Check All That Apply:)

☒ Bti

☒ Bs

☒ Methoprene

☐ Non-Petroleum Surface Film

☐ Other, please specify:

Please specify the following for each larvacide:

Chemical or Common name:

☒ Ground

☒ Aerial

Rate of application: As directed by label

Method of application: Truck, Helicopter, Drone

Proposed Adult Mosquito Control:

Aerial adulticiding ☒ Yes ☐ No

Ground adulticiding ☒ Yes ☐ No

Please specify the following for each adulticide: Permethrin, Sumithrin, Bifenthrin

Chemical or common name: Aqualuer 20-20, Duet, Talstar P

Rate of application: As directed by label

Method of application: Truck, Aerial, Drone, Backpack, Thermal Fogger

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities:

Spraying by air will only commence after coordination between Anastasia Mosquito Control District management and the local Land Manager. Aerial adulticide applications will only be considered after an Emergency Declaration for a mosquito-borne threat to human populations.

Records:

Are records being kept in accordance with Chapter 388, F.S.:

☒ Yes ☐ No

Records Location: AMCD Office

How long are records maintained: 5 years

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed? None

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed: No

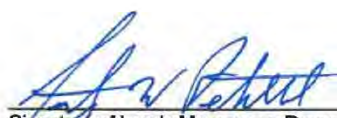
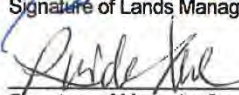
Include proposed operational schedules for water fluctuations:

List any periodic restrictions, as applicable, for example peak fish spawning times.

Proposed Modification of Aquatic Vegetation: None

Land Manager Comments:

Arthropod Control Agency Comments:

 01/22/2021
Signature of Lands Manager or Representative Date
 1-20-21
Signature of Mosquito Control Director / Manager Date