A Management Plan for the Escribano Point Wildlife Management Area 2015 - 2025

Santa Rosa County, Florida

Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MARJORY STONEMAN DOUGLAS BUILDING
3900 COMMONWEALTH BOULEVARD
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT
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JONATHAN P. STEVERSON
SECRETARY

April 29, 2015

Mr. Gary Cochran
Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, FL 32399-1600

RE: Escribano Point Wildlife Management Area - Lease #4447

Dear Mr. Cochran:

The Division of State Lands, Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund, hereby approves the Escribano Point Wildlife Management Area management plan. The next management plan update is due April 29, 2025.

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

Sincerely,

Marianne S. Gengenbach
Office of Environmental Services
Division of State Lands

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A Management Plan
For the
Escribano Point Wildlife Management Area

Santa Rosa County, Florida

Owned by the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida

Managed by the Florida Fish and Wildlife Conservation Commission

January 2015

Approved Thomas H. Eason

Thomas Eason
Director, Division of Habitat and Species Conservation

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LAND MANAGEMENT PLAN EXECUTIVE SUMMARY

Lead Agency: Florida Fish and Wildlife Conservation Commission (FWC)
Common Name of Property: Escribano Point Wildlife Management Area
Location: Santa Rosa County, Florida
Acreage Total: 4,057 acres
Acreage Breakdown:

Land Cover Classification	Acres	Percent of Total Area
Artificial pond	1.1	<0.1%
Beach dune	30.8	0.8%
Bottomland forest	76.2	2.0%
Developed	3.4	0.1%
Dome swamp	147.2	3.8%
Mesic flatwoods	161.6	4.2%
Mesic hammock	97.3	2.5%
Pine plantation	20.0	0.5%
Salt marsh	116.0	3.0%
Sandhill	126.1	3.2%
Scrubby flatwoods	184.7	4.7%
Shrub bog	2,891.8	74.3%
Wet flatwoods	37.4	1.0%

*GIS-calculated acreage for land cover classification varies slightly from actual total acreage.
Lease/Management Agreement No.: 4447 (Appendix 13.1)
Use: Single _____ Multiple X
Management Responsibilities: Agency FWC
Responsibilities LEAD, SUBLESSEE (Wildlife Management Area, resource protection, law enforcement)
Designated Land Use: Wildlife Management Area
Sublease (s): None
Encumbrances: Reservation of a 100-ft, nonexclusive right-of-way easement and reservation of an undivided ½ interest in oil, gas and mineral rights on the original 1,166 acres.
Type Acquisition: Florida Forever and donations to the State from the Deepwater Horizon oil spill settlement
Unique Features: Natural: Natural communities include shrub bog, scrubby flatwoods, mesic flatwoods, dome swamp, sandhill, and salt marsh. The area is uniquely located to provide recreational access to saltwater, freshwater, wetlands and uplands. The EPWMA protects a large tract of undeveloped shoreline in Santa Rosa County and lands adjacent to the Yellow River Marsh Aquatic Preserve.
Archaeological/Historical: 17 sites documented within EPWMA.
Management Needs: Habitat restoration and improvement; public access and recreational opportunities; hydrological preservation and restoration; exotic and invasive species maintenance and control; imperiled species habitat maintenance, enhancement, and restoration.
Acquisition Needs/Acreage: 614 acres FWC Additions and Inholdings list; 335 acres remaining in the Escribano Point Florida Forever Project (Figure 4).
Surplus Lands/Acreage: None
Public Involvement: Management Advisory Group consensus building meeting and Public Hearing (Appendix 13.2)

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

ARC Approval Date _____ BTIITF Approval Date: _____

Comments: _____

Land Management Plan Compliance Checklist

Required for State-owned conservation lands over 160 acres

Section A: Acquisition Information Items			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
1	The common name of the property.	18-2.018 & 18-2.021	1
2	The land acquisition program, if any, under which the property was acquired.	18-2.018 & 18-2.021	6-7
3	Degree of title interest held by the Board, including reservations and encumbrances such as leases.	18-2.021	10
4	The legal description and acreage of the property.	18-2.018 & 18-2.021	1, Appendix 13.1
5	A map showing the approximate location and boundaries of the property, and the location of any structures or improvements to the property.	18-2.018 & 18-2.021	2, 5, 84
6	An **assessment** as to whether the property, or any portion, should be declared surplus. *Provide Information regarding **assessment and analysis** in the plan, and provide **corresponding map**.*	18-2.021	58-59
7	Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property. *Please clearly indicate parcels on a map.*	18-2.021	85-86
8	Identification of adjacent land uses that conflict with the planned use of the property, if any.	18-2.021	14
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(10)	6, 9-10
10	Proximity of property to other significant State, local or federal land or water resources.	18-2.021	10-14

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	56-57
12	A description of past and existing uses, including any unauthorized uses of the property.	18-2.018 & 18-2.021	54-55
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	57-58
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	86-87
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	82, Appendix 13.13

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	130
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(10)	76-79
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	131
19	Letter of compliance from the local government stating that the LMP is in compliance with the Local Government Comprehensive Plan.	BOT requirement	Appendix 13.18
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	58, 67-126
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	56
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	Appendix 13.8
23	A statement regarding incompatible use in reference to Ch. 253.034(10).	253.034(10)	58

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

Section C: Public Involvement Items			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
24	A statement concerning the extent of public involvement and local government participation in the development of the plan, if any.	18-2.021	14-15, Appendix 13.2
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(10)	Appendix 13.2
26	LMPs and LMP updates for parcels over 160 acres shall be developed with input from an advisory group who must conduct at least one public hearing within the county in which the parcel or project is located. *Include the advisory group members and their affiliations, as well as the date and location of the advisory group meeting.*	259.032(10)	Appendix 13.2
27	Summary of comments and concerns expressed by the advisory group for parcels over 160 acres	18-2.021	Appendix 13.2
28	During plan development, at least one public hearing shall be held in each affected county. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing. *Include a copy of each County's advertisements and announcements (meeting minutes will suffice to indicate an announcement) in the management plan.*	253.034(5) & 259.032(10)	Appendix 13.2
29	The manager shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. *Include manager's replies to the team's findings and recommendations.*	259.036	67, Appendix 13.3
30	Summary of comments and concerns expressed by the management review team, if required by Section 259.036, F.S.	18-2.021	Appendix 13.3
31	If manager is not in agreement with the management review team's findings and recommendations in finalizing the required 10-year update of its management plan, the managing agency should explain why they disagree with the findings or recommendations.	259.036	Appendix 13.3

Section D: Natural Resources			
Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
32	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding soil types. *Use brief descriptions and include USDA maps when available.*	18-2.021	16-18, Appendix 13.4
33	Insert FNAI based natural community maps when available.	ARC consensus	28-29
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	16-52

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	19-54
36	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding beaches and dunes.	18-2.021	53
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	53
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	19-54
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	19-39
40	The identification or resources on the property that are listed in the Natural Areas Inventory. *Include letter from FNAI or consultant where appropriate.*	18-2.021	19-52, Appendix 13.5
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(10)	67-125
42	Habitat Restoration and Improvement	259.032(10) & 253.034(5)	
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.	↓	67-126
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.		67-125
42-C.	The associated measurable objectives to achieve the goals.		93-104
42-D.	The related activities that are to be performed to meet the land management objectives and their associated measures. *Include fire management plans - they can be in plan body or an appendix.*		Appendices: 13.7, 13.8, 13.9, 13.10, 13.11, 13.13
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.		127-129, Appendix 13.14
43	***Quantitative data description of the land regarding an inventory of forest and other natural resources and associated acreage. *See footnote.*	253.034(5)	19-52
44	Sustainable Forest Management, including implementation of prescribed fire management	18-2.021, 253.034(5) & 259.032(10) ↓	
44-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).		67-126

44-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		80-81
44-C.	Measurable objectives (see requirement for #42-C).		99-100
44-D.	Related activities (see requirement for #42-D).		Appendices: 13.7, 13.8, 13.9, 13.10, 13.11, 13.13
44-E.	Budgets (see requirement for #42-E).		127-129, Appendix 13.14
45	Imperiled species, habitat maintenance, enhancement, restoration or population restoration	259.032(10) & 253.034(5)	
45-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	67-126
45-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		73-75
45-C.	Measurable objectives (see requirement for #42-C).		94, 96
45-D.	Related activities (see requirement for #42-D).		Appendices: 13.7, 13.8, 13.9, 13.10, 13.11, 13.13
45-E.	Budgets (see requirement for #42-E).		127-129, Appendix 13.14
46	***Quantitative data description of the land regarding an inventory of exotic and invasive plants and associated acreage. *See footnote.*	253.034(5)	75-76
47	Place the Arthropod Control Plan in an appendix. If one does not exist, provide a statement as to what arrangement exists between the local mosquito control district and the management unit.	BOT requirement via lease language	Appendix 13.17
48	Exotic and invasive species maintenance and control	259.032(10) & 253.034(5)	
48-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	67-126
48-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		75-76
48-C.	Measurable objectives (see requirement for #42-C).		96-97
48-D.	Related activities (see requirement for #42-D).		Appendices: 13.7, 13.8, 13.9, 13.10, 13.11, 13.13
48-E.	Budgets (see requirement for #42-E).		127-129, Appendix 13.14

Section E: Water Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
49	A statement as to whether the property is within and/or adjacent to an aquatic preserve or a designated area of critical state concern or an area under study for such designation. *If yes, provide a list of the appropriate managing agencies that have been notified of the proposed plan.*	18-2.018 & 18-2.021	4, 6
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	52
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	19-36
52	***Quantitative description of the land regarding an inventory of hydrological features and associated acreage. *See footnote.*	253.034(5)	20, 52-53
53	Hydrological Preservation and Restoration	259.032(10) & 253.034(5)	
53-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	67-126
53-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		79-80
53-C.	Measurable objectives (see requirement for #42-C).		99
53-D.	Related activities (see requirement for #42-D).		Appendices: 13.7, 13.8, 13.9, 13.10, 13.11, 13.13
53-E.	Budgets (see requirement for #42-E).		127-129, Appendix 13.14

Section F: Historical, Archeological and Cultural Resources

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
54	**Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding archeological and historical resources. *Include maps of all cultural resources except Native American sites, unless such sites are major points of interest that are open to public visitation.*	18-2.018, 18-2.021 & per DHR's request	53-54, Appendix 13.13
55	***Quantitative data description of the land regarding an inventory of significant land, cultural or historical features and associated acreage.	253.034(5)	53-54, Appendix 13.13
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	81-82, Appendix 13.13
57	Cultural and Historical Resources	259.032(10) & 253.034(5)	
57-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	67-126

57-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		81-82
57-C.	Measurable objectives (see requirement for #42-C).		100
57-D.	Related activities (see requirement for #42-D).		Appendices: 13.7, 13.8, 13.9, 13.10, 13.11, 13.13
57-E.	Budgets (see requirement for #42-E).		127-129, Appendix 13.14

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

Section G: Facilities (Infrastructure, Access, Recreation)

Item #	Requirement	Statute/Rule	Page Numbers and/or Appendix
58	***Quantitative data description of the land regarding an inventory of infrastructure and associated acreage. *See footnote.*	253.034(5)	82, 84
59	Capital Facilities and Infrastructure	259.032(10) & 253.034(5)	
59-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	67-126
59-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		82
59-C.	Measurable objectives (see requirement for #42-C).		100-101
59-D.	Related activities (see requirement for #42-D).		Appendices: 13.7, 13.8, 13.9, 13.10, 13.11, 13.13
59-E.	Budgets (see requirement for #42-E).		127-129, Appendix 13.14
60	*** Quantitative data description of the land regarding an inventory of recreational facilities and associated acreage.	253.034(5)	82, 84
61	Public Access and Recreational Opportunities	259.032(10) & 253.034(5)	
61-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	↓	67-126
61-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).		76-79
61-C.	Measurable objectives (see requirement for #42-C).		97-98
61-D.	Related activities (see requirement for #42-D).		Appendices: 13.7, 13.8, 13.9, 13.10, 13.11, 13.13
61-E.	Budgets (see requirement for #42-E).		127-129, Appendix 13.14

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	iii
63	Place the Executive Summary at the front of the LMP. Include a physical description of the land.	ARC and 253.034(5)	i
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	59-67
65	Key management activities necessary to achieve the desired outcomes regarding other appropriate resource management.	259.032(10)	67-125
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(5)	127-129, Appendix 13.14
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(10)	127-129, Appendix 13.14
68	A statement of gross income generated, net income and expenses.	18-2.018	56, 127-129 Appendix 13.14

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

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1 Introduction and General Information

Conserving more than ten miles of natural coastline and associated natural and archaeological resources along the shorelines of Blackwater Bay, East Bay and the Yellow River Estuary in Santa Rosa County Florida, the Escribano Point Wildlife Management Area (EPWMA) provides important upland and shoreline protection to the estuarine system and adjacent bays, which contains sea grass beds vital to fish and other marine species. The EPWMA's coastal wetlands and shrub bogs preserve and serve as a protective buffer to the Yellow River Marsh Aquatic Preserve to the west and the Eglin Air Force Base (Eglin AFB) to the east. Connecting to a landscape of adjacent public conservation lands, the EPWMA is part of a network of publicly owned conservation lands that provides habitat for rare plants and animals such as the white-top pitcher plant, Gulf sturgeon, and Florida black bear, and aids in protecting the watershed and water quality in Blackwater Bay, East Bay, and the Yellow River Aquatic Preserve. The shorelines of EPWMA also provide stopover and foraging habitat for migrating shorebird species, among which are listed species such as the piping plover, Cuban snowy plover, least tern and black skimmer.

Extending immediately inland to Eglin AFB in southwestern Santa Rosa County, (Figure 1), the EPWMA encompasses approximately 4,057 acres and is located fourteen miles northeast of Pensacola (across Pensacola Bay) and six miles southeast of Milton. Beginning at the northernmost area of EPWMA is an expanse of black needlerush marsh habitat surrounding Catfish Creek and tidal creeks that grade into pine forests at higher elevations. While the southern portion of the EPWMA consists of large areas of shrub bog interspersed with scrubby flatwoods, mesic flatwoods, dome swamp, and mesic hammock along with a variety of other coastal natural communities. Collectively, these natural areas provide important wildlife habitat for imperiled and more common wildlife, protect important archaeological sites, provide important military base buffering for Eglin AFB and provide outstanding opportunities for fish and wildlife based public outdoor recreation.

The EPWMA is managed by the Florida Fish and Wildlife Conservation Commission (FWC), for the conservation of imperiled and more common wildlife and for fish and wildlife based public outdoor recreation. Accordingly, the FWC manages the area to conserve the important natural communities on site that provide habitat for a wide range of imperiled and more common wildlife species, to conserve and restore natural wildlife habitat, to protect and conserve important archaeological sites and to provide high-quality opportunities for hunting, fishing, wildlife viewing, and other fish and wildlife-based public outdoor recreation opportunities including primitive camping, paddling, and hiking. While the FWC is the lead managing agency for EPWMA, the FWC also cooperates and works closely with the Northwest Florida Water Management District (NWFWMD) and the United States Department of Defense (DOD; Air Force) who own and manage adjoining conservation lands, to ensure that resource protection and recreational opportunities are of the highest quality.

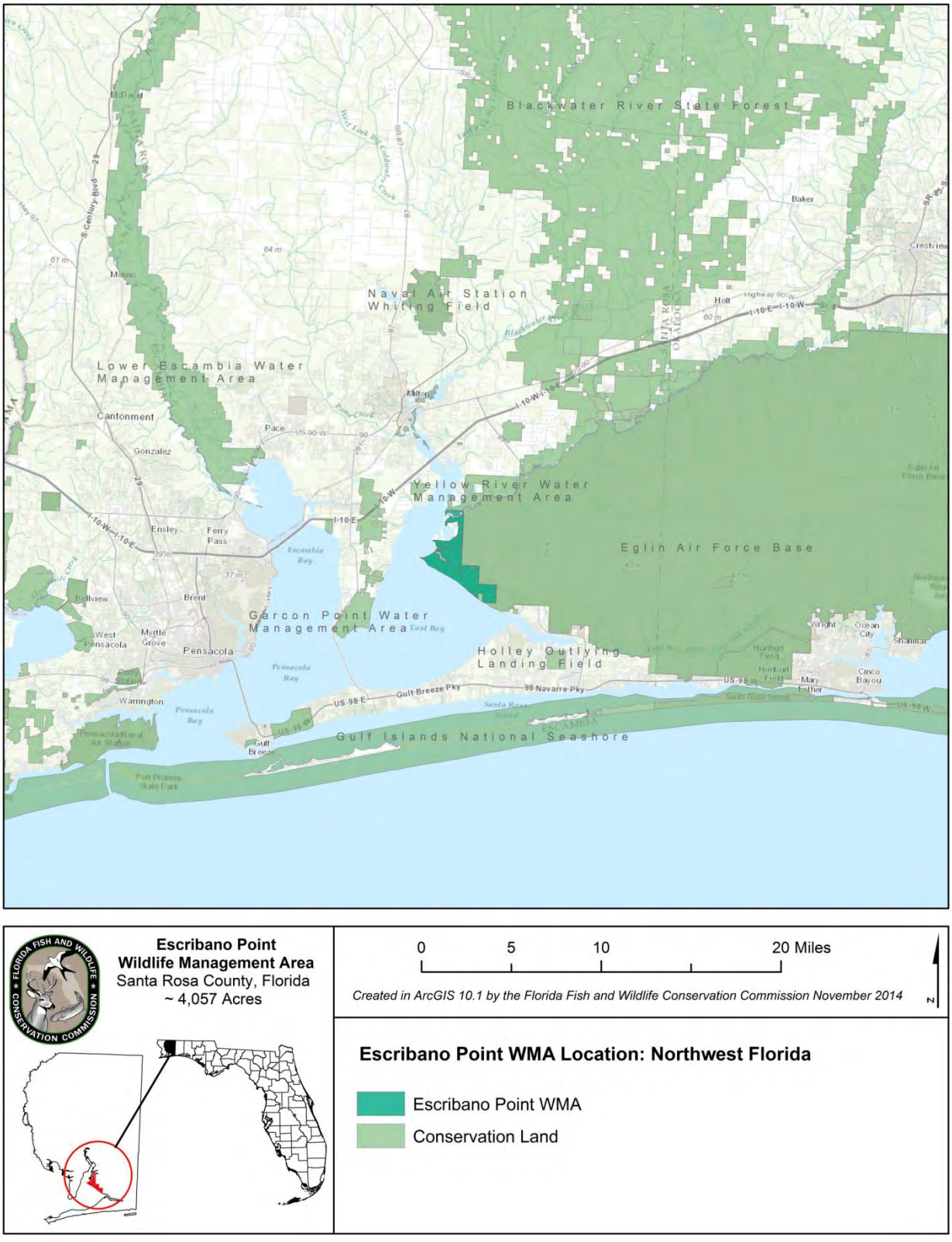


Figure 1. EPWMA Location - Northwest Florida

1.1 Management Plan Purpose

This Management Plan serves as the basic statement of policy and direction for the management of EPWMA. It provides information including the past usage, conservation acquisition history, and descriptions of the natural and cultural resources found on EPWMA. Furthermore, it identifies the FWC's future management intent, goals and associated short and long-term objectives, as well as identifying challenges and solutions. This Management Plan has been developed to guide each aspect of EPWMA's management for the next ten years.

This Management Plan is submitted for review to the Acquisition and Restoration Council (ARC) acting on behalf of the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) of the State of Florida through the Florida Department of Environmental Protection's Division of State Lands (DSL), in compliance with paragraph seven of Lease No. 4447 (Appendix 13.1) and pursuant to Chapters 253 and 259, Florida Statutes (FS), and Chapters 18-2 and 18-4, Florida Administrative Code (FAC). Format and content were drafted in accordance with ARC requirements for management plans and the model plan outline provided by the staff of the DSL. Terms (Appendix 13.14) used in this Management Plan describing management activities and associated measurable goals and objectives conform to those developed for the Land Management Uniform Accounting Council Biennial Land Management Operational Report.

1.1.1 FWC Planning Philosophy

The FWC's planning philosophy includes emphasizing management recommendation consensus-building among stakeholders and input from user groups and the general public at the beginning of the planning process. The FWC engages stakeholders by convening a Management Advisory Group (MAG) and solicits additional input from user groups and the general public at a public hearing (Appendix 13.2). The FWC also engages area, district, and regional agency staff, as well as other FWC staff expertise, in developing this Management Plan, thereby facilitating area biologist and manager "ownership" of the Management Plan, and thus the development of meaningful management intent language, goals with associated measurable objectives, timelines for completion, and the identification of challenges and solution strategies for inclusion in the EPWMA Management Plan (Sections 5 – 8).

Further management planning input is received through Land Management Reviews (LMR) conducted every five years, which includes a review of the previous Management Plan, as well as a field review of EPWMA. The LMR report (Section 5.1, Appendix 13.3) provides FWC staff with important information and guidance provided by a diverse team of land management auditors, and communicates the recommendations of the LMR team to the FWC so they may be adequately addressed in this Management Plan, and thus guides the implementation of the LMR team recommendations on EPWMA.

Additionally, the FWC maintains transparency and accountability throughout the development and implementation of this Management Plan. A "living document" concept, linking this updated Management Plan to the previous one, is accomplished by reporting on the objectives, management activities, and projects accomplished over the last planning timeframe (previous ten years; see Section 4), to ensure agency accountability through time. Also, in an effort to remain adaptive for the duration of this Management Plan, continuous input and feedback will be collected from FWC staff, stakeholders, user groups, and other interested parties and individuals. As needed, amendments to this Management Plan will be presented to the DSL and the ARC for review and consideration.

1.2 Location

As noted above, the EPWMA is located in Santa Rosa County along the East Bay and Blackwater Bay. The EPWMA is located approximately 6 miles northwest of Navarre, 6 miles southeast of Milton, 14 miles northeast of Pensacola (across Pensacola Bay) and 29 miles southeast of Crestview. The Weaver River (which empties into the Yellow River) runs along part of EPWMA's northern boundary. The NWFWD's Yellow River Water Management Area is located to the north, across the Yellow River. At the northwest boundary, EPWMA is surrounded by herbaceous (estuarine) wetlands along Blackwater Bay, including Catfish Basin. Eglin AFB borders the eastern boundary of EPWMA. The U.S. Forest Service (USFS) manages a parcel located along East Bay in the southeastern corner of the EPWMA that is surrounded by EPWMA on three sides. Two privately-owned single family parcels are inholdings within the Grassy Point tract of EPWMA and are located adjacent to Blackwater Bay. Two privately owned parcels are located adjacent to the northwest border of EPWMA, immediately south of the Yellow River at its entrance to Blackwater Bay. The EPWMA is located in multiple sections in Township 01S, Ranges 27W-28W (Figure 2). Public access to the EPWMA by road is available through Eglin AFB on Choctaw Field Road (Access Easement Appendix 13.6). Access is also available by boat.

EPWMA, *FWC*

The EPWMA is adjacent to the boundary of the Yellow River Marsh Aquatic Preserve (Chapter 18-2.018 and 18-2.021 FAC). The aquatic preserve encompasses approximately 16,000 acres of the Yellow River, Blackwater Bay and East Bay and their associated salt and freshwater marshes and forested wetlands, which provide filtration from pollutants

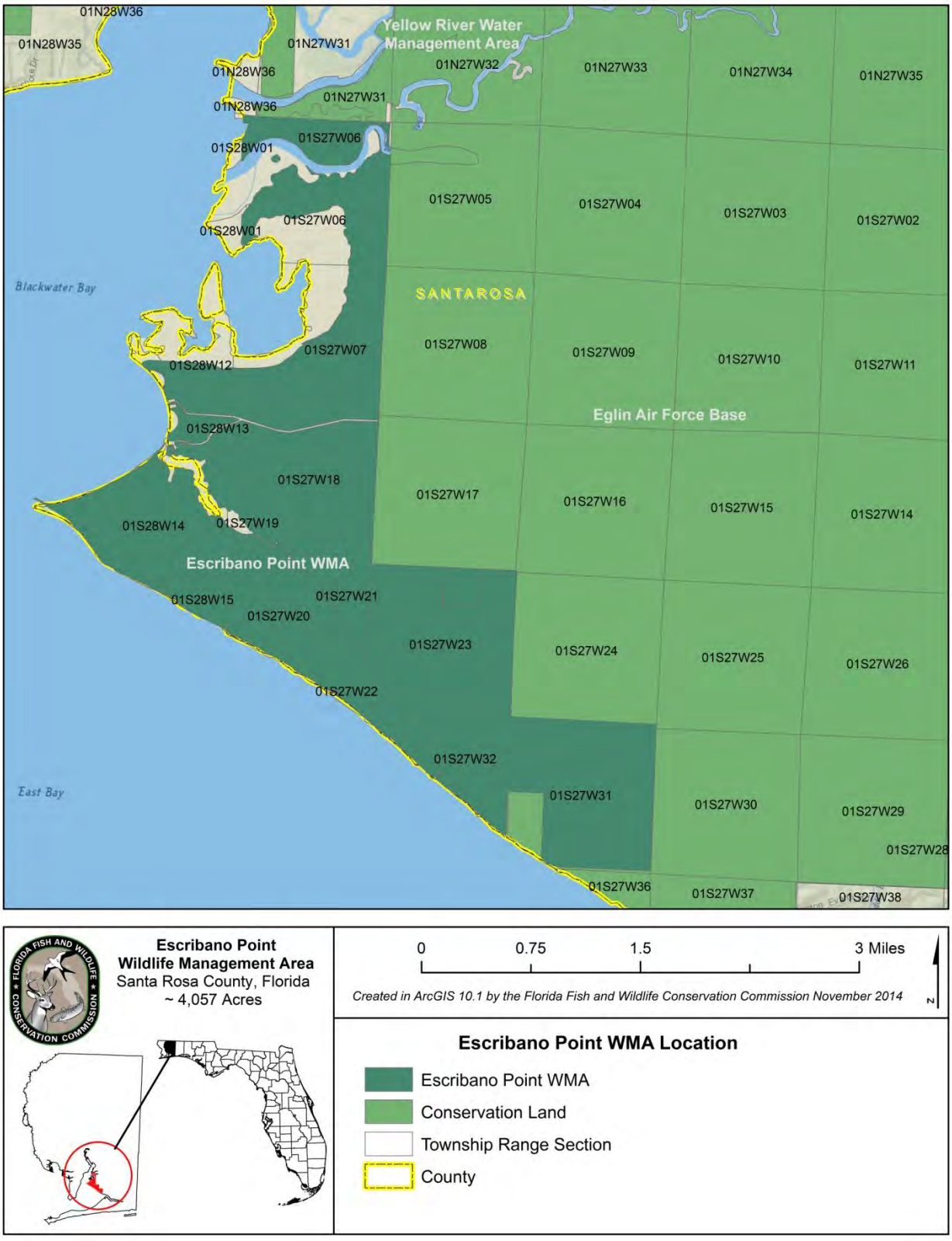


Figure 2. Escribano Point WMA - Township, Range, Sections

and serve as natural flood control. No part of the EPWMA is within or adjacent to an Area of Critical State Concern (Chapter 380.05 FS).

1.3 Acquisition

1.3.1 Purpose for Acquisition of the Property

The state acquired lands within the Escribano Point Florida Forever Project to provide recreational opportunities and natural resource protection for 10.4 miles of shoreline along East Bay and Blackwater Bay, protection for surface water, and a buffer to protect Eglin AFB from impacts associated with development and its potential encroachment.

The EPWMA was also acquired to protect the estuarine system and adjacent Blackwater Bay, which contains sea grass beds vital to fish and other marine species and to further protect the Yellow River by adding to the public shoreline of the Yellow River Water Management Area.

Additionally, lands within the Escribano Point Florida Forever project were selected for Gulf of Mexico restoration projects funded through Deepwater Horizon Gulf Restoration funds due to their high value coastal fish and wildlife habitat located in the East Bay portion of Pensacola Bay at the confluence of the Yellow River and Blackwater River in Santa Rosa County, Florida.

As a result of Deepwater Horizon oil spill in 2010 off of the coast of Louisiana in the Gulf of Mexico, Santa Rosa County's coast experienced persistent and repeated oiling from the Deepwater Horizon oil spill event. Over the course of the event, 93% of the coastal waters within the county experienced oiling. While the full impact of this persistent oiling has not been completely quantified, there is little question that the Deepwater Horizon event created additional stressors that degraded wildlife habitats and impacted coastal wildlife in the region.

Accordingly, mitigating these local impacts have been the impetus behind acquisition, restoration and management projects already completed or planned in the region under Deepwater Horizon Gulf Restoration Programs with the MOEX Offshore 2007, LLC (MOEX) settlement funding, the National Oceanic and Atmospheric Administration's (NOAA) Natural Resources Damage Assessment (NRDA) early Deepwater Horizon Gulf Restoration funding and the National Fish and Wildlife Foundation (NFWF) funded projects within the EPWMA. Uplands south of the river floodplain are protected as part of Eglin AFB. The strategic location of EPWMA within a network of other conservation lands provides for a contiguous system of natural areas spanning over one-half million acres and offering additional protected habitat for wildlife species.

1.3.2 Acquisition History

The EPWMA was acquired through several Florida Forever program acquisitions as well as donations to the state that resulted from of Gulf restoration mitigation associated with the

Deepwater Horizon Oil Spill that occurred in 2010. The original 1,166 acres of EPWMA were acquired by the Board of Trustees in 2004 and subsequently leased to the FWC under the Florida Forever Program as part of the Escribano Point Florida Forever Land Acquisition Project. The Escribano Point Florida Forever project comprises approximately 3,049 acres, with 335 acres remaining to be acquired. This land acquisition project is distributed over a north-south distance of approximately seven miles and over an east-west distance of approximately 4 miles extending to the mouth of the Yellow River.

In 2007, an additional 130 acres was acquired under the Florida Forever program. These additions were also leased to the FWC. In 2012, 1,541 additional acres were donated to the state as part of legal settlement for the 2010 Deepwater Horizon oil spill in the Gulf of Mexico. The property was previously owned by the American Bank of Texas, and was conveyed to the Board of Trustees as mitigation required by a Consent Order between the United States and MOEX Offshore 2007, LLC and MOEX USA Corporation resulting from the Deepwater Horizon oil spill, with the Trust for Public Land (TPL) acting as an intermediary, initially acquiring the tract and then donating it to the Board of Trustees.

The addition of the MOEX parcel to EPWMA provided an additional five miles of shoreline protection along Blackwater and East Bays to help safeguard the quality of water flowing into Pensacola Bay and the Gulf of Mexico. The addition also helped to connect existing parcels within the EPWMA and aid in habitat management practices such as application of prescribed fire and provide substantial new fish and wildlife based public outdoor recreational opportunities.

In 2014, the NWFWMD donated the Grassy Point tract to the Board of Trustees for inclusion in the EPWMA. The NWFWMD acquired the 1,176.6-acre Grassy Point tract from Amerivest Mortgage Emerald Point Development in 2001. Funding sources used to acquire this tract included Florida Forever (purchased 204.5 acres) and Save Our Rivers (purchased 972 acres). Also in 2014, a 40 acre inholding in EPWMA formerly owned by KWY Investments, LLC, was acquired by TPL with Deepwater Horizon Gulf Restoration funds through the NFWF and then donated to the Board of Trustees.

Similarly, in 2014, the TPL acquired and then donated to the Board of Trustees three additional parcels known as the Solar house parcels through Deepwater Horizon Gulf Restoration NFWF funding, located in Section 14, Township 01S, Range 28W totaling approximately 2.5 acres. These parcels will also be leased to the FWC for management as part of the EPWMA. All of the 2014 additions are currently under interim management by the FWC and are expected to be added to the Board of Trustees Lease Number 4447 in 2014 or early 2015. Collectively, each of the above listed acquisitions brought the FWC's lead managed acreage within the EPWMA to 4,057 acres (Figure 3).

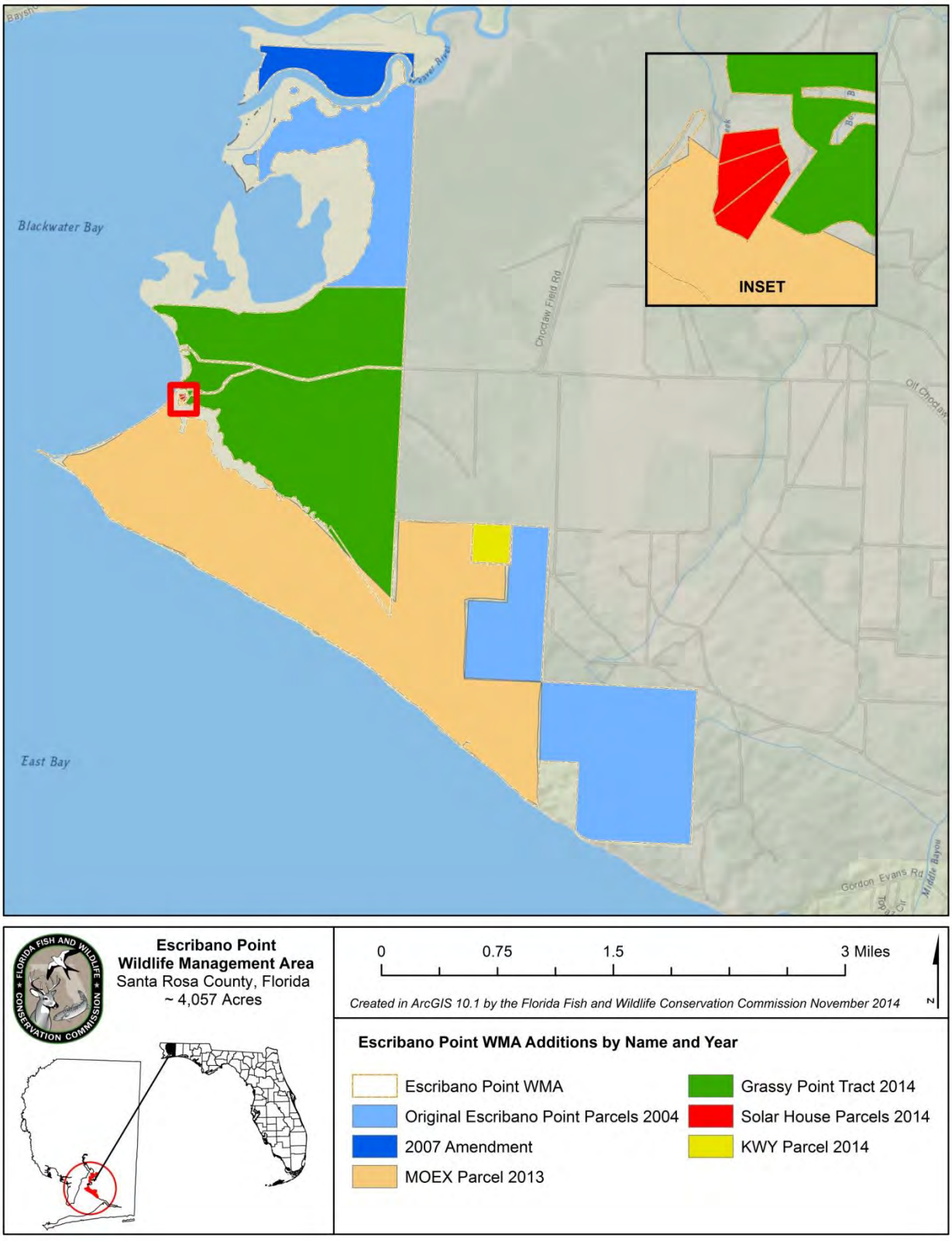


Figure 3. Escribano Point WMA Additions

1.3.3 EPWMA Gulf Restoration - Deepwater Horizon Funding

As a result of the 2010 Deepwater Horizon oil spill, the NRDA legal process set forth in the U.S. Petroleum Oil Spill Act immediately began to document and study the environmental impacts from the spill and determine the compensation to the affected states and agencies (known as the Natural Resource Trustees; "Gulf Restoration Trustees") will receive for the damage to the natural resources or loss of use of such resources. British Petroleum (BP) and the Gulf Restoration Trustees were able to reach an early restoration agreement (Framework Agreement) which provided one billion dollars for early restoration projects.

Consequently, in December 2013, the Gulf Restoration Trustees awarded $2,576,365 for Escribano Point Gulf Restoration projects Under Phase III of the NRDA Framework Agreement. These projects include construction of public access roads and facilities including entrance kiosks, parking areas, fishing and picnicking facilities, primitive camping sites, wildlife viewing facilities and the assessment and mapping activities necessary for developing these facilities.

In early 2013, a U.S. District Court approved two plea agreements resolving the criminal cases against BP and Transocean. The agreements direct funds to the NFWF to fund projects benefitting the natural resources of the Gulf Coast that were impacted by the Deepwater Horizon oil spill. The NFWF will carry out the plea agreement through its newly established Gulf Environmental Benefit Fund. On November 14, 2013 the NFWF announced the funding of $15.7 million for six Florida projects, including $1,231,035 for the Management & Restoration of Escribano Point Coastal Habitat, Phase I.

In November 2014, the NFWF awarded $1,486,800 for Restoration and Management of Escribano Point Coastal Habitat – Phase II. Phase II of the project is designed to complete strategic acquisitions to improve the sustainability of, and provide long-term protection for, the coastal habitat of Escribano Point in Pensacola Bay. Planned acquisitions under this proposal include approximately 590 acres of preserved, high-value coastal wildlife habitat.

As described above, the purchase of the MOEX tract by the TPL resulted from funds issued from a Consent Decree between MOEX and the U.S. Department of Justice. The TPL acquired the MOEX parcel for $2,507,369 and conveyed the property to the Board of Trustees who added it to EPWMA Lease 4447 in May 2013. The facilities to be developed on the area and the projects that will be implemented through the funding sources described above are detailed as objectives in Section 6 of this Management Plan.

1.4 Management Authority

The FWC is the designated lead managing agency for EPWMA under the authority granted by Lease Number 4447 from the Board of Trustees agent, the DSL. Further management authority derives from Article IV, Section 9 of the Florida Constitution as well as the guidance and directives of Chapters 253, 259, 327, 370, 372, 375, 378, 379, 403, 487, 870,

and 597 and of the Florida Statutes. These constitutional provisions and laws provide FWC the authority to protect, conserve, and manage the State's fish and wildlife resources.

1.5 Management Directives

The 50-year Board of Trustees' Lease Agreement Number 4447 with FWC directs FWC to "manage the leased premises only for the conservation and protection of natural and historical resources and resource-based public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 253.023(11), FS." The lease agreement further directs FWC to "implement applicable Best Management Practices for all activities under this lease in compliance with paragraph 18-2.018(2)(h), FAC, which have been selected, developed, or approved by lessor, lessee, or other land managing agencies for the protection and enhancement of the leased premises."

1.6 Title Interest and Encumbrances

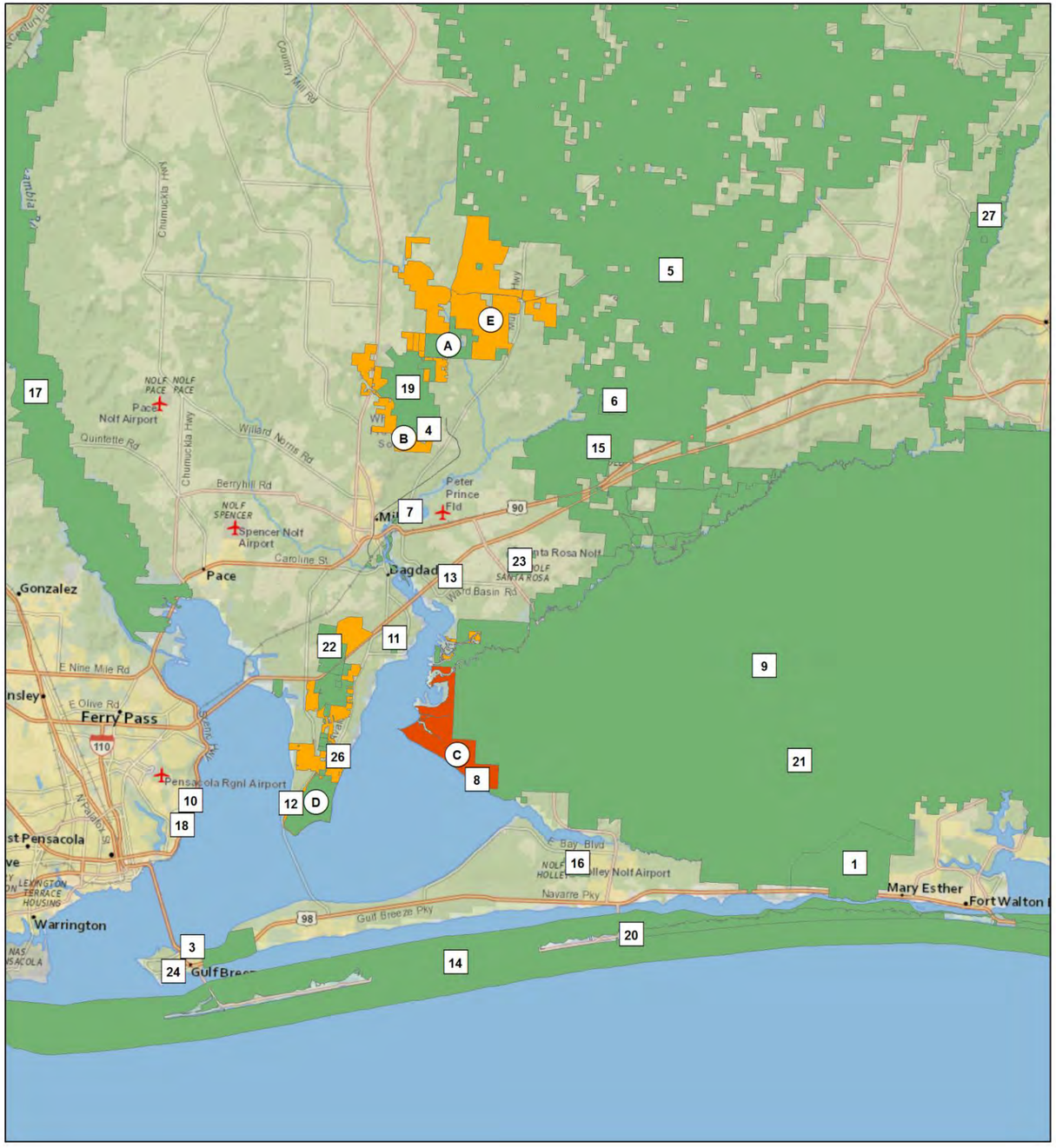
As State-owned lands, title to EPWMA is vested in the Board of Trustees (Governor and Cabinet). In February 2004, the DSL, as staff to the Board of Trustees, entered into Lease Agreement Number 4447, a 50 year lease agreement, granting the FWC management authority for EPWMA. In April 2007, Lease No. 4447 was amended to add 130 acres. In May 2013, 1,541.9 acres were added to Lease No. 4447 for EPWMA.

The two encumbrances of record listed in the Commitment for Title Insurance (Commonwealth Land Title Insurance Company, 2003) are the following: 1. reservation of a 100-ft, nonexclusive right-of-way easement; and 2. reservation of an undivided ½ interest in oil, gas and mineral rights on the original 1,166 acres of EPWMA. The right of way easements and outstanding mineral rights do not impede the FWC's ability to manage the property in conformance with the purposes for acquisition as described in the federal and state covenants and requirements, lease requirements and management directives outlined above. Additionally, the warranty deed conveying the MOEX property from the TPL to the Board of Trustees contains the following restriction:

"As required by the Consent Decree, the property shall be perpetually maintained as a protected area in its natural state consistent with the purpose of preserving and protecting natural habitat and resources and/or water resources in the Gulf of Mexico region (the 'Deed Restriction'). All uses, activities or conditions that are inconsistent with the Deed Restriction are hereby prohibited."

1.7 Proximity to Other Public Conservation Lands

As noted above, the EPWMA's location adjacent to the East Bay, Blackwater Bay, and Yellow River places it within close proximity to a large number of conservation lands (Figure 4). As described above, the strategic location of EPWMA serves as a link among public lands stretching from part of the much larger extent of contiguous private and public lands.



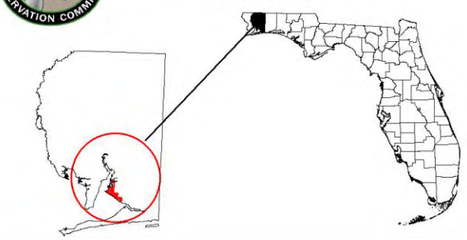
Conservation Lands and Florida Forever Projects

Conservation Lands	Map Label
Air Force Special Operations Command, Hurlburt Field	1
Bay Bluffs Park	2
Baycliff Preserve	3
Blackwater Heritage State Trail	4
Blackwater River State Forest	5
Blackwater River State Park	6
Blackwater River Water Management Area	7
Choctawhatchee National Forest	8
Eglin Air Force Base	9
Escambia Bay Bluffs	10
Garcon Peninsula Mitigation Bank	11
Garcon Point Water Management Area	12
Gillis Road Tract	13
Gulf Islands National Seashore	14
Harold Outlying Landing Field	15
Holley Outlying Landing Field	16
Lower Escambia River Water Management Area	17
Mallory Heights Park #3	18
Naval Air Station Whiting Field	19
Navarre Beach Park	20
Patterson Natural Area	21
Pensacola Bay Mitigation Bank	22
Santa Rosa Outlying Landing Field	23
Shoreline Park South	24
Whiting Park	25
Yellow River Marsh Preserve State Park	26
Yellow River Water Management Area	27

Florida Forever Project	Map Label
Clear Creek/Whiting Field- Phase I	A
Clear Creek/Whiting Field- Phase II	B
Escribano Point	C
Garcon Ecosystem	D
Wolfe Creek Forest	E

Escribano Point Wildlife Management Area

Santa Rosa County, Florida
~ 4,057 Acres



Conservation Lands and Florida Forever Projects in the Vicinity of Escribano Point WMA

Legend

- Escribano Point WMA
- Conservation Lands
- Florida Forever Projects

0 2.5 5 10 Miles

N

Created in ArcGIS 10.1 by the Florida Fish and Wildlife Conservation Commission November, 2014

Figure 4. Conservation Lands and Florida Forever Projects in the Vicinity of EPWMA

Many of these regional conservation lands, including EPWMA, are part of a partnership known as the Gulf Coastal Plain Ecosystem Partnership (GCPEP). While pursuing their individual missions, the GCPEP partners also work to accomplish the GCPEP goal of collectively protecting and managing the exceptional biodiversity of the GCPEP landscape. The GCPEP cooperates through a Steering Committee which makes decisions based on consensus. Collectively, this landowner partnership comprises over one million acres extending from Pine Log State Forest (Bay and Washington counties) on the east to the Tarkiln Bayou Preserve State Park (Escambia County) on the west, and from the Gulf of Mexico on the south into the Conecuh National Forest in Alabama (Covington County) on the north.

Tables 1 and 2 list the conservation lands and Florida Forever projects within a 15-mile radius of the EPWMA, including lands managed by public and private entities, that conserve cultural and natural resources within this region of Florida. Conservation lands immediately adjacent to EPWMA include Eglin AFB, the Yellow River Water Management Area, and the USFS Choctawhatchee parcel. The remaining acreage of the Escribano Point Florida Forever project is the nearest project to EPWMA. Most of the conservation lands listed in Table 1 are owned in full-fee by a public entity; however, there are two wetland mitigation banks in proximity to EPWMA. These areas provide restoration and enhancement of wetlands onsite in advance of wetland impacts on other sites and earn compensatory mitigation credits that can be used to satisfy development mitigation requirements for future wetland impacts.

Table 1. Conservation Lands in the Vicinity (15 Miles) of EPWMA

Federal Government	**Managing Agency**
Air Force Special Operations Command, Hurlburt Field	DOD, USAF
Choctawhatchee National Forest	USFS
Eglin Air Force Base	DOD, USAF
Gulf Islands National Seashore	NPS
Harold Outlying Landing Field	DOD, Navy
Holley Outlying Landing Field	DOD, Navy
Naval Air Station Whiting Field	DOD, Navy
Patterson Natural Area	DOD, USAF
Santa Rosa Outlying Landing Field	DOD, Navy
Whiting Park	DOD, Navy

State of Florida	**Managing Agency**
Blackwater Heritage State Trail	DEP-DRP
Blackwater River State Forest	FDACS, FFS
Blackwater River State Park	DEP-DRP
Gillis Road Tract	Not currently assigned to a managing agency

Table 1. Conservation Lands in the Vicinity (15 Miles) of EPWMA

Yellow River Marsh Aquatic Preserve	DEP-FCO
Yellow River Marsh Preserve State Park	DEP-DRP

County/City	**Managing Agency**
Bay Bluffs Park	City of Pensacola
Baycliff Preserve	City of Gulf Breeze
Escambia Bay Bluffs	City of Pensacola
Mallory Heights Park #3	City of Pensacola
Navarre Beach Park	Santa Rosa County
Shoreline Park South	City of Gulf Breeze

Water Management District	**Managing Agency**
Blackwater River Water Management Area	NWFWMD
Garcon Point Water Management Area	NWFWMD
Lower Escambia River Water Management Area	NWFWMD
Yellow River Water Management Area	NWFWMD

Mitigation Bank	**Managing Agency**
Garcon Peninsula Mitigation Bank	Garcon Peninsula Mitigation Bank, LLC
Pensacola Bay Mitigation Bank	Westervelt Ecological Services

Acronym Key	**Agency Name**
DEP	Florida Department of Environmental Protection
DOD	United State Department of Defense
DRP	Division of Recreation and Parks
FCO	Florida Coastal Office
FDACS	Florida Dept. of Agriculture and Consumer Services
FFS	Florida Forest Service
NPS	National Park Service
NWFWMD	Northwest Florida Water Management District
USAF	United States Air Force
USFS	United States Forest Service

Table 2. Florida Forever Projects in the Vicinity (15 Miles) of EPWMA

Project Name	**GIS Acres**
Clear Creek/Whiting Field Florida Forever BOT Project- Phase I	2,235.2
Clear Creek/Whiting Field Florida Forever BOT Project- Phase II	2,809.5
Escribano Point Florida Forever BOT Project	3,057.4
Garcon Ecosystem Florida Forever BOT Project	7,446.2

Table 2. Florida Forever Projects in the Vicinity (15 Miles) of EPWMA

Project Name	GIS Acres
Wolfe Creek Forest Florida Forever BOT Project	10,141.8

1.8 Adjacent Land Uses

As described above, the EPWMA is primarily surrounded by publicly owned conservation lands and water bodies, most notably sharing an eastern border with Eglin AFB and neighboring the Blackwater and East Bays to the west. In Santa Rosa County, the EPWMA is currently zoned primarily as R1 (single family residential, 4 units per acre) and RR1 (rural residential single family, 2 units per acre). The areas of EPWMA located in Township 01S, Range 27W, Section 31-32 are primarily zoned R1-APZ 1, and R1-APZ 2, zones associated with military activities on Eglin AFB. Accident Potential Zone 1 (APZ) is an area beyond the clear zone that exhibits a measurable potential for accidents relative to the clear zone. The APZ may curve to follow flight tracks. The APZ 2 is an area beyond APZ 1 that exhibits a measurable potential for aircraft accidents relative to APZ 1 or the clear zone. Zoning for Eglin AFB and the Yellow River Water Management Area is MIL (military) and is AG (agriculture/rural residential, density is one unit per acre), respectively. Zoning north of the Yellow River is RR1. The FWC will work with Santa Rosa County to ensure zoning regulations are updated to reflect FWC management of EPWMA and development of recreational facilities on the area that would conflict with the current zoning of the property. This will require the FWC to work with the County to issue an administrative rezoning for the area so that the public access and use facilitates described in Sections 6.5 and 6.9 will be in compliance with zoning ordinances.

The future land use designation for EPWMA is single family residential (SFR) and conservation/recreation. The future land use designation for the adjacent Eglin AFB is military. Other surrounding future land uses are conservation/recreation (Yellow River Water Management Area), agriculture, and single family residential (north of the Yellow River).

The U.S. Census 2013 population estimate for Santa Rosa County is 161,096 people. The 2013 populations of Pensacola and Milton were estimated to be 52,703 and 9,323 individuals, respectively. The Bureau of Economic and Business Research (BEBR) produces Florida's official state and local population estimates and projections. The BEBR's mid-range population projection for Santa Rosa County in 2025 is 192,800 people.[1]

1.9 Public Involvement

The FWC conducted a Management Advisory Group (MAG) meeting in Gulf Breeze, Florida on October 8, 2014, to obtain input from both public and private stakeholders regarding management of EPWMA. Results of this meeting were used by the FWC to develop management goals and objectives and to identify opportunities and strategies for inclusion

in this Management Plan. A summary of issues and opportunities raised by the MAG, as well as a listing of participants, is included as Appendix 13.2.

EPWMA MAG meeting, *FWC*

Additionally, following the EPWMA MAG Meeting, a public hearing, as required by Chapter 259.032(10), FS, was held in Gulf Breeze, Florida on November 6, 2014. The report of that hearing is also contained in Appendix 13.2. A website is also maintained for receipt of public input at http://myfwc.com/conservation/terrestrial/management-plans/develop-mps/ . Further testimony and input is received at a public hearing held by the ARC. Input received from all public involvement efforts has been considered in the development of this Management Plan.

2 Natural and Cultural Resources

2.1 Physiography and Topography

The EPWMA is located in the Gulf Coastal Lowlands physiographic province. The Gulf Coastal Lowlands are low-lying, relatively undissected level plains, a region characterized by elevations ranging from sea level to 100 feet above mean sea level.[2] The surface is relatively flat and characterized by karstic topography and shallow, sandy soils with muck in wetland areas.[3]

The coastal portion of Santa Rosa County along Blackwater Bay and East Bay extends from sandhill elevations of over 100 feet down to sea level. The northernmost area of EPWMA is flat and low, with elevations ranging from approximately five feet to sea level. Elevations in the southern two parcels are mostly gently sloping from 25 feet down to sea level. However, small areas of the northeastern corners of these two parcels reach into higher

Mouth of the Fundy Bayou at EPWMA, *FWC*

sandhills, with elevations in the range of 45 to 75 feet.

2.1.1 Climate

Santa Rosa County experiences a warm temperate climate. The temperature for the City of Milton during the period 1948 to 2008 ranged from an average of 51 degrees Fahrenheit (F) in January to 81 degrees F in July. Average total annual precipitation during the period 1948 to 2008 was 66.5 inches, during which period rainfall was highest during the month of July (7.8 inches) and lowest in October (3.8 inches). The driest months were May (4.2 inches) and October. The wet season normally extends from June (7.3 inches) through September (6.0 inches), while winter and fall are normally considered to be drier seasons.

2.1.2 Soils

The Natural Resource Conservation Service (NRCS) soils maps displaying the EPWMA's soil series and depth to water table are presented as Figures 5 and 6. There are nine series at EPWMA, with Dorovan-Pamlico association and Rutledge loamy sand covering the majority of the area. Dorovan-Pamlico association soils are nearly level, very poorly drained, organic soils underlain by sandy material.[2] Rutledge loamy sand is also very poorly drained, nearly level and is located along stream bottoms, ponds, and in low upland flats. Soils series descriptions were developed using NRCS geographic information system (GIS) data for EPWMA and are included as Appendix 13.4.

2.1.3 Geologic Conditions[4]

The surface geologic units at Santa Rosa County are primarily the Citronelle Formation and Pleistocene/Holocene sediments. The geology of Santa Rosa County, as reflected on the U.S. Department of the Interior, United States Geological Survey's (USGS) website (http://mrdata.usgs.gov/geology/state/fips-unit.php?code=f12113) is as follows:

2.1.3.1 Citronelle Formation (Pliocene)

The Citronelle Formation covers 76% of Santa Rosa County at the surface and is widespread in the Gulf Coastal Plain. The Citronelle Formation grades laterally, through a broad facies transition, into the Miccosukee Formation of the eastern Florida panhandle. The Citronelle Formation is a siliciclastic, deltaic deposit that is lithologically similar to, and time equivalent with, the Cypresshead Formation and, at least in part, the Long Key Formation (Cunningham et al., 1998) of the peninsula. In the western panhandle, some of the sediments mapped as Citronelle Formation may be reworked Citronelle. The lithologies are the same and there are few fossils present to document a possible younger age. The Citronelle Formation consists of gray to orange, often mottled, unconsolidated to poorly consolidated, very fine to very coarse, poorly sorted, clean to clayey sands. It contains significant amounts of clay, silt and gravel which may occur as beds and lenses and may vary considerably over short distances. Limonite nodules and limonite-cemented beds are common.

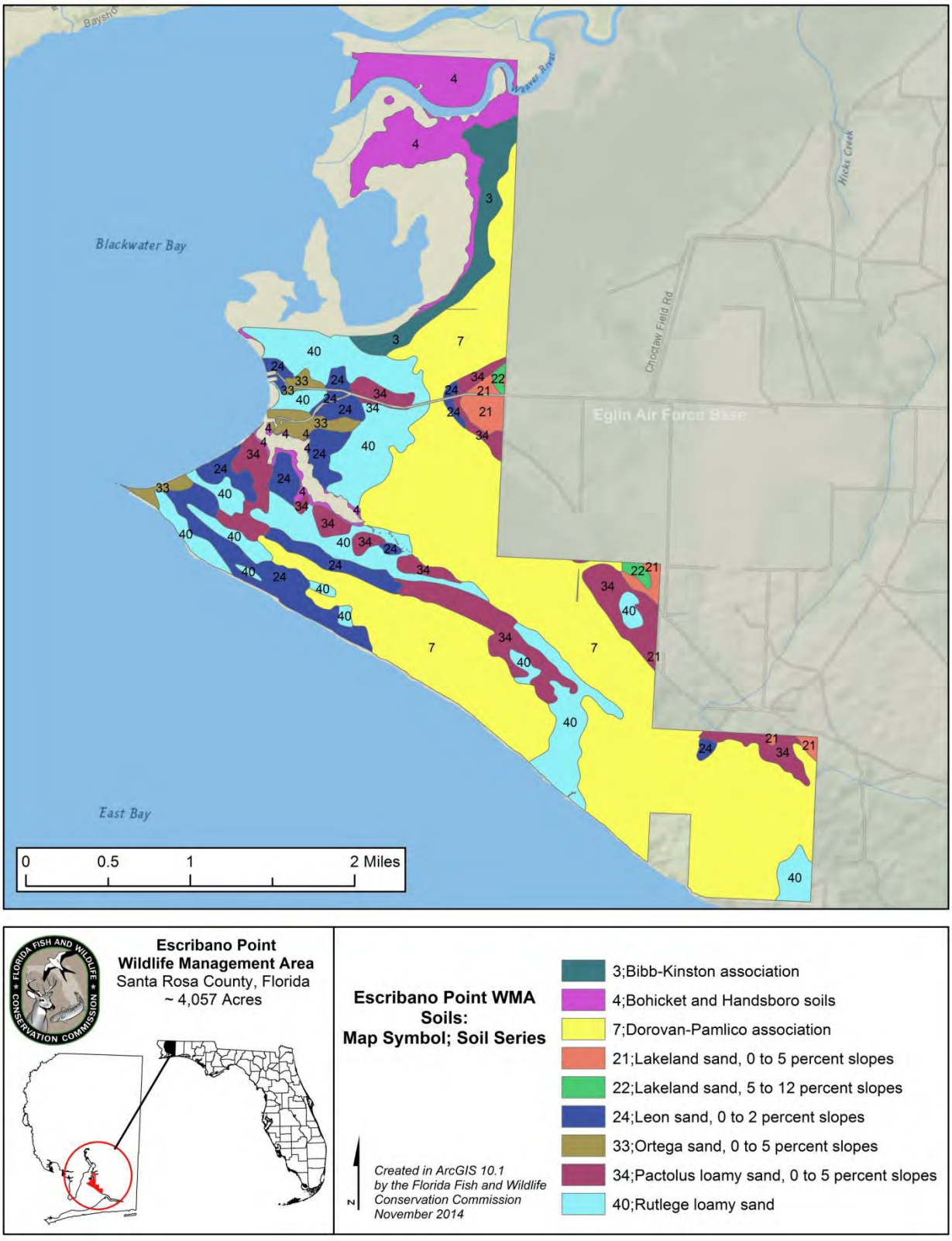


Figure 5. Escribano Point WMA Soils

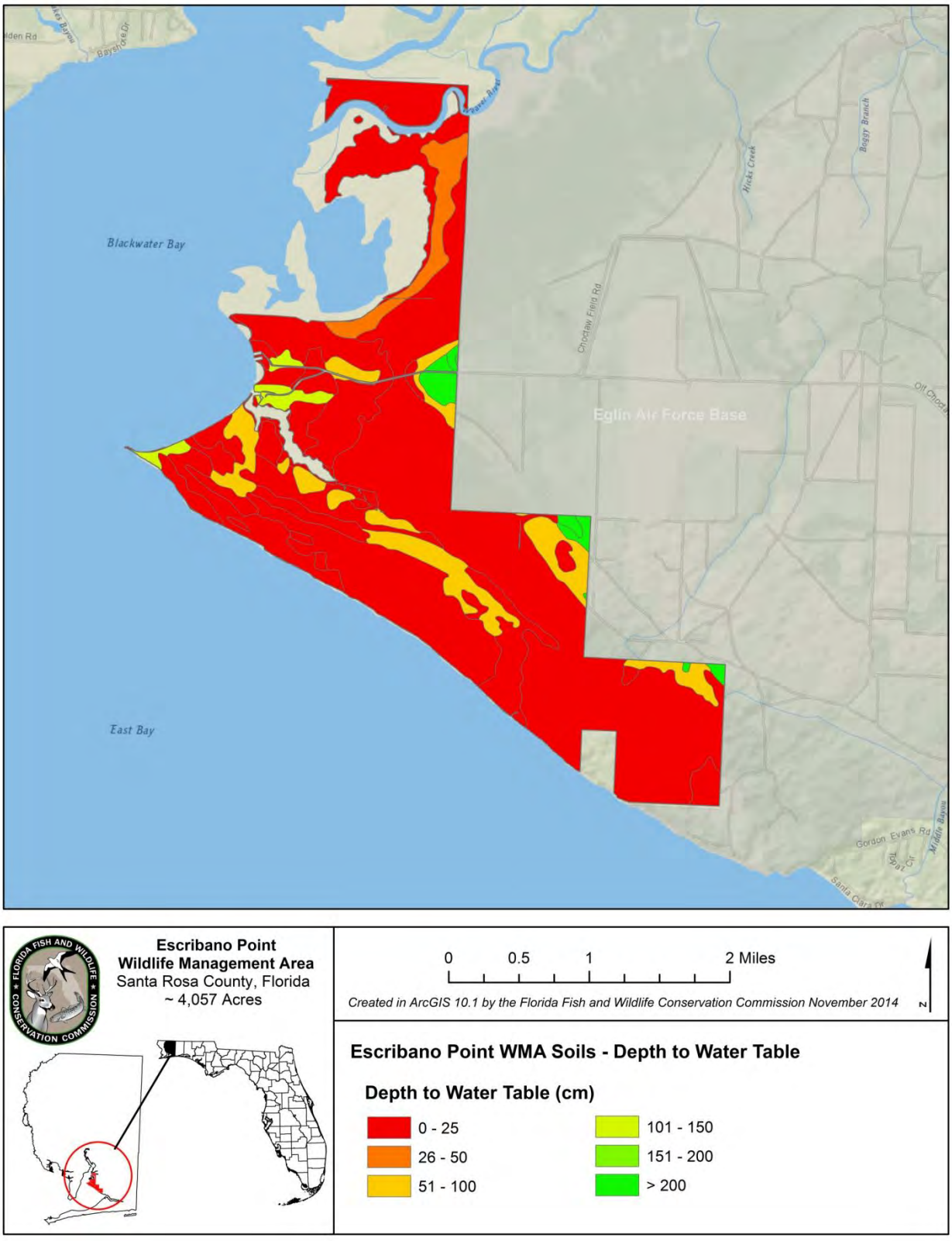


Figure 6. Escribano Point WMA Soils - Depth to Water Table

Marine fossils are rare but fossil pollen, plant remains and occasional vertebrates are found. Much of the Citronelle Formation is highly permeable. It forms the Sand and Gravel Aquifer of the surficial aquifer system. Lithology: delta; sand; clay or mud; silt; gravel.

2.1.3.2 Holocene sediments (Holocene)

Holocene sediments cover 0.1% of Santa Rosa County. Holocene sediments in Florida occur near the present coastline at elevations generally less than 5 feet (1.5 meters). The sediments include quartz sands, carbonate sands and muds, and organics. Lithology: beach sand; clay or mud; biogenic sediment.

2.1.3.3 Undifferentiated sediments (Pleistocene/Holocene)

Undifferentiated sediments cover less than 0.1% of Santa Rosa County. Much of Florida's surface is covered by a varying thickness of undifferentiated sediments consisting of siliciclastics, organics and freshwater carbonates. The siliciclastics are light gray, tan, brown to black, unconsolidated to poorly consolidated, clean to clayey, silty, unfossiliferous, variably organic-bearing sands to blue green to olive green, poorly to moderately consolidated, sandy, silty clays. Gravel is occasionally present in the panhandle. Organics occur as plant debris, roots, disseminated organic matrix and beds of peat. Freshwater carbonates, often referred to as marls in the literature, are scattered over much of the State. These carbonates often contain organics. The dominant fossils in the freshwater carbonates are mollusks. Lithology: clay or mud; beach sand; silt; gravel; peat; sand.

2.2 Vegetation

Through the services of the Florida Natural Areas Inventory (FNAI), the natural communities at EPWMA were mapped in 2014, including the recent additions to the area described in Section 1.3 and the area's historic natural communities. The original 1,166 acres (Escribano Point Parcels in the Yellow River Wildlife Management Area, EPYRWMA) were previously mapped in 2006 and remapped in 2013, prior to the additions to the area. Table 3 lists occurring community types alphabetically along with the accompanying acreage and percentages for each type. The FNAI describes 10 natural communities and three altered landcover types, artificial pond, developed areas, and pine plantation, at EPWMA. The largest community type found on the EPWMA is shrub bog (74.3%), followed by scrubby flatwoods (4.7%), mesic flatwoods (4.2%), dome swamp (3.8%), sandhill (3.2%), and salt marsh (3.0%), respectively.

In conjunction with natural community mapping, the FWC and the FNAI have assembled an inventory of imperiled plants documented on EPWMA or with a high potential to occur on the area (Table 4), native plants (Table 5), and exotic plants (Table 6).

Table 3. Natural Communities and Altered Landcover Types at EPWMA

Community Type	Acres	Percentage*
Artificial pond	1.1	<0.1%
Beach dune	30.8	0.8%
Bottomland forest	76.2	2.0%
Developed	3.4	0.1%
Dome swamp	147.2	3.8%
Mesic flatwoods	161.6	4.2%
Mesic hammock	97.3	2.5%
Pine plantation	20.0	0.5%
Salt marsh	116.0	3.0%
Sandhill	126.1	3.2%
Scrubby flatwoods	184.7	4.7%
Shrub bog	2,891.8	74.3%
Wet flatwoods	37.4	1.0%

* Percentage of FNAI mapped acreage differs from total EPWMA acreage

Table 4. EPWMA: Imperiled Plants Documented or with High Potential to Occur

Common Name	Scientific Name	Status
Arkansas oak	*Quercus arkansana*	ST
Ashe's magnolia	*Magnolia ashei*	SE
Baltzell's sedge	*Carex baltzellii*	ST
Beaked spikerush	*Eleocharis rostellata*	SE
Curtiss' sandgrass	*Calamovilfa curtissii*	ST
Florida flame azalea	*Rhododendron austrinum*	SE
Hairy wild indigo	*Baptisia calycosa* var. *villosa*	ST
Hairy-peduncled beakrush	*Rhynchospora crinipes*	SE
Hummingbird flower	*Macranthera flammea*	SE
Panhandle lily	*Lilium iridollae*	SE
Pinewoods bluestem	*Andropogon arctatus*	ST
Purple pitcherplant	*Sarracenia purpurea*	ST
Silky camellia	*Stewartia malacodendron*	SE
Spoonleaf sundew	*Drosera intermedia*	ST
Sweet pitcherplant	*Sarracenia rubra*	ST
White-top pitcherplant	*Sarracenia leucophylla*	SE
Yellow fringeless orchid	*Platanthera integra*	SE

Abbreviations: SE - State listed endangered; ST - State listed threatened

Table 5. Native Plant Species Documented at EPWMA

Common Name	Scientific Name
Adam's needle	*Yucca filamentosa*
American holly	*Ilex opaca*
Arrowhead	*Sagittaria* sp.
Aster	*Symphyotrichum* sp.
Atlantic white cedar	*Chamaecyparis thyoides*
Bald cypress	*Taxodium distichum*
Beaked panicum	*Panicum anceps*
Beakrush	*Rhynchospora* sp.
Bedstraw St. John's wort	*Hypericum galioides*
Bigleaf sumpweed	*Iva frutescens*
Black titi	*Cliftonia monophylla*
Blackberry	*Rubus* sp.
Blue huckleberry	*Gaylussacia frondosa* var. *tomentosa*
Blue maidencane	*Amphicarpum muhlenbergianum*
Bluejack oak	*Quercus incana*
Bluestem	*Andropogon* sp.
Bracken fern	*Pteridium aquilinum*
Broomsedge bluestem	*Andropogon virginicus*
Bulltongue arrowhead	*Sagittaria lancifolia*
Bushy bluestem	*Andropogon glomeratus*
Cabbage palm	*Sabal palmetto*
Carolina ash	*Fraxinus caroliniana*
Carolina redroot	*Lachnanthes caroliana*
Carolina yellow-eyed grass	*Xyris caroliniana*
Cat greenbrier	*Smilax glauca*
Cattail	*Typha* sp.
Chalky bluestem	*Andropogon virginicus* var. *glaucus*
Chapman's beaksedge	*Rhynchospora chapmanii*
Cinnamon fern	*Osmunda cinnamomea*
Club-moss	*Lycopodiella* sp.
Clustered beaksedge	*Rhynchospora glomerata*
Coastal sweetpepperbush	*Clethra alnifolia*
Coastalplain St. John's wort	*Hypericum brachyphyllum*
Coastal plain yellow-eyed grass	*Xyris ambigua*
Cockspur pricklypear	*Opuntia pusilla*
Common pawpaw	*Asimina triloba*
Common persimmon	*Diospyros virginiana*
Coral greenbrier	*Smilax walteri*
Coralbean	*Erythrina herbacea*

Table 5. Native Plant Species Documented at EPWMA

Common Name	Scientific Name
Dahoon	*Ilex cassine*
Darrow's blueberry	*Vaccinium darrowii*
Diamond oak	*Quercus hemisphaerica*
Dog fennel	*Eupatorium capillifolium*
Dogtongue wild buckwheat	*Eriogonum tomentosum*
Drumheads	*Polygala cruciata*
Dwarf huckleberry	*Gaylussacia dumosa*
Dwarf palmetto	*Sabal minor*
Earleaf greenbrier	*Smilax auriculata*
Early whitetop fleabane	*Erigeron vernus*
Eastern poison ivy	*Toxicodendron radicans*
Eastern purple bladderwort	*Utricularia purpurea*
Elliott's blueberry	*Vaccinium elliottii*
Falase rosemary	*Conradina canescens*
False indigobush	*Amorpha fruticosa*
Fascicled beaksedge	*Rhynchospora fascicularis*
Fetterbush	*Lyonia lucida*
Flatsedge	*Cyperus* sp.
Flattened pipewort	*Eriocaulon compressum*
Florida anisetree	*Illicium floridanum*
Florida tickseed	*Coreopsis floridana*
Foliage flower	*Phyllanthus angustifolius*
Foxtail club-moss	*Lycopodiella alopecuroides*
Gallberry	*Ilex glabra*
Goldenrod	*Solidago* sp.
Gopher apple	*Licania michauxii*
Groundsel tree	*Baccharis halimifolia*
Hairy chaffhead	*Carphephorus paniculatus*
Hairy laurel	*Kalmia hirsuta*
Highbush blueberry	*Vaccinium corymbosum*
Large gallberry	*Ilex coriacea*
Largeleaf marshpennywort	*Hydrocotyle bonariensis*
Laurel greenbrier	*Smilax laurifolia*
Laurel oak	*Quercus laurifolia*
Little bluestem	*Schizachyrium scoparium*
Live oak	*Quercus virginiana*
Loblolly pine	*Pinus taeda*
Longleaf pine	*Pinus palustris*
Longleaf threeawn	*Aristida palustris*

Table 5. Native Plant Species Documented at EPWMA

Common Name	Scientific Name
Long-leaved panic grass	*Panicum longifolium*
Lovegrass	*Eragrostis* sp.
Low panic grass	*Dichanthelium* sp.
Michaux's hawthorn	*Crataegus michauxii*
Muscadine	*Vitis rotundifolia*
Myrtle dahoon	*Ilex cassine* var. *myrtifolia*
Myrtle oak	*Quercus myrtifolia*
Narrowfruit horned beaksedge	*Rhynchospora inundata*
Narrowleaf silkgrass	*Pityopsis graminifolia*
Narrowleaf sunflower	*Helianthus angustifolius*
Needle rush	*Juncus roemerianus*
Nutrush	*Scleria* sp.
October flower	*Polygonella polygama*
Odorless bayberry	*Myrica inodora*
Oneflower honeycombhead	*Balduina uniflora*
Orange milkwort	*Polygala lutea*
Panic grass	*Panicum* sp.
Peppervine	*Ampelopsis arborea*
Piedmont blacksenna	*Seymeria pectinata*
Pignut hickory	*Carya glabra*
Pinewoods bluestem	*Andropogon arctatus*
Pineywoods dropseed	*Sporobolus junceus*
Pink sundew	*Drosera capillaris*
Pinkscale gayfeather	*Liatris elegans*
Pond cypress	*Taxodium ascendens*
Purple blustem	*Andropogon glomeratus* var. *glaucopsis*
Purple pitcherplant	*Sarracenia purpurea*
Red buckeye	*Aesculus pavia*
Red cedar	*Juniperus virginiana*
Red chokeberry	*Photinia pyrifolia*
Red maple	*Acer rubrum*
Roundpod St. John's wort	*Hypericum cistifolium*
Royal fern	*Osmunda regalis* var. *spectabilis*
Royal snoutbean	*Rhynchosia cytisoides*
Rusty blackhaw	*Viburnum rufidulum*
Saltmeadow cordgrass	*Spartina patens*
Saltwater falsewillow	*Baccharis angustifolia*
Sand live oak	*Quercus geminata*
Sand pine	*Pinus clausa*

Table 5. Native Plant Species Documented at EPWMA

Common Name	Scientific Name
Sand post oak	*Quercus margarettae*
Sandyfield beaksedge	*Rhynchospora megalocarpa*
Savannah meadowbeauty	*Rhexia alifanus*
Savannah yellow-eyed grass	*Xyris flabelliformis*
Saw greenbrier	*Smilax bona-nox*
Saw palmetto	*Serenoa repens*
Sawgrass	*Cladium jamaicense*
Sawtooth blackberry	*Rubus argutus*
Seaside goldenrod	*Solidago sempervirens*
Shiny blueberry	*Vaccinium myrsinites*
Shortleaf lobelia	*Lobelia brevifolia*
Shortleaf rosegentian	*Sabatia brevifolia*
Silverling	*Baccharis glomeruliflora*
Slash pine	*Pinus elliottii*
Slender flattop goldenrod	*Euthamia caroliniana*
Slender gayfeather	*Liatris gracilis*
Slender woodoats	*Chasmanthium laxum*
Smooth yellow false foxglove	*Aureolaria flava*
Southern cattail	*Typha domingensis*
Southern magnolia	*Magnolia grandiflora*
Southern umbrellasedge	*Fuirena scirpoidea*
Spadeleaf	*Centella asiatica*
Spanish moss	*Tillandsia usneoides*
Sparkleberry	*Vaccinium arboreum*
Sphagnum moss	*Sphagnum* sp.
Spoonleaf sundew	*Drosera intermedia*
St. John's wort	*Hypericum* sp.
St. Andrew's cross	*Hypericum hypericoides*
Swamp azalea	*Rhododendron viscosum*
Swamp bay	*Persea palustris*
Swamp dock	*Rumex verticillatus*
Swamp tupelo	*Nyssa sylvatica* var. *biflora*
Sweet goldenrod	*Solidago odora*
Sweetbay	*Magnolia virginiana*
Switchcane	*Arundinaria gigantea*
Switchgrass	*Panicum virgatum*
Tall jointweed	*Polygonella gracilis*
Tapered witchgrass	*Dichanthelium acuminatum*
Tenangle pipewort	*Eriocaulon decangulare*

Table 5. Native Plant Species Documented at EPWMA

Common Name	Scientific Name
Threeawn	*Aristida* sp.
Titi	*Cyrilla racemiflora*
Toothachegrass	*Ctenium aromaticum*
Trumpet creeper	*Campsis radicans*
Turkey oak	*Quercus laevis*
Twoleaf water milfoil	*Myriophyllum heterophyllum*
Vanillaleaf	*Carphephorus odoratissimus*
Variableleaf sunflower	*Helianthus heterophyllus*
Virginia chain fern	*Woodwardia virginica*
Virginia iris	*Iris virginica*
Water cowbane	*Oxypolis filiformis*
Water oak	*Quercus nigra*
Wax myrtle	*Myrica cerifera*
Whitetop aster	*Sericocarpus tortifolius*
White-top pitcherplant	*Sarracenia leucophylla*
Wild olive	*Osmanthus americanus*
Winged sumac	*Rhus copallinum*
Wiregrass	*Aristida stricta* var. *beyrichiana*
Woody goldenrod	*Chrysoma pauciflosculosa*
Woolly huckleberry	*Gaylussacia mosieri*
Yaupon	*Ilex vomitoria*
Yellow hatpins	*Syngonanthus flavidulus*
Yellow indiangrass	*Sorghastrum nutans*
Yellow jessamine	*Gelsemium sempervirens*
Yellow-eyed grass	*Xyris* sp.

Table 6. Exotic Plant Species at EPWMA

Common Name	Scientific Name
Chinese tallow tree	*Sapium sebiferum*
Guinea grass	*Panicum maximum*
Japanese honeysuckle	*Lonicera japonica*
Mimosa	*Albizia julibrissin*
New world climbing fern	*Lygodium japonicum*
Purple sesban	*Sesbania punicea*
Torpedograss	*Panicum repens*

2.2.1 FNAI Natural Community Descriptions

The following include generic natural community description excerpts from the FNAI Guide

to the Natural Communities of Florida 2010 Edition[5], and have been modified by the FWC for the purposes of this Management Plan. Natural community descriptions specific to the original EPYRWMA acreage were developed by the FNAI in 2006 and updated in 2014. Following the addition of new parcels to the EPWMA in 2013 and 2014, the FNAI completed mapping and development of natural community descriptions for the area in 2014 (Figures 7 and 8).

Beach dune *(30.8 acres)*

Beach dune is a predominantly herbaceous community of wide-ranging coastal specialist plants on the vegetated upper beach and first dune above the beach (foredune). This community is usually built by sea oats, a perennial rhizomatous grass, whose stems trap the sand grains blown off the beach, building up the dune by growing upward to keep pace with sand burial. Other grasses that can tolerate some sand burial include bitter panicgrass and saltmeadow cordgrass.

Shoreline at EPWMA, *FWC*

At EPWMA, beach dune occurs as a very narrow community that immediately borders the Blackwater Bay. This area receives just enough wave energy and sand deposition to be classified as beach dune. Common herbaceous indicators include saltmeadow cordgrass and seaside goldenrod in addition to switchcane, sawgrass, and southern umbrellasedge. Shrubs are commonly sparse and include groundsel tree, swamp bay, and slash pine. This coastline habitat is continually eroding and often contains slash pine with exposed roots and abrupt transitions where sand has been washed away by wave activity. Woody debris is common within the beach dunes areas of EPWMA.

Bottomland Forest *(76.2 acres)*

Bottomland forests are hardwood forests that occur on drier soils at slightly higher elevations than floodplain swamp within river floodplains, and are flooded seasonally. Found in areas intermediate between swamps and uplands, the canopy may be quite diverse with both deciduous and evergreen hydrophytic to mesophytic trees. Bottomland forest is a closed-canopy forest found on terraces and levees within riverine floodplains and in shallow depressions. Bottomland forests along smaller streams are prone to periodic

flooding attributable to localized rainfall that increases seepage and runoff from surrounding uplands. In floodplains along larger rivers and tributaries, bottomland forests on higher terraces, ridges, and levees are subject to only short seasonal floods due to high relief or quickly drained sandy soils, or both conditions.

In the EPWMA, bottomland forest is primarily associated with small seepage streams that enter the Yellow River. In the bottomland forests on the EPWMA, slash pine and Atlantic white cedar are dominant in the canopy, red maple, sweetbay, swamp tupelo, and bald cypress are also common. All of these tree species also characterize the subcanopy. Red cedar, water oak, and live oak are present, but less common. Shrubs are multi-layered and are dominated by Atlantic white cedar, wax myrtle and yaupon. Other shrubs include sapling swamp tupelo, Carolina ash, swamp bay, large gallberry, fetterbush, red chokeberry, odorless bayberry, swamp azalea, and dwarf palmetto.

The herbaceous layer in undisturbed bottomland forests is patchy, depending upon sunlight availability at the forest floor. Although past hurricanes opened up patches in the canopy, allowing considerable sunlight through, there is abundant downed woody debris on the ground as a result, that appears to be suppressing herbaceous vegetation. Patches of largeleaf marsh pennywort, switchcane, spadeleaf, Carolina redroot, early whitetop fleabane, cinnamon fern, and royal fern are common. The rare white-top pitcherplant and purple pitcherplant were also observed in the bottomland forest community. Vines are common and include laurel greenbrier, coral greenbrier, eastern poison ivy, trumpet creeper, and muscadine.

Dome Swamp *(147.2 acres)*

Dome swamps are typically small forested wetlands occurring in depressions within a pyrogenic matrix community, commonly flatwoods or sandhill. These swamps are generally small, but may also be large and shallow. The characteristic dome shape is created by smaller trees that grow in the shallower waters of the outer edge, while taller trees grow in the deeper water in the interior of the swamp. Dome swamps are most often found on flat terraces, where they develop when the overlying sand has slumped into a depression in the underlying limestone, creating a rounded depression connected to a shallow water table. In uplands with clay soils, dome swamps may occupy depressions over a perched water table. Soils in dome swamps are variable, but are most often composed of a layer of peat, which may be thin or absent at the periphery, becoming thicker toward the center of the dome.

In the EPWMA, dome swamp infrequently occurs within the coastal ridge and swale topography that is found along southern section of the area, adjacent to Blackwater Bay. The dome swamp communities become more frequent in the southeastern section of the area.

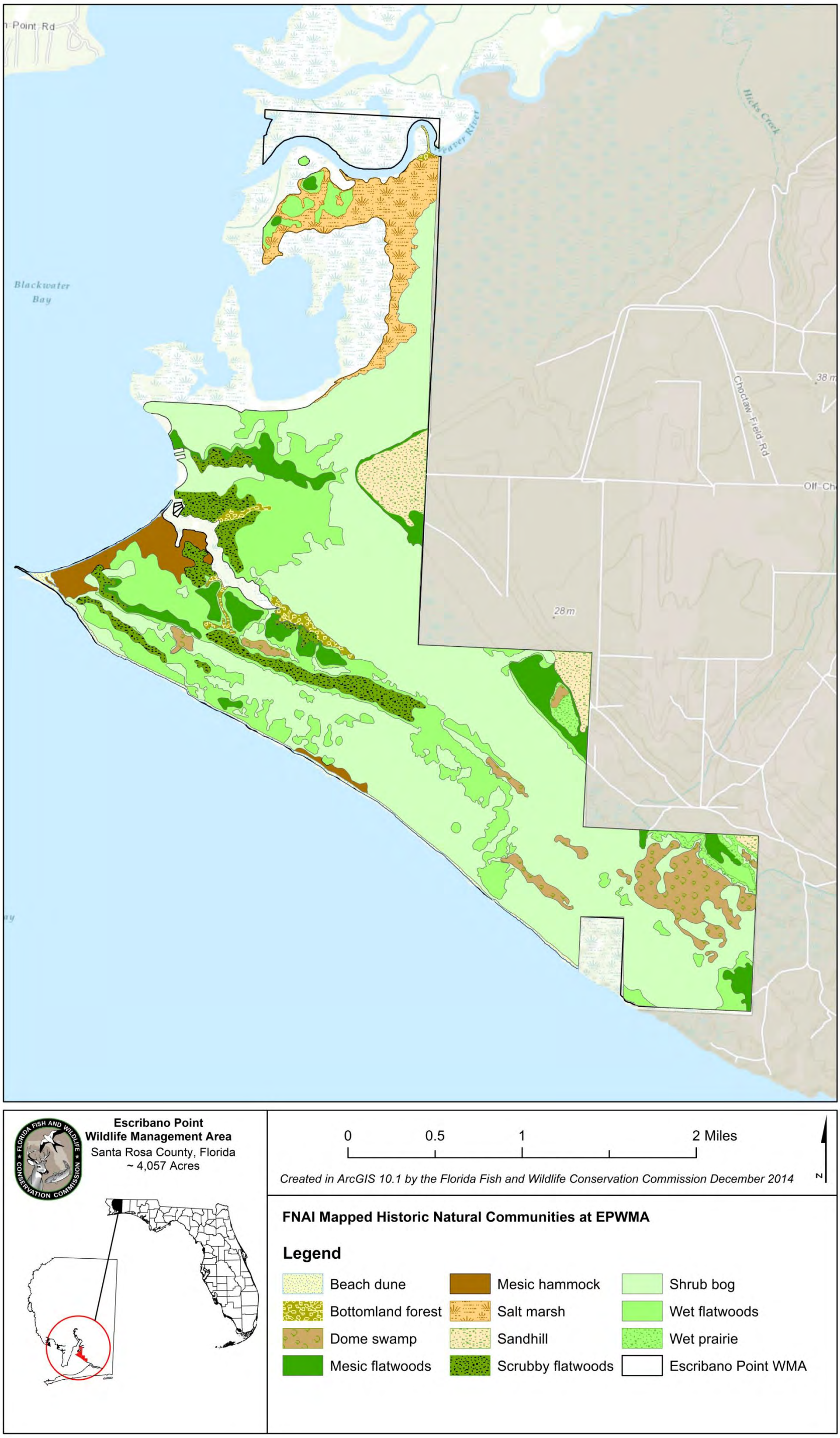


Figure 7. Historic Natural Communities of EPWMA

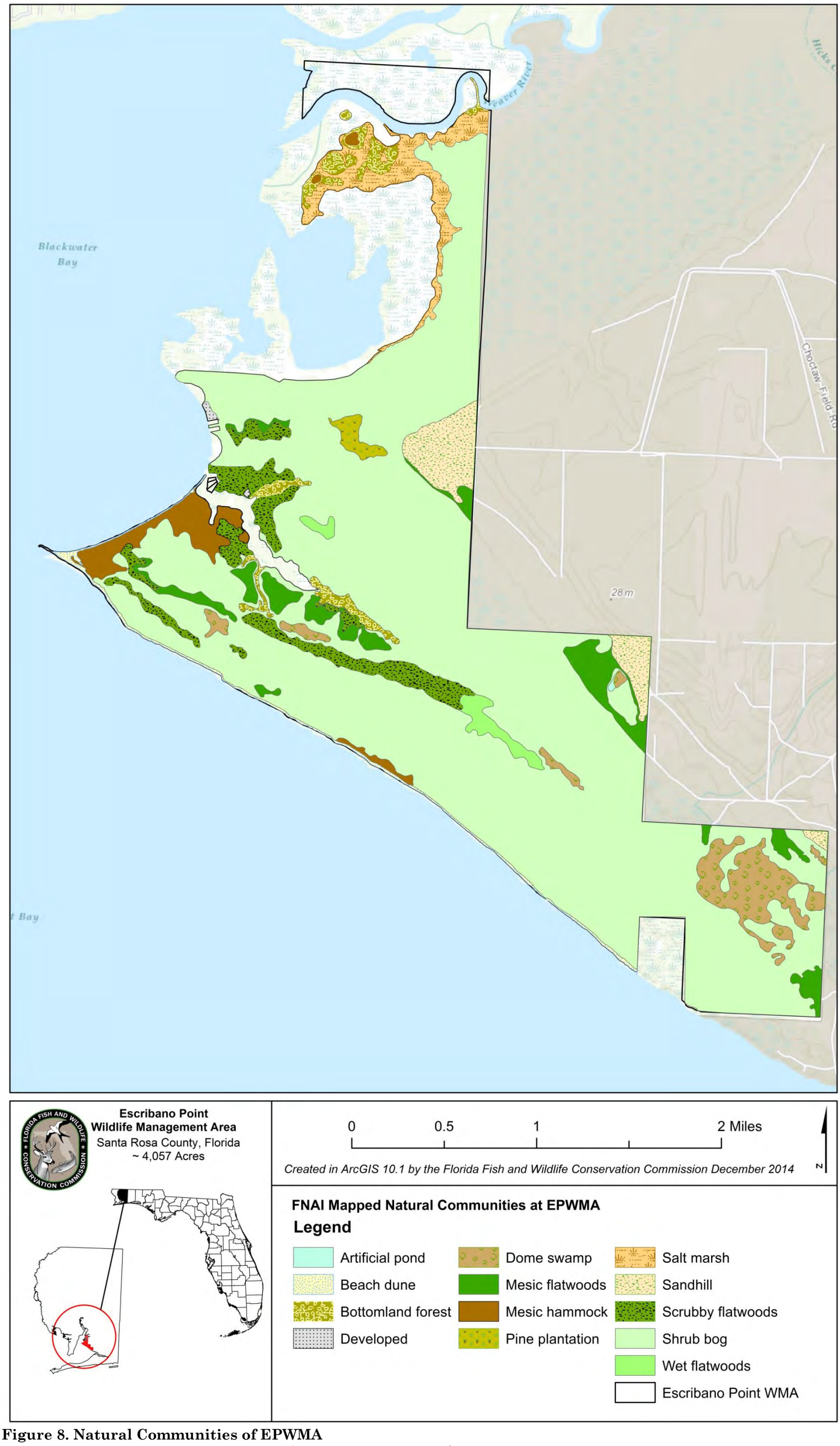


Figure 8. Natural Communities of EPWMA

These habitats are larger, more developed, and begin to form what could be considered a basin swamp.

The canopy and subcanopy trees include swamp tupelo and pond cypress. Species in the tall and short shrub layers are myrtle dahoon, large gallberry, swamp tupelo, swamp bay, fetterbush, and coastalplain St. John's wort. Species in the herbaceous layer include broomsedge bluestem, longleaf threeawn, flattened pipewort, Carolina redroot, water cowbane, panic grasses, beakrushes, yellow-eyed grasses and sphagnum moss. Laurel greenbrier is the predominant vine.

Many dome swamps found at EPWMA contain quality herbaceous vegetation in conjunction with high quality herbaceous groundcover (wiregrass) occurring in the adjacent uplands. These characteristics combined with a hydrologically isolated landscape position give this habitat a high potential to support the rare reticulated flatwoods salamander. The FNAI has documented numerous occurrences of this species in the lands surrounding the EPWMA.

Mesic Flatwoods *(161.6 acres)*

Mesic flatwoods are open canopy forests of widely spaced, uneven-aged longleaf pine in xeric/mesic sites and slash pine in hydric and immediately coastal areas. There is little or no subcanopy, and a dense, low ground cover of diverse herbs and shrubs.

In the mesic flatwoods at EPWMA, the canopy is primarily slash pine, although in some areas longleaf pine occurs. These pines are widely spaced in most of the mesic flatwoods on the area, with a sparse subcanopy of slash pine and occasional laurel oak or live oak. Tall shrubs are patchy and typically sparse, and include yaupon, black titi, titi, large gallberry, sweetbay, wax myrtle, and occasionally silverling and coastal sweetpepperbush. Tree saplings at tall shrub height are common, and include slash pine, longleaf pine, laurel oak, and live oak. Typical short shrubs in the mesic flatwoods include woolly huckleberry, gallberry, hairy laurel, fetterbush, saw palmetto, highbush blueberry, shiny blueberry, and gopher apple. Short shrubs also include small individuals of the tall shrub species.

The herbaceous layer of the mesic flatwoods community is dominated by wiregrass, but also contains a diversity of other grasses and graminoids, including little bluestem, low panic grasses, beakrushes, and indicators of disturbance such as broomsedge bluestem and chalky bluestem. Bracken fern and less often, Virginia chain fern, may also be present. A good diversity of fall flowering species can be found, including savannah meadowbeauty, vanillaleaf, hairy chaffhead, narrowleaf silkgrass, orange milkwort, tall jointweed, narrowleaf sunflower, variable leaf sunflower, and coastal plain yellow-eyed grass. Vines include yellow jessamine, cat greenbrier, laurel greenbrier, and muscadine.

Mesic Hammock ***(97.3 acres)***

Mesic hammocks are closed canopy forests of hardwood species occurring as fringes along water bodies, wetlands or on slight rises within swamps, hydric hammocks, or other hydric communities. Soils are generally sands with a significant organic component. Mesic hammocks can also develop in flatwoods communities as a result of fire exclusion. These are distinguished from hydric hammocks by the dominance of live oak in the canopy and often more saw palmetto in the shrub layer. Fires are rare in mesic hammocks due to incombustibility of the fuels, soil moisture levels, and isolation from pyrogenic communities.

At EPWMA, mesic hammocks occur adjacent to Blackwater Bay and Catfish Basin. There is an emergent canopy of a few slash pine over a dense subcanopy of live oak, pignut hickory, cabbage palm, southern magnolia, red cedar, and a few sweetbay. Spanish moss can be seen in the tree branches. Shrubs are multi-layered and patchy, and include yaupon, cabbage palm, wax myrtle and common persimmon. Herbs are sparse and are often include bracken fern. Vines include peppervine, trumpet creeper, and poison ivy and saw greenbrier.

Salt Marsh ***(116.0 acres)***

Salt marsh is a largely herbaceous community that occurs in the portion of the coastal zone affected by tides and seawater and protected from large waves, either by the broad, gently sloping topography of the shore, by a barrier island, or by location along a bay or estuary. The width of the intertidal zone depends on the slope of the shore and the tidal range. Salt marsh may have distinct zones of vegetation, each dominated by a single species of grass or rush.

Marsh at EPWMA, ***FWC***

The salt marsh within EPWMA occurs at the confluence of the Yellow River and Blackwater Bay. These large marshes are dominated by needle rush, bands of sawgrass within and on the fringes of the marsh. Shrubs are sparse, and are dominated by Carolina ash, with occasional red maple, indicating brackish water. Other herbs common in the marsh are Virginia iris, swamp dock, and arrowhead. Also observed were cinnamon fern, and goldenrod scattered throughout, and a few small patches of cattail.

Sandhill ***(126.1 acres)***

Sandhill is characterized by widely spaced pine trees with a sparse midstory of deciduous

oaks and a moderate to dense groundcover of grasses, herbs, and low shrubs. Sandhill occurs on the rolling topography and deep sands of the Southeastern U.S. Coastal Plain.

Sandhill at EPWMA, *FWC*

On the EPWMA, sandhill occurs on xeric sands that form the highest elevations of the site. These eastern portions of the EPWMA border Eglin AFB /Choctaw Outlying Landing Field. This natural community is characterized by a canopy dominated by longleaf pine, an understory of turkey oak, and a groundcover of a mixture of low shrubs and grasses. Turkey oaks dominate the subcanopy, which also includes longleaf pine, bluejack oak, and live oak. The tall shrub layer includes turkey oak, sand live oak, bluejack oak, and live oak. The short shrub layer includes dwarf huckleberry, yaupon, gopher apple, turkey oak, live oak, saw palmetto, and St. Andrew's cross. Species in the herbaceous layer include pinewoods bluestem, wiregrass, dogtongue wild buckwheat, October flower, bracken fern, little bluestem, yellow Indian grass, and pineywoods dropseed. Earleaf greenbrier is the most typical vine in the sandhills at EPWMA. This community has received fairly frequent prescribed fire applications and retains much of its historic vegetation assemblage and structure.

Scrubby flatwoods *(184.7 acres)*

Scrubby flatwoods have an open canopy of widely spaced pine trees and a low, shrubby understory dominated by scrub oaks and saw palmetto, often interspersed with areas of barren white sand. Bare sand openings are often present but are generally small. Scrubby flatwoods often occur on slight rises within mesic flatwoods and in transitional areas between scrub and mesic flatwoods.

Scrubby flatwoods at EPWMA have generally retained their historic vegetation assemblage and structure. The xeric character of this community somewhat slows the proliferation of woody encroachment and despite fire exclusion, this community remains in a good quality functional condition.

The canopy layer of the scrubby flatwoods community at EPWMA includes sand pine, slash pine, longleaf pine, loblolly pine, and sand live oak. These species in addition to water oak comprise the sparse to moderately dense subcanopy. Shrubs are common and often equally interspersed with herbaceous groundcover and exposed white sands. The shrub layer is characterized by sand live oak, water oak, sparkleberry, Elliott's blueberry, woody goldenrod, false rosemary, dwarf huckleberry, gallberry, yaupon, gopher apple, sand pine, myrtle oak, saw palmetto, and shiny blueberry. The herbaceous layer of the scrubby flatwoods community includes threeawn, wiregrass, smooth yellow false foxglove,

vanillaleaf, lovegrass, pinkscale gayfeather, switchgrass, narrowleaf silkgrass, tall jointweed, october flower, bracken fern, sandyfield beaksedge, whitetop aster, Piedmont blacksenna, and Carolina yellow-eyed grass.

Shrub bog *(2,891.8 acres)*
Shrub bog consists of dense stands of broadleaved evergreen shrubs, vines, and short trees, one to five meters tall depending on time since fire, with or without an overstory of scattered pine or bay trees, growing in mucky soil where water is usually less than a foot deep. Shrub bog is found on the border of swamps, in streamhead drainages, and in flat, poorly drained areas between rivers. It often forms the border between the mesic or wet flatwoods communities and dome swamp, basin swamp, or hydric hammock communities.

At EPWMA, shrub bog currently occupies historic areas of fire excluded wet prairie, wet flatwoods, and previously logged swamps. All three of these situations can appear very similar currently due to woody encroachment by hydrophytic shrubs. Historic aerial photography and historic natural community mapping products can be used to differentiate between these variants. This vegetation assemblage is similarly found on small islands within the salt marsh that have been fire excluded. These areas were likely historic wet flatwoods habitats, part of the mainland at one time, but have been separated by the fluctuating salt marsh and floodplain marsh associated with the Yellow River drainage. Shrub bog habitats also naturally occur as a transition between swamps and pyrogenic uplands.

Trees in the canopy include sweetbay, swamp bay, slash pine, and occasionally swamp tupelo. All of these tree species, in addition to black titi, are also typical in the subcanopy. Dominant species in the shrub layers include black titi, titi, large gallberry, fetterbush, wax myrtle, gallberry, and red bay. Other shrub species observed include odorless bayberry, coastalplain St. John's wort, and woolly huckleberry. Vines are abundant, and include largely laurel greenbrier, eastern poison ivy, and muscadine.

In well-developed shrub bogs, where woody vegetation is dense, the herbaceous layer is sparse due to the dense shade. In some areas within the EPWMA, the vegetation has been disturbed by past timbering activities, and open patches of herbaceous vegetation occur in scraped or rutted areas where mineral soils were exposed. Small remnant wet prairie and wet flatwoods areas are often infrequently scattered throughout the shrub bog community and give evidence that these areas were once much more open. Species in these open herbaceous areas community include chalky bluestem, Chapman's beaksedge, beakrushes, sphagnum moss, yellow-eyed grasses, white-top pitcherplants, and wiregrass.

Wet Flatwoods *(37.4 acres)*
Wet flatwoods are characterized by relatively open canopy forests of scattered pine trees

with a thick shrubby understory and very sparse ground cover, or a fire maintained, sparse understory and dense ground cover of hydrophytic herbs. Wet flatwoods exist on relatively flat, poorly drained land.

In the EPWMA wet flatwoods, the canopy and subcanopy are dominated by slash pine. Tall shrubs include black titi, dahoon, myrtle dahoon, large gallberry, sweetbay, wax myrtle, swamp tupelo, water oak, and highbush blueberry. Common short shrubs include blue huckleberry, woolly huckleberry, coastalplain St. John's wort, gallberry, fetterbush, and wax myrtle. Other, less common shrubs include coastal sweet pepperbush, odorless bayberry, swamp bay, saw palmetto, roundpod St. John's wort, bedstraw St. John's wort, and other species of St. John 's wort, swamp azalea, and rusty blackhaw.

Where shrubs are relatively sparse or patchy, the herbaceous layer can be diverse. Graminoids include wiregrass, switchcane, sedge, toothachegrass, tapered witchgrass, low panic grasses, panic grasses, Chapman's beaksedge, clustered beaksedge, and beakrushes. Forbs include pink sundew, flattened pipewort, tenangle pipewort, coastal plain yellow-eyed grass, sphagnum moss, drumheads, yellow hatpins, savannah yellow-eyed grass, and other yellow-eyed grasses. Ferns may include Virginia chain fern, bracken fern, and cinnamon fern.

Weedy species are found in areas that have been subjected to past timbering effort where soil disturbance occurred. These species include broomsedge bluestem, chalky bluestem, dog fennel, Carolina redroot, and blackberry. Vines are also common in areas of disturbance. Most common is laurel greenbrier, but yellow jessamine and muscadine may also be present.

Much of the wet flatwoods areas historically present at EPWMA have succeeded to shrub due to fire exclusion and woody encroachment. Wet flatwoods only occurs in small limited areas where dense herbaceous groundcover has out competed with the shrub layer or has received a random infrequent fire event. With the reintroduction of frequent prescribed fire, the current shrub bog community will begin to transition back to a much more open and sparsely structured habitat of wet flatwoods.

Wet prairie *(not of sufficient size at EPWMA to be mapped)*

Wet prairies are seasonally wet grasslands with few or no pine trees and contain few shrubs when burned frequently. There are no mapped areas classified as wet prairie in the EPWMA. This habitat has mostly been lost to fire exclusion and woody encroachment and only small remnant patches of wet prairie/wet flatwoods habitat remain. These areas typically contain dense wiregrass that has limited woody succession. Historic wet prairie contains a canopy and subcanopy of slash pine that occurs over scattered to dense shrubs. Overall, shrubs have become dense enough to shade out the historic graminoid groundcover

characteristic of wet prairie. Shrubs include black titi, woolly huckleberry, coastalplain St. John's wort, fetterbush, sweetbay, and highbush blueberry. Laurel greenbrier is common in this community currently.

The herbaceous layer will improve with the reintroduction of fire to the shrub bog and its included wet prairie areas. Once fire is reintroduced into this community, it is important to maintain a frequent, one to three year, fire return interval. If left unattended, resprouting shrubs will quickly increase in percent cover and negatively affect what limited high quality herbaceous species remain.

Altered Communities

Artificial pond *(1.1 acres)*

One artificial pond was mapped in the EPWMA and is approximately one acre in size. Artificial ponds are sites that have been excavated to hold deeper areas of water. The area is adjacent to a small dome swamp and wet prairie that was presumably scraped with heavy machinery sometime in the past. This location looks like a natural depression marsh, but with straight, bermed sides to the west. It grades gradually into former wet prairie to the east, and the line where historical disturbance stops and wet prairie starts is subtle. A few slash pines rim the edges of this pond and a sparse shrub layer of coastalplain St. John's wort occurs throughout. The marsh-like herbaceous layer contains longleaf threeawn, low panic grasses, panic grasses, beakrushes, eastern purple bladderwort, and yellow-eyed grass.

Developed *(3.4 acres)*

Developed land are defined as check stations, off road vehicle (ORV) use areas, parking lots, buildings, maintained lawns (as part of recreational, business, or residential areas), botanical or ornamental gardens, campgrounds, recreational, industrial, and residential areas. At EPWMA, developed areas are limited to two sites, a small campground area adjacent to Blackwater Bay and a small parking area/boat launch just south of the campground. These areas are characterized unpaved parking lots, large live oaks, and open lawn/weedy herbaceous clearings. The developed areas are within a small footprint and are surrounded by natural vegetation communities.

Pine plantation *(20.0 acres)*

Pine plantations are areas altered by silvicultural activities. These include lands where either planted pines are having or will have an ongoing detrimental effect on native groundcover, or the history of planted pines has damaged ground cover to the point where further restoration beyond thinning and burning is required, and/or the method of planting (e.g. bedding) has severely impacted groundcover. Pine plantations in Florida are often dominated by even-aged loblolly, sand, or slash pine. Dense pine plantations typically have

sparse to absent herbaceous vegetation as a result of shading or a cover of deep pine needle duff. These plantations may be very shrubby or vine-dominated or open at ground level. The groundcover in most cases has been severely impacted by mechanical site preparation, such as roller chopping and bedding. However, while perennial grasses such as wiregrass may be greatly reduced, many components of the native groundcover persist even though the relative abundance is altered. Groundcover can be partially restored by thinning and/or frequent burning, although some planting of perennial grasses such as wiregrass may be required.

Pine plantation at EPWMA is defined as planted pines occurring in rows and lacking a significant or diverse assemblage of groundcover/herbaceous species. Only one area in the north-central portion of the site has been classified as pine plantation. This area was originally created as a slash pine restoration area, but the current density of pines and lack of prescribed fire is most indicative of a pine plantation situation.

The canopy layer of the pine plantation is young slash pine that is so thickly planted that it negatively affects the groundcover. The sparse shrub layer includes gallberry, water oak, and shining blueberry. The herbaceous layer is limited to the disturbance species broom sedge. No rare or exotic plant species were observed in this community. All of the current pine plantations at EPWMA occur in historic wet flatwoods.

2.2.2 Forest Resources

Forest resources at EPWMA include mesic flatwoods, wet flatwoods, dry flatwoods and sandhills. Section 253.036, F.S., requires that plans for natural areas that are 1,000 acres or greater in size include a professional forester's assessment of the resource conservation and revenue-producing potentials of the tract's forests. The Florida Forest Service (FFS) conducted a Timber Assessment of the original three EPWMA parcels totaling 1,166 acres in 2005. The assessment indicated that due to the wet nature of the area and very poorly drained soils, the area was not readily conducive to timber production without site disturbing measures such as channeling, ditching, and draining. The assessment also noted that there was a low volume and widespread arrangement of merchantable timber. However, the addition of uplands and previously timbered lands to the EPWMA in 2013 and 2014 will warrant an updated Timber Assessment by the FFS. When complete, the Timber Assessment will be included as Appendix 13.8. If determined to be necessary, a Forest Resource Management Plan will be developed by the FWC in cooperation with the FFS or a professional forester.

2.3 Fish and Wildlife Resources

2.3.1 Integrated Wildlife Habitat Ranking System

The FWC has developed the Integrated Wildlife Habitat Ranking System (IWHRS) as a GIS-based assessment tool that incorporates a wide variety of land cover and wildlife

species data. The IWHRS evaluates the Florida landscape based upon the habitat needs of wildlife as a way to identify ecologically significant lands in the state, and to assess the potential impacts of management and land-use changes. The IWHRS was developed to provide technical assistance to various local, regional, state, and federal agencies, and entities interested in wildlife needs and conservation in order to: (1) determine ways to avoid or minimize project impacts by evaluating alternative placements, alignments, and transportation corridors during early planning stages, (2) assess direct, secondary, and cumulative impacts to habitat and wildlife resources, and (3) identify appropriate parcels for public land acquisition for wetland and upland habitat mitigation purposes. The IWHRS (2009) indicates that EPWMA has a high mean wildlife value of 6.7 (Figures 9).

2.3.2 Imperiled Species

For the purposes of this Management Plan, the term "imperiled species" refers to plant and animal species that are designated as Endangered, Threatened, or a Species of Special Concern by FWC, or that are designated as Endangered or Threatened by the U.S. Fish and Wildlife Service. This designation is also commonly known as "listed species" (Table 7).

On November 8, 2010, new threatened species rules approved by the FWC were implemented. All federally listed species that occur in Florida will now be included on Florida's list as federally-designated Endangered or federally-designated Threatened species. In addition, the state has implemented a listing process to identify species that are not federally listed, but that may be at risk of extinction. These species will be called state-designated Threatened. All previous state-designated imperiled species were grandfathered on the list and are currently undergoing status reviews. The FWC will continue to maintain a separate Species of Special Concern category until all the former imperiled species have been reviewed and those species are either determined to be state-designated Threatened or removed from the list. The FWC has developed Species Action Plans (SAPs) for imperiled species which describe individual species threats and conservation needs. The SAPs will not be submitted for approval to the FWC's Commissioners until 2015 and are considered to be final drafts prior to Commission approval. Development of the SAPs is a critical part of moving toward the FWC's final goal of developing a single, comprehensive Imperiled Species Management Plan. For more information about the SAPs and individual plans see http://myfwc.com/wildlifehabitats/imperiled/species-action-plans/.

Table 7. Rare and Imperiled Wildlife Species Documented or Expected to Occur at EPWMA

Common Name	Scientific Name	Status
Birds		
Black skimmer	*Rynchops niger*	SSC
Least tern	*Sterna antillarum*	ST
Limpkin	*Aramus guarauna*	SSC

Table 7. Rare and Imperiled Wildlife Species Documented or Expected to Occur at EPWMA

Common Name	Scientific Name	Status
Little blue heron	*Egretta caerulea*	SSC
Piping plover	*Charadrius melodus*	FT
Red-cockaded woodpecker	*Picoides borealis*	FE
Reddish egret	*Egretta rufescens*	SSC
Snowy egret	*Egretta thula*	SSC
Snowy plover	*Charadrius alexandrinus*	ST
Southeastern American kestral	*Falco sparverius paulus*	ST
Tricolored heron	*Egretta tricolor*	SSC
White ibis	*Eudocimus albus*	SSC
Fish		
Atlantic sturgeon	*Acipenser oxyrinchus*	FE
Blackmouth shiner	*Notropis melanostomus*	ST
Bluenose shiner	*Pteronotropis welaka*	SSC
Gulf sturgeon	*Acipenser oxyrhynchus desotoi*	FT
Saltmarsh topminnow	*Fundulus jenkinski*	SSC
Amphibians		
Florida bog frog	*Lithobates okaloosae*	SSC
Flatwoods salamander	*Ambystoma cingulatum*	FT
Gopher frog	*Lithobates capito*	SSC
Pine barrens treefrog	*Hyla andersonii*	SSC
Reptiles		
Alligator snapping turtle	*Macrochelys temminckii*	SSC
American alligator	*Alligator mississippiensis*	FT(S/A)
Eastern indigo snake	*Drymarchon corais couperi*	FT
Florida pine snake	*Pituophis melanoleucus mugitus*	SSC
Gopher tortoise	*Gopherus polyphemus*	ST
Green sea turtle	*Chelonia mydas*	FE

Abbreviations: Listed by the State of Florida as Federally-designated Endangered (FE), Federally-designated Threatened (FT), Federally-designated Threatened because of similarity of appearance [FT(S/A)], State-designated Threatened (ST), or State Species of Special Concern (SSC).

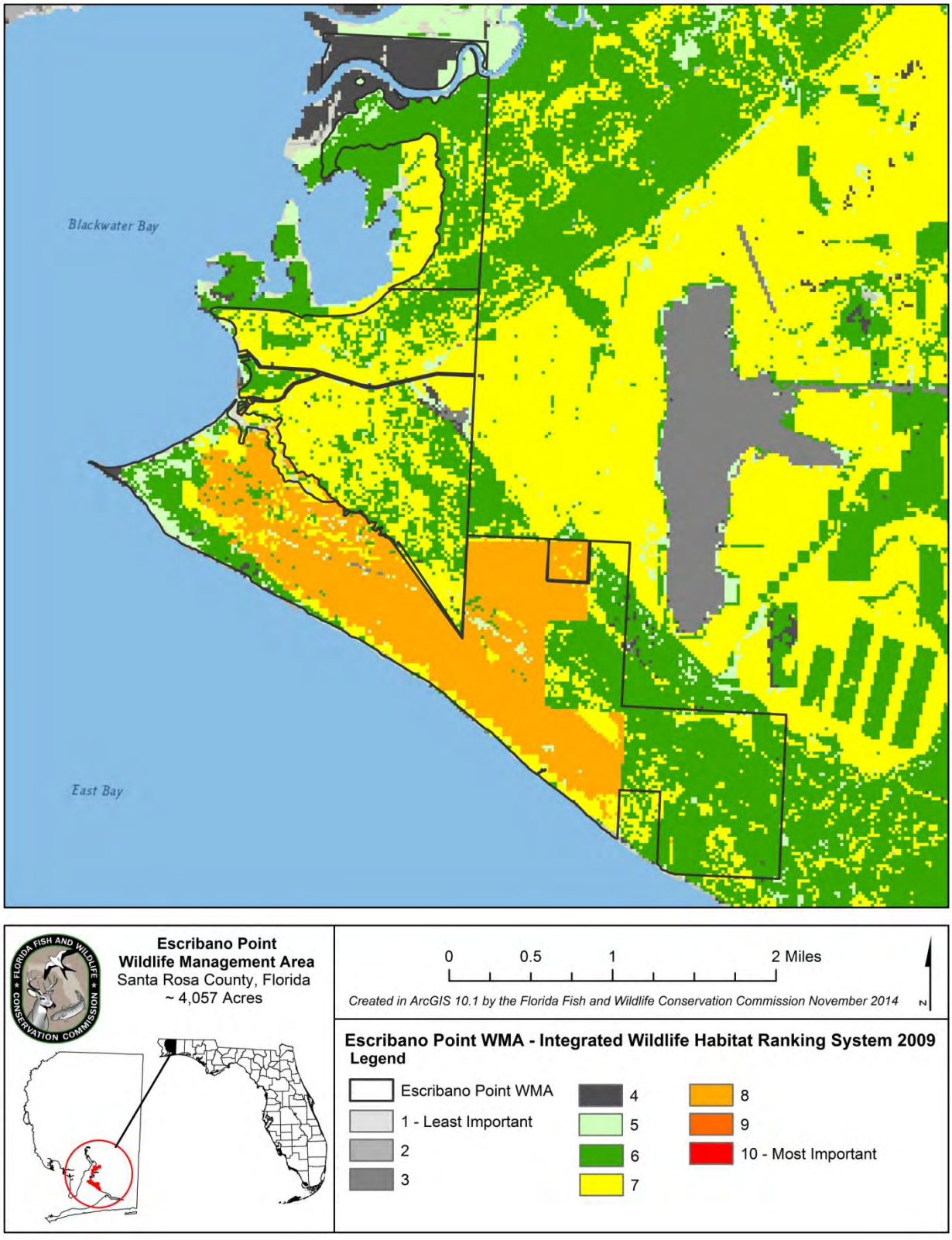


Figure 9. EPWMA - Integrated Wildlife Habitat Ranking System 2009

2.3.3 FNAI Element Occurrences

Geographic information system data maintained by the FNAI (Element Occurrences) indicates that EPWMA has numerous documented occurrences of wildlife and a diverse assemblage of animal species that occur on and in the vicinity of the area (Figure 10). An FNAI Element Occurrence data usage letter is included as Appendix 13.5. Tables 8- 13 display the variety of wildlife species documented or expected to occur on EPWMA. Objectives to complete additional wildlife surveys on the area to enhance the existing species lists are included in Section 6 of this Management Plan.

Table 8. Mammalian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Beaver	*Castor canadensis*
Bobcat	*Lynx rufus*
Cotton mouse	*Peromyscus gossypinus*
Coyote	*Canis latrans*
Eastern chipmunk	*Tamias striatus*
Eastern cottontail	*Sylvilagus floridanus*
Eastern gray squirrel	*Sciurus carolinensis*
Eastern harvest mouse	*Reithrodontomys humulis*
Eastern mole	*Scalopus aquaticus*
Eastern woodrat	*Neotoma floridana*
Florida black bear	*Ursus americanus floridanus*
Golden mouse	*Ochrotomys nuttalli*
Gray fox	*Urocyon cinereoargenteus*
Hispid cotton rat	*Sigmodon hispidus*
Least shrew	*Cryptotis parva*
Long-tailed weasel	*Mustela frenata*
Marsh rabbit	*Sylvilagus palustris*
Northern yellow bat	*Lasiurus intermedius*
Oldfield mouse	*Peromyscus polionotus*
Raccoon	*Procyon lotor*
Red fox	*Vulpes vulpes*
River otter	*Lontra canadensis*
Southeastern pocket gopher	*Geomys pinetis*
Southern flying squirrel	*Glaucomys volans*
Southern fox squirrel	*Sciurus niger niger*
Southern short-tailed shrew	*Blarina carolinensis*
Striped skunk	*Mephitis mephitis*
Virginia opossum	*Didelphis virginiana*
White-tailed deer	*Odocoileus virginianus*

Figure 10. FNAI Element Occurrences within One Mile of EPWMA

Table 9. Avian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Acadian flycatcher	*Empidonax virescens*
American coot	*Fulica americana*
American crow	*Corvus brachyrhynchos*
American goldfinch	*Carduelis tristis*
American kestrel	*Falco sparverius*
American pipit	*Anthus rubescens*
American robin	*Turdus migratorius*
American wigeon	*Anas americana*
American woodcock	*Scolopax minor*
Anhinga	*Anhinga anhinga*
Bald eagle	*Haliaeetus leucocephalus*
Bank swallow	*Riparia riparia*
Barn swallow	*Hirundo rustica*
Barred owl	*Strix varia*
Belted kingfisher	*Megaceryle alcyon*
Black skimmer	*Rynchops niger*
Black vulture	*Coragyps atratus*
Black-and-white warbler	*Mniotilta varia*
Black-necked stilt	*Himantopus mexicanus*
Black-billed cuckoo	*Coccyzus erythropthalmus*
Blue grosbeak	*Passerina caerulea*
Blue jay	*Cyanocitta cristata*
Blue-gray gnatcatcher	*Polioptila caerulea*
Blue-headed vireo	*Vireo solitarius*
Blue-winged teal	*Anas discors*
Broad-winged hawk	*Buteo platypterus*
Brown creeper	*Certhia americana*
Brown thrasher	*Toxostoma rufum*
Brown-headed cowbird	*Molothrus ater*
Brown-headed nuthatch	*Sitta pusilla*
Bufflehead	*Bucephala albeola*
Carolina chickadee	*Poecile carolinensis*
Carolina wren	*Thryothorus ludovicianus*
Cedar waxwing	*Bombycilla cedrorum*
Chimney swift	*Chaetura pelagica*
Chipping sparrow	*Spizella passerina*
Chuck-will's widow	*Antrostomus carolineusis*
Common gallinule	*Gallinula chloropus*
Common goldeneye	*Bucephala clangula*

Table 9. Avian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Common grackle	*Quiscalus quiscula*
Common ground-dove	*Columbina passerina*
Common nighthawk	*Chordeiles minor*
Common snipe	*Gallinago delicata*
Common yellowthroat	*Geothlypis trichas*
Cooper's hawk	*Accipiter cooperii*
Dark-eyed junco	*Junco hyemalis*
Double-crested cormorant	*Phalacrocorax auritus*
Downy woodpecker	*Picoides pubescens*
Eastern bluebird	*Sialia sialis*
Eastern kingbird	*Tyrannus tyrannus*
Eastern meadowlark	*Sturnella magna*
Eastern phoebe	*Sayornis phoebe*
Eastern screech-owl	*Megascops asio*
Eastern towhee	*Pipilo erythrophthalmus*
Eastern whip-poor-will	*Antrostomus vociferus*
Eastern wood-pewee	*Contopus virens*
Field sparrow	*Spizella pusilla*
Fish crow	*Corvus ossifragus*
Forster's tern	*Sterna forsteri*
Golden-crowned kinglet	*Regulus satrapa*
Gray catbird	*Dumetella carolinensis*
Great blue heron	*Ardea herodias*
Great crested flycatcher	*Myiarchus crinitus*
Great egret	*Ardea alba*
Great horned owl	*Bubo virginianus*
Greater scaup	*Aythya marila*
Greater yellowlegs	*Tringa melanoleuca*
Green heron	*Butorides virescens*
Green-winged teal	*Anas crecca*
Hairy woodpecker	*Picoides villosus*
Hermit thrush	*Catharus guttatus*
Hooded merganser	*Lophodytes cucullatus*
Hooded warbler	*Setophaga citrina*
House sparrow	*Passer domesticus*
House wren	*Troglodytes aedon*
Indigo bunting	*Passerina cyanea*
Kentucky warbler	*Geothlypis formosa*
Killdeer	*Charadrius vociferus*

Table 9. Avian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Laughing gull	*Leucophaeus atricilla*
Le Conte's sparrow	*Ammodramus leconteii*
Least sandpiper	*Calidris minutilla*
Least tern	*Sternula antillarum*
Lesser scaup	*Aythya affinis*
Lesser yellowlegs	*Tringa flavipes*
Lincoln's sparrow	*Melospiza lincolnii*
Limpkin	*Aramus guarauna*
Little blue heron	*Egretta caerulea*
Loggerhead shrike	*Lanius ludovicianus*
Marsh wren	*Cistothorus palustris*
Mallard	*Anas platyrhynchos*
Merlin	*Falco columbarius*
Mississippi kite	*Elanoides forficatus*
Mourning dove	*Zenaida macroura*
Northern bobwhite	*Colinus virginianus*
Northern cardinal	*Cardinalis cardinalis*
Northern flicker	*Colaptes auratus*
Northern harrier	*Circus cyaneus*
Northern mockingbird	*Mimus polyglottos*
Northern parula	*Setophaga americana*
Northern rough-winged swallow	*Stelgidopteryx serripennis*
Northern shoveler	*Anas clypeata*
Orange-crowned warbler	*Oreothlypis celata*
Orchard oriole	*Icterus spurius*
Osprey	*Pandion haliaetus*
Palm warbler	*Setophaga palmarum*
Pied-billed grebe	*Podilymbus podiceps*
Pileated woodpecker	*Dryocopus pileatus*
Pine warbler	*Setophaga pinus*
Piping plover	*Charadrius melodus*
Prothonotary warbler	*Protonotaria citrea*
Purple finch	*Carpodacus purpureus*
Purple martin	*Progne subis*
Red-bellied woodpecker	*Melanerpes carolinus*
Red-breasted merganser	*Mergus serrator*
Red-breasted nuthatch	*Sitta canadensis*
Red-cockaded woodpecker	*Picoides borealis*
Reddish egret	*Egretta rufescens*

Table 9. Avian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Red-eyed vireo	*Vireo olivaceus*
Red-headed woodpecker	*Melanerpes erythrocephalus*
Red-shouldered hawk	*Buteo lineatus*
Red-tailed hawk	*Buteo jamaicensis*
Red-winged blackbird	*Agelaius phoeniceus*
Ring-necked duck	*Aythya collaris*
Ruby-crowned kinglet	*Regulus calendula*
Ruby-throated hummingbird	*Archilochus colubris*
Ruddy duck	*Oxyura jamaicensis*
Rusty blackbird	*Euphagus carolinus*
Savannah sparrow	*Passerculus sandwichensis*
Scarlet tanager	*Piranga olivacea*
Semipalmated plover	*Charadrius semipalmatus*
Sharp-shinned hawk	*Accipiter striatus*
Snowy egret	*Egretta thula*
Song sparrow	*Melospiza melodia*
Snowy plover	*Charadrius alexandrinus*
Southeastern American kestrel	*Falco sparverius paulus*
Summer tanager	*Piranga rubra*
Swainson's warbler	*Limnothlypis swainsonii*
Swallow-tailed kite	*Elanoides forficatus*
Swamp sparrow	*Melospiza georgiana*
Tree swallow	*Tachycineta bicolor*
Tricolored heron	*Egretta tricolor*
Tufted titmouse	*Baeolophus bicolor*
Turkey vulture	*Cathartes aura*
Vesper sparrow	*Pooecetes gramineus*
Western sandpiper	*Calidris mauri*
White ibis	*Eudocimus albus*
White-eyed vireo	*Vireo griseus*
White-throated sparrow	*Zonotrichia albicollis*
Wild turkey	*Meleagris gallopavo*
Winter wren	*Troglodytes troglodytes*
Wood duck	*Aix sponsa*
Wood thrush	*Hylocichla mustelina*
Yellow-bellied sapsucker	*Sphyrapicus varius*
Yellow-billed cuckoo	*Coccyzus americanus*
Yellow-breasted chat	*Icteria virens*
Yellow-rumped warbler	*Setophaga coronata*

Table 9. Avian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Yellow-throated vireo	*Vireo flavifrons*
Yellow-throated warbler	*Setophaga dominica*

Table 10. Amphibian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Alabama waterdog	*Necturus alabamensis*
Barking treefrog	*Hyla gratiosa*
Bird-voiced treefrog	*Hyla avivoca*
Bullfrog	*Lithobates catesbeianus*
Central newt	*Notophthalmus viridescens louisianensis*
Dwarf salamander	*Eurycea quadridigitata*
Eastern lesser siren	*Siren intermedia intermedia*
Eastern narrow-mouthed toad	*Gastrophryne carolinensis*
Eastern tiger salamander	*Ambystoma tigrinum*
Florida bog frog	*Lithobates okaloosae*
Fowler's toad	*Anaxyrus fowleri*
Gopher frog	*Lithobates capito*
Gray treefrog	*Hyla chrysoscelis*
Green treefrog	*Hyla cinerea*
Oak toad	*Anaxyrus quercicus*
One-toed amphiuma	*Amphiuma pholeter*
Ornate chorus frog	*Pseudacris ornata*
Pig frog	*Lithobates grylio*
Pine barrens treefrog	*Hyla andersonii*
Pinewoods treefrog	*Hyla femoralis*
Reticulated flatwoods salamander	*Ambystoma bishopi*
Southeastern slimy salamander	*Plethodon grobmani*
Southern chorus frog	*Pseudacris nigrita*
Southern cricket frog	*Acris gryllus gryllus*
Southern leopard frog	*Lithobates sphenocephalus utricularius*
Southern red salamander	*Pseudotriton ruber vioscai*
Southern toad	*Anaxyrus terrestris*
Southern two-lined salamander	*Eurycea cirrigera*
Spotted dusky salamander	*Desmognathus conanti*
Spring peeper	*Pseudacris crucifer*
Squirrel treefrog	*Hyla squirella*
Three-lined salamander	*Eurycea guttolineata*
Two-toed amphiuma	*Amphiuma means*

Table 11. Reptilian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Alligator snapping turtle	*Macrochelys temminckii*
American alligator	*Alligator mississippiensis*
Banded water snake	*Nerodia fasciata fasciata*
Broad-headed skink	*Eumeces laticeps*
Brown water snake	*Nerodia taxispilota*
Chicken turtle	*Deirochelys reticularia*
Common garter snake	*Thamnophis sirtalis*
Common kingsnake	*Lampropeltis getula*
Common slider	*Trachemys scripta*
Common snapping turtle	*Chelydra serpentina*
Corn snake	*Elaphe guttata guttata*
Cottonmouth	*Agkistrodon piscivorus*
Crayfish snake	*Regina rigida*
Diamondback terrapin	*Malaclemys terrapin*
Dusky pygmy rattlesnake	*Sistrurus miliarius barbouri*
Eastern box turtle	*Terrapene carolina*
Eastern coachwhip	*Masticophis flagellum flagellum*
Eastern coral snake	*Micrurus fulvius*
Eastern diamondback rattlesnake	*Crotalus adamanteus*
Eastern fence lizard	*Sceloporus undulatus*
Eastern hog-nosed snake	*Heterodon platirhinos*
Eastern indigo snake	*Drymarchon couperi*
Eastern mud turtle	*Kinosternon subrubrum subrubrum*
Eastern slender glass lizard	*Ophisaurus attenuatus longicaudus*
Escambia map turtle	*Graptemys ernsti*
Five-lined skink	*Eumeces fasciatus*
Florida pine snake	*Pituophis melanoleucus mugitus*
Florida softshell turtle	*Apalone ferox*
Gopher tortoise	*Gopherus polyphemus*
Green anole	*Anolis carolinensis*
Green sea turtle	*Chelonia mydas*
Ground skink	*Scincella lateralis*
Gulf coast smooth softshell	*Apalone mutica calvata*
Mimic glass lizard	*Ophisaurus mimicus*
Mississippi diamond terrapin	*Malaclemys terrapin pileata*
Mole skink	*Eumeces egregius*
Mud snake	*Farancia abacura*
Musk turtle	*Sternotherus minor*
Rat snake	*Elaphe obsoleta*

Table 11. Reptilian Species Expected to Occur at EPWMA

Common Name	Scientific Name
Ringneck snake	*Diadophis punctatus*
Rough earth snake	*Virginia striatula*
Rough green snake	*Opheodrys aestivus*
Scarlet snake	*Cemophora coccinea*
Six-lined racerunner	*Cnemidophorus sexlineatus sexlineatus*
Southern black racer	*Coluber constrictor priapus*
Southern coal skink	*Eumeces anthracinus pluvialis*
Southern hog-nosed snake	*Heterodon simus*

Table 12. Fishes Recorded in Blackwater and Yellow River Systems, Including Blackwater Bay and East Bay

Common Name	Scientific Name
Alabama shad	*Alosa alabamae*
Alligator gar	*Atractosteus spatula*
American eel	*Anguilla rostrata*
Atlantic croaker	*Micropogonias undulatus*
Atlantic needlefish	*Strongylura marina*
Atlantic threadfin	*Polydactylus octonemus*
Banded pygmy sunfish	*Elassoma zonatum*
Banded topminnow	*Fundulus cingulatus*
Bay anchovy	*Anchoa mitchilli*
Bighead searobin	*Prionotus tribulus*
Black crappie	*Pomoxis nigromaculatus*
Black drum	*Pogonias cromis*
Black madtom	*Noturus funebris*
Blackbanded darter	*Percina nigrofasciata*
Blackmouth shiner	*Notropis melanostomus*
Blackspotted topminnow	*Fundulus olivaceus*
Blacktail redhorse	*Moxostoma poecilurum*
Blacktail shiner	*Cyprinella venusta*
Blacktip shiner	*Lythrurus atrapiculus*
Blue catfish	*Ictalurus furcatus*
Bluegill	*Lepomis macrochirus*
Bluenose shiner	*Pteronotropis welaka*
Bluespotted sunfish	*Enneacanthus gloriosus*
Bowfin	*Amia calva*
Brook silverside	*Labidesthes sicculus*
Brown bullhead	*Ameiurus nebulosus*

Table 12. Fishes Recorded in Blackwater and Yellow River Systems, Including Blackwater Bay and East Bay

Common Name	Scientific Name
Brown darter	*Etheostoma edwini*
Bull shark	*Carcharhinus leucas*
Chain pickerel	*Esox niger*
Channel catfish	*Ictalurus punctatus*
Choctawhatchee darter	*Etheostoma davisoni*
Clear chub	*Hybopsis winchelli*
Clown goby	*Microgobius gulosus*
Coastal darter	*Etheostoma colorosum*
Coastal shiner	*Notropis petersoni*
Crevalle jack	*Caranx hippos*
Darter goby	*Ctenogobius boleosoma*
Diamond killifish	*Adinia xenica*
Dixie chub	*Semotilus thoreauianus*
Dollar sunfish	*Lepomis marginatus*
Eastern mosquitofish	*Gambusia holbrooki*
Everglades pygmy sunfish	*Elassoma evergladei*
Flagfin shiner	*Pteronotropis signipinnis*
Flathead catfish	*Pylodictis olivaris*
Flier	*Centrarchus macropterus*
Florida chub	*Macrhybopsis* sp.
Florida sand darter	*Ammocrypta bifascia*
Freshwater goby	*Ctenogobius shufeldti*
Gafftopsail catfish	*Bagre marinus*
Gizzard shad	*Dorosoma cepedianum*
Golden shiner	*Notemigonus crysoleucas*
Golden topminnow	*Fundulus chrysotus*
Goldstripe darter	*Etheostoma parvipinne*
Grass carp	*Ctenopharyngodon idella*
Green sunfish	*Lepomis cyanellus*
Gulf darter	*Etheostoma swaini*
Gulf menhaden	*Brevoortia patronus*
Gulf pipefish	*Syngnathus scovelli*
Gulf sturgeon	*Acipenser oxyrinchus desotoi*
Hardhead catfish	*Ariopsis felis*
Harvestfish	*Peprilus paru*
Highfin carpsucker	*Carpiodes velifer*
Hogchoker	*Trinectes maculatus*
Inland silverside	*Menidia beryllina*

Table 12. Fishes Recorded in Blackwater and Yellow River Systems, Including Blackwater Bay and East Bay

Common Name	Scientific Name
Ironcolor shiner	*Notropis chalybaeus*
Ladyfish	*Elops saurus*
Lake chubsucker	*Erimyzon sucetta*
Largemouth bass	*Micropterus salmoides*
Largescaled spinycheek sleeper	*Eleotris amblyopsis*
Least killifish	*Heterandria Formosa*
Leatherjacket	*Oligoplites saurus*
Longear sunfish	*Lepomis megalotis*
Longnose gar	*Lepisosteus osseus*
Longnose killifish	*Fundulus similis*
Longnose shiner	*Notropis longirostris*
Marsh killifish	*Fundulus confluentus*
Naked goby	*Gobiosoma bosc*
Pinfish	*Lagodon rhomboides*
Pirate perch	*Aphredoderus sayanus*
Pugnose minnow	*Opsopoeodus emiliae*
Pygmy killifish	*Leptolucania ommata*
Quillback	*Carpiodes cyprinus*
Rainwater killifish	*Lucania parva*
Red drum	*Sciaenops ocellatus*
Redbreast sunfish	*Lepomis auritus*
Redear sunfish	*Lepomis microlophus*
Redeye chub	*Notropis harperi*
Redfin pickerel	*Esox americanus*
Rough silverside	*Membras martinica*
Russetfin topminnow	*Fundulus escambiae*
Sailfin molly	*Poecilia latipinna*
Sailfin shiner	*Pteronotropis hypselopterus*
Saltmarsh topminnow	*Fundulus jenkinsi*
Sand seatrout	*Cynoscion arenarius*
Shadow bass	*Ambloplites ariommus*
Sharpfin chubsucker	*Erimyzon tenuis*
Sheepshead	*Archosargus probatocephalus*
Sheepshead minnow	*Cyprinodon variegatus*
Silver perch	*Bairdiella chrysoura*
Silverjaw minnow	*Notropis buccatus*
Skipjack herring	*Alosa chrysochloris*
Southern brook lamprey	*Ichthyomyzon gagei*

Table 12. Fishes Recorded in Blackwater and Yellow River Systems, Including Blackwater Bay and East Bay

Common Name	Scientific Name
Southern flounder	*Paralichthys lethostigma*
Speckled chub	*Hybopsis aestivalis*
Speckled darter	*Etheostoma stigmaeum*
Speckled madtom	*Noturus leptacanthus*
Speckled worm eel	*Myrophis punctatus*
Spot	*Leiostomus xanthurus*
Spotfin mojarra	*Eucinostomus argenteus*
Spotted bass	*Micropterus punctulatus*
Spotted bullhead	*Ameiurus serracanthus*
Spotted gar	*Lepisosteus oculatus*
Spotted seatrout	*Cynoscion nebulosus*
Spotted sucker	*Minytrema melanops*
Spotted sunfish	*Lepomis punctatus*
Stingray	*Dasyatis* sp.
Striped bass	*Morone saxatilis*
Striped mullet	*Mugil cephalus*
Swamp darter	*Etheostoma fusiforme*
Tadpole madtom	*Noturus gyrinus*
Taillight shiner	*Notropis maculatus*
Tarpon	*Megalops atlanticus*
Threadfin shad	*Dorosoma petenense*
Warmouth	*Lepomis gulosus*
Weed shiner	*Notropis texanus*
White bass	*Morone chrysops*
White catfish	*Ameiurus catus*
Yellow bullhead	*Ameiurus natalis*

Table 13. Exotic Species Expected to Occur at EPWMA

Common Name	Scientific Name
Mammals	
Black rat	*Rattus rattus*
House mouse	*Mus musculus*
Nine-banded armadillo	*Dasypus novemcinctus*
Norway rat	*Rattus norvegicus*
Nutria	*Myocastor coypus*
Wild hog	*Sus scrofa*
Birds	

Table 13. Exotic Species Expected to Occur at EPWMA

Common Name	Scientific Name
Cattle egret	*Bubulcus ibis*
Eurasian collared-dove	*Streptopelia decaocto*
European starling	*Sturnus vulgaris*
House sparrow	*Passer domesticus*
Rock dove	*Columba livia*

2.4 Native Landscapes

The EPWMA helps to conserve some of the last undeveloped waterfront tracts in Santa Rosa County as well as preserving wetlands and forests. The EPWMA contains approximately 10 miles of shoreline along Blackwater Bay and East Bay. Other native landscapes include freshwater forested wetlands, sandhill, scrubby flatwoods, and marshes. Complete descriptions of the natural communities found on EPWMA may be found in Section 2.2.1 of this Management Plan.

2.5 Water Resources

Water resources adjacent to the EPWMA are extensive and the area serves an important role in protecting the quality of water that enters the bays and ultimately the Gulf of Mexico. Fundy Bayou and Catfish Branch extend into the EPWMA from Blackwater Bay and Catfish Basin, respectively. The Blackwater Bay is one of five water bodies which make up the Pensacola Bay System. The Blackwater River and Yellow River enter Blackwater Bay north of EPWMA, where Blackwater Bay widens into East Bay.[6] Blackwater Bay and East Bay and its tributaries are classified by the DEP as Class II waters, which have been designated for shellfish propagation or harvesting. Waters within and adjacent to the EPWMA that are not described as Class II have the Class III designated use of recreation, propagation and maintenance of a healthy, well balanced population of fish and wildlife, and the Class III criteria applied to them. Class III waters are confined to the area of Blackwater Bay north of Interstate 10 and the various rivers and tributaries entering the system.[6]

The adjacent Yellow River Marsh Aquatic Preserve has been designated as an Outstanding Florida Water (OFW). This designation is given to surface waters with the intention of maintaining ambient, or existing, water quality. This is accomplished through stricter permit requirements in or adjacent to waters with this designation compared to waters without an OFW designation (62-302.700, FAC). The Blackwater River has also been designated as an OFW.

The sand and gravel aquifer is the primary water source for Santa Rosa and Escambia counties, and provides about 75 percent of the ground water used in the counties, with the remaining 25 percent coming from the Floridan aquifer. The sand and gravel aquifer

consists of sand and gravel with interbedded layers of silt and clay. The clay layers form local confined conditions within the aquifer. Groundwater flow is generally towards the coast.[7] The aquifer is highly productive due to its high recharge rate from rainfall. The aquifer's recharge rate has been estimated by USGS studies at up to 18 inches per year.[8]

2.6 Beaches and Dunes

The addition of the MOEX parcel added several miles of shoreline to the area, including the Escribano Point itself, one of the largest sand beach areas at EPWMA. There are approximately 31 acres of the beach dune natural community at EPWMA, as classified by the FNAI.

View from the Escribano Point at EPWMA, *FWC*

2.7 Mineral Resources

The predominant mineral resources in the Santa Rosa County are sand, gravel, clay, and petroleum.[9] Petroleum is produced from the Jay Oil Field in Northwest Santa Rosa County. The Jay Oil Field was discovered in 1970 and is approximately 32 miles north-northwest of the EPWMA. The Jay Oil Field is located within the "Jay trend" of Escambia and Santa Rosa counties in Florida, and Escambia County, Alabama. The Jay trend fields in Florida and Alabama are associated with a normal fault complex which rims the Gulf Coast and is believed to extend to the south-southwest into the Gulf of Mexico.[10]

There are numerous oil test permits within 15 miles of the EPWMA, however; all of them have been dry holes except those in the Jay Field. Oil test well W405 is within approximately two miles of the EPWMA. This test well was drilled to a depth of 6,871 feet below land surface. The well was found to be dry and was subsequently plugged and abandoned. The prospects of oil and gas discovery upon the EPWMA are considered to be medium to low.[11] Reservation of an undivided ½ interest in oil, gas and mineral rights was retained when the state acquired ownership of the original three parcels of EPWMA.

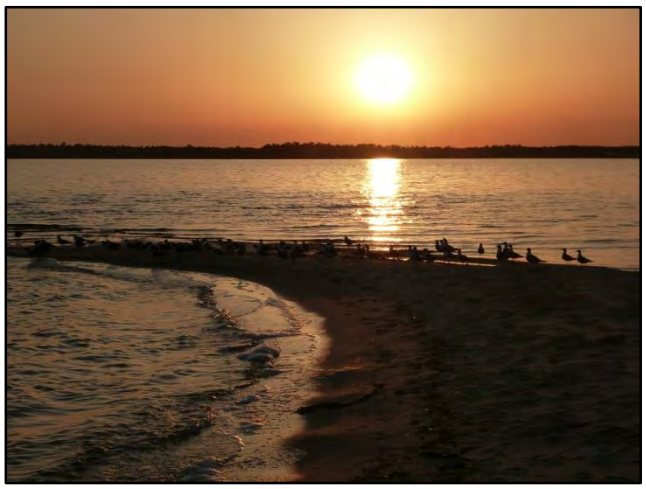
2.8 Cultural Resources

The Florida Department of State's Division of Historical Resources (DHR) observations are broken down into five categories: archeological sites, resource groups, historical structures, historic bridges and historic cemeteries. To date, the DHR Master Site File indicates 17 archaeological and historical sites on the EPWMA (Appendix 13.13). The sites include two prehistoric burial sites (SR00779 and SR00781), one historic burial site (SR00002), one homestead (SR01435), seven historic dumps (SR00773, SR00774, SR00775, SR00776, SR01900, SR01899, and SR01898), one prehistoric shell midden SR00760), one ceramic

scatter (SR00777), one prehistoric habitation site (SR00780), one lithic scatter site (SR01901), and two areas of low density artifact scatter (SR01902 and SR01903). There have been 14 field surveys documented on or near EPWMA. The FWC will submit subsequently located cultural sites on the EPWMA to the DHR for inclusion in their Master Site file. The FWC will continue to consult with the DHR in an attempt to locate and preserve any features on the area.

2.9 Scenic Resources

Scenic resources at EPWMA include shoreline along Blackwater Bay, East Bay and the Yellow River which offer scenic views of tidewater environments and the surrounding bays. The salt marsh surrounding Catfish Basin and Fundy Bayou also offer scenic views and surroundings for paddlers, boaters, and other recreationalists. The Escribano Point provides views of the bays and miles of undeveloped shoreline. With the diversity of natural communities and planned active wildlife management practices, the EPWMA is expected to be an excellent place to view wildlife and to enjoy seeing its scenic resources.



Escribano Point at sunset, *FWC*

3 Uses of the Property

3.1 Previous Use and Development

Prior to European settlement, the landscape of Florida, including this area of the Florida peninsula, was settled and used by a variety of aboriginal peoples whose culture relied mainly on hunting, fishing, and subsistence agriculture. Several important archaeological sites located on the area document the presence of Native Americans occupying the lands within EPWMA over many thousands of years. Though some land alteration occurred, only minor alteration of the landscape is thought to have taken place until the advent of European settlement beginning with the Spanish occupation of Florida in the sixteenth century.

Along with more advanced agricultural practices, the Spanish and other settlers brought livestock, primarily cattle and hogs, as well as horses to Florida. This began an era of broad use of the landscape for agriculture. Rangeland cattle grazing and other agricultural practices began to be utilized in a more systematic way and occurred throughout much of the central Florida peninsula through most of the European settlement era from the 16th

through the 20th centuries. Use of these agricultural practices began an era of increased alteration of the natural landscape. However, it wasn't until the 19th and 20th centuries that major settlement and more extensive alteration of the landscape in the area began with the widespread use of agriculture and associated development.

The EPWMA was owned by private land holders and land holding companies from 1933 until its purchase by the state in 2003. Historic aerial photography of the area shows it to be mostly rural and undeveloped, although some areas contain trail roads and evidence of timbering and land clearing activities. A 2009 Hydrology Assessment and Conceptual Restoration Plan for the original three parcels of the EPWMA used historical aerial photography to assess drainage patterns. The historical photos showed parts of EPWMA had been logged and some areas were clearcut. Vegetation surveys for natural community mapping completed by the FNAI found logging roads (and accompanying borrow ditches) extending into a dome swamp and an access road crossing the swamp on the western end of EPWMA. The swamp and baygall complex in the largest dome swamp/basin swamp were heavily logged in the early to mid-1990s. The FNAI also noted that in some areas baygall vegetation had been disturbed by past timbering activities.

The Grassy Point tract was previously managed by the NWFWMD for the protection of natural systems, wetland and floodplain functions, groundwater recharge, surface and groundwater quality, and fish and wildlife habitat. Previous activities on the Grassy Point tract included prescribed burning, pine timber management and harvest, and public access and recreation. Recreational uses at the Grassy Point tract included primitive camping, hiking, boating access, and wildlife viewing. The Solar parcels acquired by the state in 2014 included two vacant residential parcels and one parcel with a single family home that was used as a residence. The KWY parcel also acquired in 2014 was zoned as single family residential with a property use description of acreage not classified agricultural although the area had no known history of residential use and was likely managed for timber and other agricultural uses prior to acquisition by the State.

3.2 Current Use of the Property

Currently, EPWMA is managed for the conservation and protection of fish and wildlife habitat and fish and wildlife based public outdoor recreation. A wide range of operational and resource management actions are conducted on EPWMA each year including activities such as prescribed burning; wildlife habitat restoration and improvement; invasive exotic species maintenance and control; road repairs and maintenance; imperiled species management, monitoring and protection; facilities and infrastructure maintenance and repair; conservation acquisition and stewardship activities; archeological and historic resources monitoring and protection; and research related activities.

Current and anticipated resource uses of the property are diverse. Fishing, hunting, paddling, and camping continue to be a popular recreational activity on EPWMA.

Recreational use of the EPWMA is expected to increase as new facilities are developed and awareness of the recreational opportunities available on the area increases. The area also offers excellent opportunities for bird watching, especially for shorebirds and wading birds. The diversity of vegetation not only harbors a variety of bird species but also provides good opportunities for mammalian wildlife viewing. Other uses include hiking, photography, biking, sightseeing, and horseback riding.

Due to the proximity of population centers in Santa Rosa County and nearby Pensacola in Escambia County, public use can be expected to increase as public awareness of opportunities increases. The FWC administers hunts in the fall and spring for various game species including small game, deer, turkey, and feral hogs.

3.2.1 Visitation and Economic Benefits

Visitation and public use of the area for fish and wildlife based public outdoor recreational opportunities is the primary source of economic benefits from EPWMA, and contribute to the overall economy for region of Florida. In Fiscal Year 2013-14, an estimated 4,800 people visited the EPWMA. This visitation rate was calculated based on estimated hunting, boat ramp, and campground usage at EPWMA. Primarily, as a result of this visitation and use of the area, FWC economic analysis estimates indicate that the EPWMA generated an estimated annual economic impact of $548,400 in retail sales for the State and the northwest Florida region. This estimated annual economic impact has aided in the support or creation of an estimated 10 jobs.

Camping at EPWMA, *FWC*

Further revenue generating potential of the EPWMA will depend upon future uses described in this Management Plan. Additional revenue from environmental lands such as the EPWMA might include sales of various permits and recreational user fees and ecotourism activities, if such projects could be feasibly developed. The annual area regulations can be consulted to clarify the required permits, fees, and regulations. Additionally, the long-term value of ecosystem services, including the protection of air and water quality functions, are considered to be significant to local and regional land and water resources, as well as human health.

3.3 Single- or Multiple-use Management

The EPWMA will be managed under the multiple-use concept as a Wildlife Management Area. The EPWMA will provide fish and wildlife resource based public outdoor recreation

and educational opportunities, while protecting the natural and cultural resources found on the area. Any natural and cultural resources of EPWMA will be managed under the guidance of the ARC, the Conceptual State Lands Management Plan, and as required in the original purposes of acquisition for the area that was described earlier in Section 1.3.

3.3.1 Analysis of Multiple-use Potential

The following actions or activities have been considered under the multiple-use concept as possible uses to be allowed on EPWMA. Uses classified as "Approved" are considered to be in accordance with the purposes for acquisition, as well as with the Conceptual State Lands Management Plan, and with the FWC agency mission, goals and objectives as expressed in the Agency Strategic Plan (Appendix 13.11). Uses classified as "Conditional" indicate that the use may be acceptable but will be allowed only if approved through a process other than the management plan development and approval process (e.g., special-use permitting, managed-area regulation and rule development). Uses classified as "Rejected" are not considered to be in accordance with the original purpose of acquisition or one or more of the various forms of guidance available for planning and management:

	Approved	**Conditional**	**Rejected**
Apiaries		✓	
Astronomy	✓		
Bicycling		✓	
Cattle grazing			✓
Citrus or other agriculture			✓
Ecosystem services and maintenance	✓		
Ecotourism	✓		
Environmental education	✓		
First-responder training		✓	
Fishing		✓	
Geocaching		✓	
Hiking		✓	
Horseback riding		✓	
Hunting		✓	
Linear facilities			✓
Military training		✓	
Preservation of cultural sites	✓		
Preservation of historical sites	✓		
Primitive camping		✓	
Protection of imperiled species	✓		
Off-road vehicle use		✓	
Shooting Sports Park			✓
Soil and water conservation	✓		

Timber harvest	✓
Wildlife observation	✓

3.3.2 Incompatible Uses and Linear Facilities

Consideration of incompatible uses and linear facilities on EPWMA are made in accordance with the requirements of Section 253.034(10), F.S., and other applicable Florida constitution, statute, rule, and policy requirements, as well as other provisions governing applications for proposed incompatible uses or linear facilities on state-owned conservation lands. Upon approval and implementation of this Management Plan, any proposed future uses that have been classified herein as Rejected, or other proposed future uses that are determined to be incompatible with the purposes of acquisition or other management authorizations and guidance, will be forwarded for review and consideration to the DEP-DSL, the ARC and the BOT as required prior to any incompatible use or linear facility being authorized on the EPWMA by these governing bodies.

3.3.3 Assessment of Impact of Planned Uses of the Property

To communicate the FWC's planned uses and activities, specific management intentions, long- and short-term goals and with associated objectives, identified challenges, and solution strategies have been developed for EPWMA (Sections 5 -8). A detailed assessment of the benefits and potential impacts of planned uses and activities on natural and cultural resources was an integral part of the development of the management activities and intent, goals, objectives, challenges, and strategies sections of this Management Plan.

3.4 Acreage That Should Be Declared Surplus

On conservation lands where the FWC is the lead manager, the FWC evaluates and identifies recommended areas for a potential surplus designation by the DSL, the ARC, and the Board of Trustees. This evaluation consists of GIS modeling and analysis, aerial photography interpretation, analysis of fish and wildlife resources, a review of resource and operational management needs, and a review of public access and recreational use of the area. Also, the FWC considers recommendations for surplus lands as they relate to Florida's "No Net Loss of Hunting Lands" legislation (Ch. 379.3001 F.S.), as well as surplus restrictions for lands acquired through the Federal Aid in Wildlife Restoration Act (Pittman-Robertson) or through other federal grant programs.

The EPWMA was acquired to protect the area's valuable natural and cultural resources and the surrounding East Bay and Blackwater Bay, which are part of the Pensacola Bay system. Deepwater Horizon Gulf Restoration NRDA and NFWF funding for acquisition and management of the EPWMA was awarded to increase nature based recreation opportunities on the area and to conserve high quality coastal habitat for fish and wildlife resources.

To insure that the EPWMA lands acquired with Deepwater Horizon Gulf Restoration funding are conserved as required, deed covenants that run with the land restrict the

EPWMA lands to be preserved in perpetuity for those purposes. The EPWMA is a unique resource for recreationalists as it provides saltwater, freshwater, and uplands settings for recreational users. Moreover, the area serves as a buffer from development encroachment to Eglin AFB.

The evaluation of potential surplus lands at EPWMA by the FWC has determined that all portions of the area are being managed and operated for the original purposes of acquisition, and remain integral to the continued conservation of important fish and wildlife resources, and continue to provide high quality fish and wildlife resource based public outdoor recreational opportunities. Therefore, no portion of the EPWMA should be considered or declared surplus.

4 Accomplished Objectives from the EPWMA Management Plan 2006 – 2016

The following Resource Management Goals and Objectives are from the 2006 – 2016 EPWMA Management Plan, formerly known as the Escribano Point Parcels within the Yellow River Wildlife Management Area (EPYRMA). Planned activities for EPWMA during this period were detailed in the Goals and Objectives listed below. The degree to which FWC was able to accomplish the planned activities during this period is reflected as **Percent Accomplished** with each associated objective. Accomplishments for the EPWMA during the previous planning timeframe are further discussed in more comprehensive detail throughout Section 5 Management Activities and Intent of this Management Plan.

Objectives Accomplished from the 2006 Escribano Point WMA Management Plan (formerly EPYRWMA)		
Goals and Objectives	**Percent Accomplished**	**Comments**
Goal 1: Enhance, maintain, and restore the diversity and integrity of native natural communities.		
Objective 1: Utilizing the EPYRWMA prescribed fire plan, employ a diverse fire regime designed to achieve a desired future condition (as determined by objective-based vegetative management [OBVM] objectives) on fire-dependent plant communities including salt and freshwater marshes (ongoing).	10%	FWC developed a prescribed burning plan, but implementation was delayed due to private property issues.

Objective 2: Protect and conserve wetlands through hydrological restoration, appropriate fire management, and management for old-growth forest conditions (ongoing).	80%	A hydrological assessment and restoration plan was completed in 2009 for the original 1,166 acres. Restoration is pending completion of a comprehensive hydrological assessment on all of the lands that now compose EPWMA.
Objective 3: Emphasize acquisition of adjacent conservation lands to enhance and protect natural resource integrity (ongoing).	100%	The state has acquired an additional 2,891 acres within the Escribano Point Florida Forever Project for inclusion in EPWMA.
Objective 4: Continue to collaborate, coordinate, and cooperate with the Gulf Coastal Plain Ecosystem Partnership, Eglin AFB, US Navy, JTL Escribano LLC, NWFWMD, Division of Forestry, DEP- CAMA, as well as other multi-agency committees and groups involved in regional natural resource management (ongoing).	100%	FWC participates in the steering committee for the GCPEP, has developed cross agency burn plan, and participates in other collaborative efforts between agency partners.
Objective 5: Conserve listed animal species and their habitats, including isolated wetlands, by following approved Federal and State recovery plans, guidelines, and other scientific recommendations (ongoing).	100%	Ongoing.
Objective 6: Enforce existing regulations to proactively address illegal access and use of non-authorized vehicles that degrade sensitive habitats and species (ongoing).	50%	Illegal access enforcement has been difficult to accomplish due to prior access issues with private lands.

Objective 7: To help limit fragmentation, reestablish connectivity of natural communities through hydrological restoration and the reestablishment of fire regimes that mimic natural conditions, and minimize artificial barriers such as roads, ditches, and firebreaks (ongoing).	0%	FWC was unable to complete the restoration and connectivity due to fragmented ownerships, however, with new acquisitions, hydrological restoration and application of prescribed fire will be implemented during the next planning cycle.
Objective 8: Contract with FNAI to identify historic and current vegetative community types pursuant to objective-based vegetation management.	100%	Completed in 2006 for the original three Escribano Point Parcels.
Objective 9: Contract for a systematic survey of invasive exotic plant species, such as cogongrass and Japanese climbing fern by 2008.	100%	Completed in 2008.
Objective 10: Contract for a hydrological assessment and restoration plan by 2009.	100%	Completed in 2009.
Objective 11: Contract for a systematic survey of rare and endangered plant species by 2009.	100%	Completed in 2008.
Objective 12: Develop quantifiable OBVM objectives by 2011.	0%	FWC was unable to complete OBVM due to fragmented ownerships, however, with new acquisitions, OBVM as a part of WCPR will be implemented during the next planning cycle.
Objective 13: Seek funding through the North Florida Upland Invasive Plant Council, or other sources, for invasive exotic plant control by 2009.	100%	FWC evaluated the need to seek funding and decided funding was not required to treat the very little acreage with exotic species.

Objective 14: Using the Timber Assessment developed by DOF, implement management practices consistent with OBVM objectives by 2010.	100%	The Timber Assessment was completed however; FWC was unable to complete timber management practices due to the previous fragmentation of the area. A new Timber Assessment will be completed during the next planning cycle.
Objective 15: To protect water resources, use the results of the hydrological assessment and restoration plan to initiate hydrological restoration by maintaining, improving or installing water control structures (i.e., culverts, hardened low water crossings, erosion control, soil stabilization, etc.) at appropriate locations by 2012.	0%	FWC was unable to complete the restoration and connectivity due to fragmented ownerships and access issues, however, with new acquisitions; hydrological restoration will be implemented during the next planning cycle.
Goal 2: Ensure FWC management activities are compatible with military operations of Choctaw Air Field and Eglin AFB.		
Objective 1: Continue to collaborate, coordinate, and cooperate with Eglin AFB, the U. S. Navy, and the Gulf Coastal Plain Ecosystem Partnership in regional natural resource management (ongoing).	100%	FWC participates in the steering committee for the GCPEP, and has developed a cross agencies' prescribed burning plan, and participates in other collaborative efforts between agency partners.
Objective 2: Coordinate with officials from the U.S. Navy and Eglin AFB to ensure that prescribed burning management activities do not interfere with the operation of Choctaw Air Field (ongoing).	100%	FWC has collaborated with Eglin AFB and the U.S. Navy to develop a prescribed burn plan.

Goal 3: Address resource information gaps by conducting surveys and inventories.		
Objective 1: Periodically update faunal inventories, emphasizing rare and listed wildlife species, including wading bird rookeries, bald eagle/osprey nests, bog frog, gopher tortoise, and flatwoods salamander (ongoing).	75%	Herpetological surveys are conducted each summer.
Objective 2: Continue to collaborate, coordinate, and cooperate in the sharing and dissemination of natural resource information with the Gulf Coastal Plain Ecosystem Partnership, Eglin AFB, US Navy, JTL Escribano LLC, NWFWMD, Division of Forestry, DEP- CAMA, as well as other multi-agency committees and groups involved in regional natural resource management (ongoing).	100%	Ongoing.
Objective 3: Conduct opportunistic and systematic surveys of reptile and amphibian species (ongoing).	100%	Ongoing. Herpetological survey conducted in 2005 and Florida bog frog surveys conducted annually from 2009-2013.
Objective 4: Contract with FNAI to identify historic and current vegetative community types pursuant to objective-based vegetation management.	100%	Completed in 2006.
Objective 5: Contract for a systematic survey of invasive exotic plant species, such as cogongrass and climbing ferns by 2008.	100%	Completed in 2008.
Objective 6: Consult with DHR or others to determine the need for a cultural resource assessment by 2008.	100%	FWC collaborated with the DHR to implement a monitoring protocol.

Objective 7: Contract for a systematic survey of rare and endangered plant species by 2009.	100%	Completed in 2008.
Goal 4: Provide nature-based recreation and educational opportunities		
Objective 1: Complete the following nature-based recreation projects: web page, bird checklist, entrance kiosk and area map and evaluate the feasibility of a stopping point for paddlers traveling via the coastal paddling trail or the Yellow River by 2008.	90%	A web page, initial bird list, and area map were completed. FWC has been unable to complete the entrance kiosk due to lack of access and fragmentation. Entrance kiosks will be developed during the next planning cycle.
Objective 2: Consult and cooperate with adjacent landowners including Eglin AFB, NWFWMD, and JTL Escribano LLC to assure adequate access to public recreation opportunities (ongoing).	100%	Ongoing.
Objective 3: Continue to collaborate, coordinate, and cooperate in the design and scheduling of nature-based recreational opportunities with the Gulf Coastal Plain Ecosystem Partnership, Eglin AFB, US Navy, JTL Escribano LLC, NWFWMD, Division of Forestry, DEP- CAMA, as well as other multi-agency committees and groups involved in regional natural resource management (ongoing).	100%	Ongoing.
Objective 4: Where appropriate, continue to maintain and improve the condition of the existing road network, as well as the condition of roads on new acquisitions (ongoing).	100%	Ongoing, roads on the newly acquired lands will be improved in coordination with a hydrological restoration plan.

Objective 5: Continue to provide a diversity of traditional hunting opportunities, including seasons for white-tailed deer, quail, dove, gray squirrel, turkey, waterfowl, and feral hog (ongoing).	100%	Ongoing.
Objective 6: Consult DHR staff in any planning and development of interpretive information regarding cultural resources (ongoing).	20%	FWC was unable to complete cultural resource interpretation due to fragmented ownerships and access issues, however, with newly acquired lands; FWC will consult with the DHR regarding cultural resource interpretation and will follow DHR's Management Procedures with regard to any ground disturbing or land altering activities on the area.
Objective 7: Monitor the level of public use to determine where picnic tables, trash receptacles, and toilet facilities may be warranted (ongoing).	0%	FWC was unable to monitor public use due to fragmented ownerships and access issues, however, with new acquisitions, FWC will monitor public use during the next planning cycle.
Objective 8: Enforce existing regulations to proactively address illegal access and use of non-authorized vehicles (ongoing).	50%	This was difficult to accomplish due to prior access issues and lack of cooperation from private landowners. However, with the new area acquisitions, FWC anticipates increasing law enforcement presence and patrol during the next planning cycle.
Goal 5: Continue to identify and protect cultural resources.		

Objective 1: Contact DHR prior to site selection for all ground-disturbing activities (ongoing).	0%	No ground disturbing activities were conducted during the planning cycle. However, with the new area acquisitions, FWC will coordinate with the DHR prior to any ground disturbing activities during the next planning cycle.
Objective 2: Involve DHR staff in planning and development of interpretive information regarding cultural resources (ongoing).	20%	FWC was unable to complete cultural resource interpretation due to fragmented ownerships and access issues, however, with new acquisitions; FWC will consult with the DHR regarding cultural resource interpretation during the next planning cycle.
Objective 3: Protect the known prehistoric shell midden and cooperate with DHR in the identification of other possible cultural resources (ongoing).	100%	Ongoing.
Objective 4: Consult DHR staff in any planning and development of interpretive information regarding cultural resources (ongoing).	20%	FWC was unable to complete cultural resource interpretation due to fragmented ownerships and access issues, however, with new area acquisitions, FWC will consult with the DHR regarding cultural resource interpretation during the next planning cycle.
Goal 6: To assure landscape-scale linkages and wildlife corridors, and to achieve the goals of the Escribano Point Florida Forever Project, develop an optimum boundary by continuing to identify and pursue acquisition needs.		

Objective 1: Continue to maintain a Geographic Information System (GIS) shapefile, acreage, and other necessary data to facilitate nominations for the FWC Additions and Inholdings Program list (ongoing).	100%	Ongoing.
Objective 2: Cooperate with and assist DEP-DSL in their efforts to complete the Escribano Point Florida Forever Project (ongoing).	100%	Ongoing.

5 Management Activities and Intent

The following section provides a description of agency plans to locate, identify, protect, preserve or otherwise use fragile natural resources and nonrenewable cultural resources. In general, the FWC management intent for EPWMA is to restore and maintain natural communities in a condition that sustains ecological processes and conserves biological diversity, especially fish and wildlife resources. In conjunction with this primary emphasis, it is the FWC's intent to provide quality fish and wildlife resource based public outdoor recreational opportunities on EPWMA. The FWC will utilize the best available data, guidelines, natural resource management practices, and recreational management practices to achieve these outcomes in accordance with the original purposes for acquisition. Furthermore, as noted earlier, the management activities described in this section are in compliance with those of the Conceptual State Lands Management Plan.

5.1 Land Management Review

The Land Management Review (LMR) of the EPYRWMA was completed in April 2010 (Appendix 13.3). The LMR team found that the FWC was managing the area in accordance with the purposes of acquisition. The recommendations from the LMR team were considered and addressed in the development of this Management Plan, including development of management intent language, goals and objectives, and identification of management challenges and development of solution strategies (Sections 5 - 8).

5.2 Adaptive Management

Adaptive management is "learning by doing"[12] it is the adjustment or modification of conservation actions to achieve a desired conservation goal. In practice, adaptive management is a rigorous process that includes sound planning and experimental design with a systematic evaluation process that links monitoring to management.[12,13] Adaptive management requires flexibility for implementation, but should be fitted over a fundamentally sound, well-planned design.

An adaptive management process produces the strongest inference and most reliable results when experimental design components are incorporated into the monitoring process. Adaptive management is most rigorously applied in an active format when components of experimental design (i.e., controls, replication, and randomization) are included in the monitoring process.[13, 14] Incorporating valid statistical analyses of results will further enhance the value of the adaptive management process. However, in some situations, rigorous experimental design procedures can be relaxed without invalidating monitoring results. In a passive format, adaptive management can involve applying a conservation action at a site, observing the results and adjusting the action in the future if warranted. [13, 14]

Proposed adaptive management, monitoring and performance measures are developed through literature reviews and FWC staff meetings. Overall, a results-based approach is incorporated into this Management Plan, for which effective monitoring is an integral component. The FWC will monitor conservation actions, species, habitats, and major threats to the conservation of the natural and cultural resources of EPWMA.

5.2.1 Monitoring

A well-developed monitoring protocol is also one of the principal, required criteria for the management of EPWMA. Monitoring and performance measures are important, but often overlooked elements of conservation planning. Monitoring provides the critical link between implementing conservation actions and revising management goals.

Monitoring is the systematic, repeated measurement of environmental characteristics to detect changes, and particularly trends, in those characteristics. Monitoring provides essential feedback, the data needed to understand the costs, benefits, and effectiveness of planned conservation actions and the management projects undertaken to address them.[13]

For natural communities, monitoring protocols are established through FWC's Objective-Based Vegetation Management (OBVM, Section 5.3.1) program, which monitors how specific vegetative attributes are responding to FWC management. For imperiled and focal fish and wildlife species, monitoring protocols are established through the FWC's Wildlife Conservation Prioritization and Recovery (WCPR, Section 5.4.2) program. FWC staff may monitor additional fish and wildlife species when deemed appropriate. Exotic and invasive plant and animal species (Section 5.5) are also monitored as needed and appropriate. Recreational uses are monitored through the FWC's Public Access and Wildlife Viewing program, and work in conjunction with the establishment and adjustment of public access carrying capacities (Section 5.6.3). Cultural and historical resources (Section 5.9) are monitored with guidance from the DHR. The FWC has collaborated with the DHR to implement a monitoring protocol for the area's cultural and historical resources.

A herpetological survey of area ponds was completed in 2005. Bog frog surveys were conducted on the area in 2005 and annually from 2009-2013. Further plans for monitoring

are addressed in Section 6 of this Management Plan and include a baseline herpetological survey and annual herpetological surveying and monitoring, and development and implementation of a deer camera survey on the area. Following development of the area's WCPR strategy, FWC staff will monitor for the imperiled and focal species identified in the strategy. Opportunistic monitoring for imperiled and non-imperiled wildlife will continue to be conducted on the area.

5.2.2 Performance Measures

Performance measures include qualitative or quantitative measures used to provide an estimate or index of the characteristic of interest, and to chart the overall progress of conservation actions towards specific goals. Successful monitoring programs and their associated performance measures provide natural resource professionals with valuable feedback on the effectiveness of conservation actions and make it possible to implement a more flexible adaptive management approach. An adaptive management approach ultimately will be more efficient and effective when it tracks inputs, incorporates an effective monitoring program that integrates performance measures, and evaluates results against desired goals.

5.2.3 Implementation

The EPWMA Management Plan serves as the guiding framework to implement this adaptive management process. It serves as the underpinning for the integration of management programs (OBVM, WCPR, Public Access and Wildlife Viewing, Recreation Master Plans, etc.) underway to accomplish needed conservation actions that are planned to manage the natural resources of EPWMA, and resolve conservation threats to fish and wildlife and the habitats they occupy. Based on evaluations of project results, the conservation actions are revised as necessary, and the adaptive management process is repeated.

5.3 Habitat Restoration and Improvement

On EPWMA, the FWC will focus on managing for native habitat diversity, emphasizing maintenance of high-quality natural communities, and restoration of disturbed areas. Restoration may be achieved on disturbed areas by the re-introduction of fire, restoring historic hydrological conditions and/or the use of mechanical or chemical forest management techniques as appropriate. The EPWMA has natural communities which include shrub bog, scrubby flatwoods, mesic flatwoods, dome swamp, sandhill, and salt marsh that were previously altered for timbering and other agricultural uses but otherwise appear somewhat intact that are projected to respond well to the FWC's continued resource management and protect efforts.

The FNAI has conducted surveys and mapped the current vegetative communities and historic vegetation communities on EPWMA. This information will be used to guide and prioritize management and restoration efforts on the area.

5.3.1 Objective-Based Vegetation Management

The FWC uses a comprehensive resource management approach to managing FWC-managed areas. Restoring the form and function of Florida's natural communities is the foundation of this management philosophy. The FWC uses OBVM to monitor how specific vegetative attributes are responding to FWC management.

The first step in implementing OBVM is to map the current, and in most cases the historic natural communities, on the managed area using the FNAI Natural Community Classification. The FWC contracts with the FNAI to provide these mapping services, and plans to have natural community maps recertified on most areas on a five-year basis. A natural community, as defined by the FNAI, is a distinct and recurring assemblage of populations of plants, animals, fungi and microorganisms naturally associated with each other and their physical environment.

Measurable habitat management objectives referred to as 'desired future conditions' are established for each actively managed natural community. Desired future conditions are the acceptable range of values for quantifiable vegetation attributes, such as basal area, shrub height and cover, and ground cover. The FWC collaborated with the FNAI to identify 'reference sites' for each actively managed natural community and applied the OBVM monitoring methodology at these reference sites to determine what attribute values occur in a high-quality community (http://www.fnai.org/reference-natural-communities.cfm). FWC staff considers the reference site attribute values when setting area-specific desired future conditions for natural communities.

Vegetation monitoring samples the selected attributes with the results being compared to the established desired future conditions. All monitoring performed under OBVM is completed using the program's Standard Operating Procedures.

Initial mapping and vegetation sampling provides FWC staff with baseline data indicating natural community structure, distribution, and condition on the area. Comparing the subsequent monitoring results to desired future conditions, provides key operational information on a natural community's vegetation structural status at a given point in time and trend over time. Using this information, managers can evaluate, adjust and modify their management practices to meet the stated objectives. By comparing natural community mapping products through the years, managers can track progress in moving altered communities to functioning natural communities.

5.3.2 Prescribed Fire and Fire Management

Periodic spring and summer fires occurred in fire-adapted communities under natural conditions. Plant species composition reflects the frequency and intensity of these fires. In the absence of fire, fallow fields on former longleaf sites follow a successional pattern

through mixed pine-hardwood forests to an exclusively hardwood community rather than to the original plant community. The plant species composition may differ slightly on poorer soils of the slash pine flatwoods, but the dominant role of fire in controlling hardwoods is equally important in either ecosystem.

Timber removal, site preparation, drainage, and lack of fire have all combined to alter the plant species composition of the area resulting in a loss of fuel and inhibiting the return to a more "natural" fire management regime. Site-specific combinations of prescribed fire, mechanical and chemical vegetation control, reforestation, and restoration of natural water regimes are likely necessary actions needed to restore the area to historic natural communities.

The FWC employs a fire management regime to increase both species and habitat diversity and will continue a prescribed burning program on the EPWMA in accordance with vegetative management objectives. As fire moves across a landscape, some areas carry fire better than others. Areas with higher vegetative fuel loads typically burn more evenly and with greater intensity. Areas with lower vegetative fuel loads or wetland areas inundated with water typically will not carry fire as evenly, and usually burn at a lower intensity. Employing a burning program with different burning frequencies, intensities, and seasonality (dormant season vs. growing season) of prescribed burns create habitat diversity and a mosaic of vegetation patterns. This mosaic is designed to have both frequently burned and infrequently burned aspects.

On some areas, prescribed burning is limited by the buildup of mid-story brush and a lack of pyrogenic groundcover fuels. This condition creates unsuitable habitat for many wildlife species. Mechanical control of brush on upland sites by roller chopping, logging, shredding, or incidentally by equipment during commercial thinning operations, can reduce shading and encourage the grasses and forbs that are necessary to sustain prescribed fire.

Whenever possible, existing firebreaks such as roads and trails, as well as natural breaks such as creeks and wetlands, will be used to define burn management units. Disk harrows, mowing, and foam lines will be used as necessary to minimize disturbance and damage created by fire plows.

The transitional areas between two adjacent but different vegetative cover types, such as forests and wetlands, are known as ecotones. With the possible exception of wildfire suppression, mechanical soil disturbance in ecotones will be avoided in order to protect habitats for important rare species that often occur between flatwoods and riparian drainages. Silvicultural site preparation and creation of firebreaks are avoided when possible in these zones. Additionally, fires are allowed to burn into the edges of marshes, swamps and other wetlands in order to maintain these habitats. Once fuel loads have been reduced and a more open appearance has returned, vegetative management objectives will

likely dictate a fire return interval that averages one to four years, preferably during the spring and early summer months.

Prior to transferring the property to FWC for management, the NWFWMD conducted prescribed burns on the Grassy Point tract most recently in 2011 and 2014. In February 2011, 360 acres were burned. The NWFWMD burned approximately 200 acres in 2014.

In addition to the general prescribed fire management guidelines described above, an area-specific Prescribed Fire Plan will be developed and implemented for EPWMA. This plan will include, but not be limited to, delineation of burn management units, detailed descriptions of prescribed fire methodology, safety, and smoke management guidelines. Upon completion by 2015, the EPWMA Prescribed Burning Plan will be implemented to facilitate habitat improvement on the area and will be included as Appendix13.9 in this Management Plan.

5.3.3 Habitat Restoration

Habitat restoration at EPWMA will primarily take place through application and reintroduction of prescribed fire. During the previous planning cycle, the FWC was unable to implement a prescribed fire regime on the EPYRMWA due to the fragmented nature of the original Escribano Point parcels and surrounding private landowners. However, with the new State acquisitions described in Section 1.3, application of prescribed fire will be implemented. The FWC will initially conduct prescribed burning on approximately 500 acres of fire adapted communities per year, including sandhills, mesic flatwoods, and scrubby flatwoods.

The FWC will conduct habitat and natural community improvement on 50 acres per year through roller chopping, Gyro-Trac, mowing, herbicide, and other viable vegetation management techniques as necessary. Other habitat restoration will include enhancing and improving shoreline habitat through the removal of shoreline debris on approximately 158 acres that were affected by prior hurricanes. The FWC will evaluate the need to conduct timber harvest for the purposes of habitat restoration on the Grassy Point tract. The FWC will also evaluate the need to restore longleaf pine on approximately 200 acres of pine plantation conversion sites and implement reforestation if it is determined appropriate to achieve restoration goals and meet OBVM objectives.

Prior to FWC management, the NWFWMD conducted habitat restoration through reforestation of longleaf pine and slash pine on the Grassy Point Tract. In 2002 and 2003, the NWFWMD planted approximately 151 acres of longleaf pine on four sites at the Grassy Point tract. In 2004 and 2005, the NWFWMD planted 59.4 acres of slash pine on the area.

Additionally, the FWC will cooperate with other agencies on marine and estuarine habitat enhancement and or restoration projects in order to preserve and protect the EPWMA shoreline. Potential shoreline restoration projects may include the installation of oyster

reef structures in subtidal waters adjacent to the EPWMA in cooperation with the TNC's *Pensacola Bay Living Shoreline and Oyster Reef Restoration* project, which proposes to create up to eight miles of non-contiguous oyster breakwater habitat and promote the restoration of salt marsh habitat along the shores of EPWMA in Blackwater and East bays. Such shoreline enhancement and or restoration projects are beneficial to the FWC's management of the EPWMA as they reduce wave energy and would thereby alleviate existing shore line erosion issues, improve water quality, enhance fisheries habitat, increase biodiversity, and enhance recreational opportunities. The FWC will work to implement management practices that support existing connections among upland, semi-aquatic, and aquatic habitats and protect resident species.

5.4 Fish and Wildlife Management, Imperiled and Focal Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration

5.4.1 Fish and Wildlife

Due to the variety of natural communities, a diversity of associated wildlife, including rare, imperiled, common game, and non-game species, can be found on EPWMA. In managing for wildlife species, an emphasis will be placed on conservation, protection and management of natural communities. As noted above, natural communities important to wildlife include shrub bog, scrubby flatwoods, mesic flatwoods, sandhill, salt marsh, dome swamp, and mesic hammock. Natural communities that are less represented on EPWMA include dome swamp and beach dune.

Southern toad at EPWMA, *FWC*

The size and natural community diversity of EPWMA creates a habitat mosaic for a wide variety of wildlife species. Resident wildlife will be managed for optimum richness, diversity and abundance. In addition to resident wildlife, the EPWMA provides resources critical to many migratory birds including waterfowl, passerines, raptors, shorebirds and others. Habitats important to migratory species will be protected, maintained or enhanced.

The FWC intends to manage game populations on a sustained-yield basis to assure healthy game populations and a high-quality recreational experience. In general, game wildlife populations will be managed to provide continued recreational sport hunting and wildlife viewing opportunities. However, due to the limited size of the area, some of the hunting opportunities may be regulated through a limited entry hunt program to ensure the persistence of viable game species populations, as well as hunter safety and satisfaction. The potential for conflicts among recreational activities and user groups will also be considered and continually monitored.

Wildlife management emphasis is placed on documenting the occurrence and abundance of rare and imperiled species on the property. The FWC will continue to update inventories for certain species, with emphasis on rare and imperiled fish and wildlife species. Monitoring of wildlife species will continue as an ongoing effort for the area. Concurrent with ongoing species inventory and monitoring activities, management practices are designed to restore, enhance or maintain rare and imperiled species, and their habitats. This will be further augmented by following approved Federal and FWC species recovery plans, guidelines, and other scientific recommendations for these species. Guided by these recommendations, land management activities including prescribed burning and timber stand improvements will address rare and imperiled species requirements and habitat needs. Section 5.4.2 below provides further information on FWC's comprehensive species management strategy for rare and imperiled wildlife and their respective habitats.

5.4.2 Imperiled Species and Focal Species: Wildlife Conservation Prioritization and Recovery

The FWC has identified the need to: 1) demonstrate optimal wildlife habitat conservation on FWC-managed lands; 2) develop science-based performance measures to evaluate management; 3) recover imperiled species; and 4) prevent future imperilment of declining wildlife species. To help meet these needs, the FWC uses a comprehensive resource management approach to managing its areas. Restoring the form and function of Florida's natural communities is the foundation of this management philosophy. The FWC uses OBVM to monitor how specific vegetative parameters are responding to FWC management, and uses the WCPR program to ensure management is having the desired effect on wildlife.

The goal of WCPR is to provide assessment, recovery, and planning support for the FWC-managed areas to enhance management of focal species and the recovery of imperiled species. WCPR program objectives include prioritizing what the FWC does for imperiled and focal species on FWC-managed areas; ensuring the actions taken on these areas are part of statewide conservation programs and priorities; and informing others about the work accomplished on lands FWC manages.

The WCPR program helps FWC take a proactive, science-based approach to species management on FWC-managed lands. This approach assesses information from statewide potential habitat models and Population Viability Analysis, and in conjunction with input from species experts and people with knowledge of the area, creates site-specific wildlife assessments for imperiled wildlife species and a select suite of focal species. Staff combines these assessments with area-specific management considerations to develop a WCPR Species Management Strategy for the area. Each WCPR Species Management Strategy contains area-specific measurable objectives for managing priority species and their habitat, prescribes management actions to achieve these objectives, and establishes

monitoring protocols to verify progress towards meeting the objectives. By providing FWC managers with information on actions they should undertake, the FWC intends for the WCPR Species Management Strategy to assure the presence and persistence of Florida's endangered and threatened wildlife species (see http://myfwc.com/media/1515251/Threatened_Endangered_Species.pdf), as well as select focal species found on the area.

In summary, for FWC-managed areas, the WCPR program helps assess imperiled and focal wildlife species needs and opportunities, prioritize what the FWC does for imperiled and focal species, prescribe management actions to aid in species recovery, prescribe monitoring protocols to allow evaluation of the species' response to management, and ensure the information is shared with others. Through the actions of this program, the FWC will facilitate fulfilling the needs of focal and imperiled wildlife species on EPWMA. In the long-term, by implementing these strategies on FWC-managed lands and continuing to assess wildlife species' needs, the FWC will continue to play an integral role in aiding the recovery of imperiled species and preventing the future imperilment of declining wildlife species.

The FWC will conduct a WCPR workshop for EPWMA in 2015 or 2016. Subsequently, the FWC will develop a WCPR Species Management Strategy for the EPWMA based on input received at the workshop by the end of 2016. After incorporating input from a review by experts, the strategy will be reviewed and approved and may include monitoring and management actions for imperiled and focal species. Species that will be given area-specific assessments possibly include swallow-tailed kite, Bachman's sparrow, Florida bog frog, brown-headed nuthatch, Cooper's hawk, reticulated flatwoods salamander, Florida black bear, Florida pine snake, gopher frog, gopher tortoise, northern bobwhite, pine barrens tree frog, red-cockaded woodpecker, southeastern American kestrel, southern bald eagle, and wading birds. Staff will implement the strategy and initiate the actions outlined in the strategy upon completion and approval. This Management Plan will be amended to include the WCPR strategy as Appendix 13.7 after the strategy is completed.

5.5 Exotic and Invasive Species Maintenance and Control

The FWC will continue efforts to control the establishment and spread of Florida Exotic Pest Plant Council (FLEPPC) Category I or II plants on the EPWMA. Exotic and invasive plant species known to occur on the EPWMA include Japanese honeysuckle, guinea grass, and Chinese tallow tree. Control technologies may include mechanical, chemical, biological, and other appropriate treatments. Treatments utilizing herbicides will comply with instructions found on the herbicide label and employ the Best Management Practices for their application.

Currently, exotic and invasive plant species have been identified as occurring at varying densities on approximately three acres of the original three parcels of EPYRWMA. The

FWC plans to conduct exotic plant species surveys on the area and expects at least 10 acres of exotics on the area will require annual treatment. The FWC will modify the acreage to be treated if more or fewer exotics are discovered. The FWC's methodology for determining the number of acres "infested" with invasive exotic plants only represents a cumulative acreage, and does not reflect the degree of the invasive exotic occurrence. The degree of infestation among areas indentified with invasive exotic plant occurrences often varies substantially by species, level of disturbance, environmental conditions, and the status of ongoing eradication and control efforts. The FWC will continue to focus treatments on areas identified as having invasive exotic plant occurrences, as well as treating any new occurrences as they are identified through continued monitoring.

An exotic animal species that may be of concern on the EPWMA is the feral hog. These animals have high reproductive rates, and when populations reach high densities, feral hogs can significantly degrade natural communities through foraging activity (rooting). Signs of feral hog damage to natural communities at EPWMA have not yet been documented, but the FWC will continue to monitor for signs of resource damage. The FWC will consult with other regional natural resource managing agencies and private landowners to coordinate feral hog control measures as necessary. Hog populations are controlled by hunts during the archery, small game, general gun, muzzleloading gun, and archery/muzzleloading gun seasons. Trapping is another measure that may be implemented to augment ongoing feral hog control efforts and to further reduce the natural community damage and degradation caused by this species.

Other exotic animal species that are found or have the potential to be found on the area include nine-banded armadillo, Eurasian collared dove, European starling, house sparrow, rock dove, brown anole, and greenhouse frog. The FWC will continue to conduct measures to control and monitor exotics species on the area as outlined in Section 6.4 of this Management Plan.

5.6 Public Access and Recreational Opportunities

5.6.1 Americans with Disabilities Act

When public facilities are developed on areas managed by FWC, every effort is made to comply with the Americans with Disabilities Act (Public Law 101-336). As new facilities are developed, the universal access requirements of this law are followed in all cases except where the law allows reasonable exceptions. Recreation facilities in semi-primitive or primitive zones will be planned to be universally accessible to the degree possible except as allowed by the ADA[15] where:

1. Compliance will cause harm to cultural or historic sites, or significant natural features and their characteristics.

2. Compliance will substantially alter the nature of the setting and therefore the purpose of the facility.

3. Compliance would not be feasible due to terrain or prevailing construction practices.

4. Compliance would require construction methods or materials prohibited by federal or state statutes, or local regulations.

5.6.2 Recreation Master Plan

The FWC has adopted a comprehensive approach to the planning and administration of fish and wildlife resource based public outdoor recreational opportunities for EPWMA. To accomplish this, the FWC will work with recreational stakeholders and the general public to develop a Recreation Master Plan (RMP) for EPWMA that will be used to further design and develop appropriate infrastructure that will support the recreational use of the area by the general public. The RMP will include planning for parking, new recreational facilities, trail design, and area resource interpretation and will be completed by 2016. When complete, the RMP will be included as Appendix 13.10.

5.6.3 Public Access Carrying Capacity

Baseline carrying capacities for users on FWC-managed lands are established by conducting a site specific sensitivity analysis using available data for the site. The intent of the carrying capacity analysis is to minimize wildlife and habitat disturbance and provide the experience of being "immersed in nature" that visitors to FWC-managed areas desire. Carrying capacities are just a first step; management of recreational use requires a means of monitoring visitor impacts. Responding to these impacts may require adjusting the carrying capacities as necessary. The carrying capacities generated through this process are used as a tool to help plan and develop public access, wildlife viewing, and fish and wildlife resource based public outdoor recreation opportunities. Based on an analysis of the overall approved uses and supported public access user opportunities, and the anticipated proportional visitation levels of the various user groups, the FWC has determined that EPWMA can currently support 100 visitors per day. However, objectives to add or improve public access facilities and infrastructure resulting in an increase of the public access carrying capacity to 155 visitors per day have been proposed in Section 6.4 of this Management Plan.

It is important to note that public access carrying capacities are not developed to serve as a goal for expanding the public use of a particular area to match the established carrying capacity. Rather, they are developed to establish maximum thresholds for public use of the respective area in order to protect the natural and cultural resources on EPWMA and to ensure that visitors will have a high-quality visitor experience. The public access carrying capacity will be periodically reevaluated, and additional capacity may be contemplated as part of the RMP development and implementation process.

5.6.4 Wildlife Viewing

Deer at EPWMA, *FWC*

The EPWMA is home to a variety of wildlife found its upland forests, marshes, swamps, and shrub bog, well as a wide variety of migrant and neo-tropical species. With the diversity of natural communities and planned active wildlife management practices, the EPWMA is expected to be an excellent place to view wildlife. Additionally, wildlife viewing opportunities are projected to increase upon the completion of planned improvements for public access and wildlife viewing outlined in Section 6.5 of this Management Plan.

5.6.5 Hunting

Hunting opportunities at EPWMA include seasons for archery, small game, general gun, muzzleloading gun, spring turkey and migratory bird as well as year round frogging. An evaluation of the hunting opportunities offered on EPWMA is performed periodically by the FWC. Additional information about the current hunting opportunities and regulations on the area may be found at: http://myfwc.com/hunting/wma-brochures/#nw

5.6.6 Fishing

Redfish caught at EPWMA, *FWC*

Fishing is permitted year-round at EPWMA. Catfish, black bass and bream are the most popular freshwater species taken; saltwater favorites include red drum, spotted seatrout, flounder, striped bass and sheepshead. Additional information about the current fishing opportunities and regulations on the area may be found at: http://myfwc.com/hunting/wma-brochures/#nw

5.6.7 Boating and Paddling

There is a boat launch along Fundy Bayou at the Grassy Point tract which allows access to kayak and canoe trails in Fundy Bayou, Blackwater Bay, Catfish Basin, and the surrounding areas. In addition, planned improvements to the boat ramp and expansion of a paddling trail outlined in Section 6.9 of this Management Plan are projected to enhance paddling opportunities on the area.

5.6.8 Trails - Hiking and Paddling

Currently, there are no established hiking or paddling trails on the EPWMA. However, both paddling and hiking opportunities are available on the area. Paddling resources include Fundy Bayou, Blackwater Bay, Catfish Basin, and the surrounding areas. Current hiking opportunities are limited to roads and shoreline. Additionally, Section 6.5 of this Management Plan proposes to design and develop up to two miles of hiking trails and up to five miles paddling trails on the area, as well as maps for any trails that are developed.

5.6.8.1 Trails - Equestrian

While equestrian trails have not been established on the EPWMA, horses are allowed throughout the area. Nearby public lands, including Eglin AFB and Blackwater River State Forest, also offer equestrian recreational opportunities that may bring users to the area.

Bayside campground at EPWMA, *FWC*

5.6.9 Camping

Camping in tents, trailers, or self-propelled camping vehicles is allowed only by permit in designated campsites. Currently, there are two primitive campgrounds at the Grassy Point tract, the Bayou campground and the Bayside campground, which are available year-round through a free reservation system. Additional information about the current camping opportunities and regulations on the area may be found at: http://myfwc.com/hunting/wma-brochures/#nw

5.6.10 Geocaching

Geocaching, also known as Global Positioning System (GPS) Stash Hunt and GeoStash, is a contemporary combination of orienteering and scavenger hunting generally utilizing a GPS receiver unit. Geocache websites routinely promote good stewardship. However, the potential exists for resource damage, user conflicts, or safety issues caused by inappropriately placed caches and/or links that do not provide adequate information about the area.

It is the policy of the FWC to allow placement of geocaches only in those locations that do not present the potential for resource damage, user conflicts, or threats to the safety of the activity participants. The placement of geocaches on FWC-managed lands is governed by specific guidelines. These guidelines may be found on the following FWC website: http://myfwc.com/media/1074886/FWC_Geocache_Guidelines.pdf .

5.6.11 Environmental Education, Interpretation and Programs

Currently there are two interpretive kiosks on the area with additions described in Section 6.5. Plans for cultural resource interpretation are described in Section 6.8. Currently FWC staff participates in education and outreach programs around Santa Rosa County and northwest Florida. Outreach events include Eglin AFB Earth Day, Munson Heritage Festival, Walton County Camp Conservation, Baker Heritage Day and many others. An objective to expand these programs to include information about the EPWMA in outreach is included in Section 6.5.

5.7 Hydrological Preservation and Restoration

In 2009, WRS Infrastructure & Environment, Inc. completed a Hydrology Assessment and Conceptual Restoration Plan for the original 1,166 acres acquired within the EPWMA. The restoration plan included basin and subbasin delineation, natural drainage way and flow

direction, existing ditches and flow direction, historic flows, existing water control structures, and recommended water control structures.

To improve hydrological functions on the area, the restoration plan recommended installation of restoration structures such as culverts and hardened low-water crossings; removal of roads; road maintenance; and ditch plugging. However, the majority of these recommended structures were suggested for development on either surrounding private property or Eglin AFB. Therefore, these structures have not yet been constructed because many of the activities needed to restore hydrology on EPWMA require approval or compliance with adjacent landowners. With the addition of lands described in Section 1.3, the FWC is in a much better position to begin implementing hydrological restoration and preservation on the area, pursuant to the recommendations of a new comprehensive hydrological assessment and restoration plan to be developed for the area described below.

5.7.1 Hydrological Assessment

Section 6.6 of this Management Plan proposes the completion of a hydrological assessment and restoration plan for the entire EPWMA. A comprehensive hydrological assessment and restoration plan is necessary in light of the recent additions to EPWMA, which have nearly tripled the area's size. Upon completion of the comprehensive hydrological assessment and restoration plan for the area, the FWC will work with the NWFWMD, other agencies and landowners as appropriate, to implement hydrological improvements and restoration as feasible on the area.

5.8 Forest Resource Management

As noted above, the FFS conducted a Timber Assessment of the original EPYRWMA in 2005. The assessment indicated that due to the wet nature of the area and very poorly drained soils, the area was not readily conducive to timber production without site disturbing measures such as channeling, ditching, and draining. The assessment also noted that there was a low volume and widespread arrangement of merchantable timber. However, the addition of uplands and previously timbered lands to the EPWMA in 2013 and 2014 has warranted an updated timber assessment by the FFS (Appendix 13.8).

Hydrological restoration and the reintroduction of prescribed burning are the most important factors in re-establishment of natural communities and the enhancement of wildlife habitats in these forested communities occurring on the area. Upland pine forest planted with off-site pines will be reforested with longleaf pine or other on-site species as appropriate. Degraded or disturbed bottomland hardwood sites will be encouraged to reforest naturally with native hardwoods and other appropriate native plant species.

Pursuant to OBVM management goals, the FWC will continue to manage timber resources for wildlife benefits and natural community restoration. Management activities including the use of timber thinning and harvesting may be utilized. Reforestation techniques often

vary depending on the natural community characteristics and species composition of the area. One of the primary management techniques for reforestation involves regeneration harvests of off-site slash and loblolly pines once they reach merchantable pulpwood size and then replanting with longleaf pine, if longleaf pine is determined to be the naturally occurring pine species for the area. Planting trees on these selected sites is used to increase the rate of reforestation and to ensure diversity. Forested wetlands are managed for stands with old growth characteristics. Snags will be protected to benefit cavity-nesting species.

5.8.1 Forest Resource Management Plan

The FWC will evaluate the need to prepare and implement a Forest Resource Management Plan which may include reforestation, harvesting, and prescribed burning activities based on restoration and maintenance needs of the natural communities and other goals established for management of EPWMA. If determined to be necessary, the Forest Resource Management Plan will be developed by the FWC through the services of a professional forestry consultant or the FFS. The management of timber resources will be considered in the context of the Forest Resource Management Plan, as well as the overall land management goals and objectives expressed in this Management Plan.

5.9 Cultural and Historical Resources

Procedures outlined by the DHR will be followed to preserve cultural and historical resources. The FWC will continue to consult with the DHR in an attempt to locate and preserve any features on the area. As appropriate and necessary, the FWC will contact professionals from the DHR for assistance prior to any ground-disturbing activity on the area.

Shell hammock midden site, *FWC*

As described earlier in Section 2.8, to date, the DHR Master Site File indicates 17 archaeological and historical sites on the EPWMA (Appendix 13.13). The sites include two prehistoric burial sites (SR00779 and SR00781), one historic burial site (SR00002), one homestead (SR01435), seven historic dumps (SR00773, SR00774, SR00775, SR00776, SR01900, SR01899, and SR01898), one prehistoric shell midden (SR00760), one ceramic scatter (SR00777), one prehistoric habitation site (SR00780), one lithic scatter site (SR01901), and two areas of low density artifact scatter (SR01902 and SR01903). There have been 14 field surveys documented on or near EPWMA. The FWC will submit subsequently located cultural sites on the EPWMA to the DHR for inclusion in their Master Site file.

Currently, the EPWMA staff has received DHR Archaeological Resources Management (ARM) training and the FWC will ensure that future management staff will also receive ARM training. Furthermore, the FWC will refer to and follow the DHR's Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties for management of these resources and prior to any facility development or other ground disturbing activities.

5.10 Capital Facilities and Infrastructure

FWC's land management philosophy is designed to conserve the maximum amount of wildlife habitat while providing the minimal number of capital facilities and infrastructure necessary to effectively conduct operational and resource management activities, and provide ample opportunities for fish and wildlife resource based public outdoor recreation. For these reasons, planned capital facilities and infrastructure will focus on improving access, recreational potential, hydrology, or other resource and operational management objectives.

Current capital facilities and infrastructure on EPWMA include (Figure 11):

- A staff residence (approximately 2.5 acres for the property)

- Two campgrounds (Bayou campgrounds with four campsites and Bayside campground with 12 campgrounds and a group campsite)

- Two miles of roads

- Two kiosks

- An unimproved boat ramp at Bayou campground

As described in Section 5.6.1 of this Management Plan, for any public facilities that are developed on areas managed by FWC, every effort is made to comply with the Americans with Disabilities Act (Public Law 101-336).

5.11 Land Conservation and Stewardship Partnerships

The FWC utilizes a three-tiered approach to identifying, acquiring or otherwise protecting important conservation lands adjacent to or in proximity to existing FWC-managed areas. This involves development of an Optimal Resource Boundary (ORB), Optimal Conservation Planning Boundary (OCPB) and associated Conservation Action Strategy (CAS). Increasingly, cooperative land steward partnership efforts with private landowners plays an integral role in this effort as does ongoing land conservation, either through fee-simple or less-than-fee conservation easements. In combination, this tiered model helps the FWC to further the regional conservation of important fish and wildlife habitats through a proactive, comprehensive, and cooperative approach towards conservation.

5.11.1 Optimal Resource Boundary

This three tiered model begins with the development of an ORB, which is a resource-based analysis on a regional scale that integrates important FWC conservation research and analysis into practical planning, acquisition, and management efforts through GIS analysis. The ORB focuses on critical and important wildlife species or habitat considerations such as rare and imperiled species habitat within a particular region or ecosystem-like area on a landscape scale within which an FWC managed area is contained while eliminating urban areas or lands that have already been conserved or protected.

5.11.2 Optimal Conservation Planning Boundary

The second tier is known as the OCPB (Figure 12). The OCPB combines the regional natural resources identified in the ORB, as well as regional and local area conservation planning, including habitat conservation and restoration, habitat linkages, management challenges, land use and zoning issues, infrastructure including roads and developments, improving access, eliminating inholdings, providing prescribed burn buffers, resolving boundary irregularities, water resource protection, and conserving other important natural and cultural resources.

The OCPB provides the basis for development of a broader CAS for EPWMA. Although the OCPB provides the basis for potential future voluntary, willing-seller conservation acquisitions, it is designed to function primarily as a conservation planning boundary. The OCPB identifies surrounding lands and natural resources that may be important to the continued viability of fish and wildlife populations in the region. As they are currently managed, these lands appear to contribute to regional conservation and may support conservation landscape linkages.

5.11.3 Conservation Action Strategy

The CAS is the third tier, and implements the results of the ORB and OCPB tiers. This element of the process incorporates the conservation planning recommendations into an action strategy that prioritizes conservation needs. The CAS is integral to the development of conservation stewardship partnerships and also implements the current approved process for establishing the FWC Florida Forever Inholdings and Additions acquisition list.

Primary components of the CAS may include:

- FWC Landowner Assistance Program (LAP)
- FWC conservation planning
- FWC Additions and Inholdings Program Land Conservation Work Plan
- Forest Stewardship Program proposals
- Florida Forever project proposals and boundary modifications
- Conservation easements
- Federal or State grant conservation proposals
- Regional or local conservation proposals

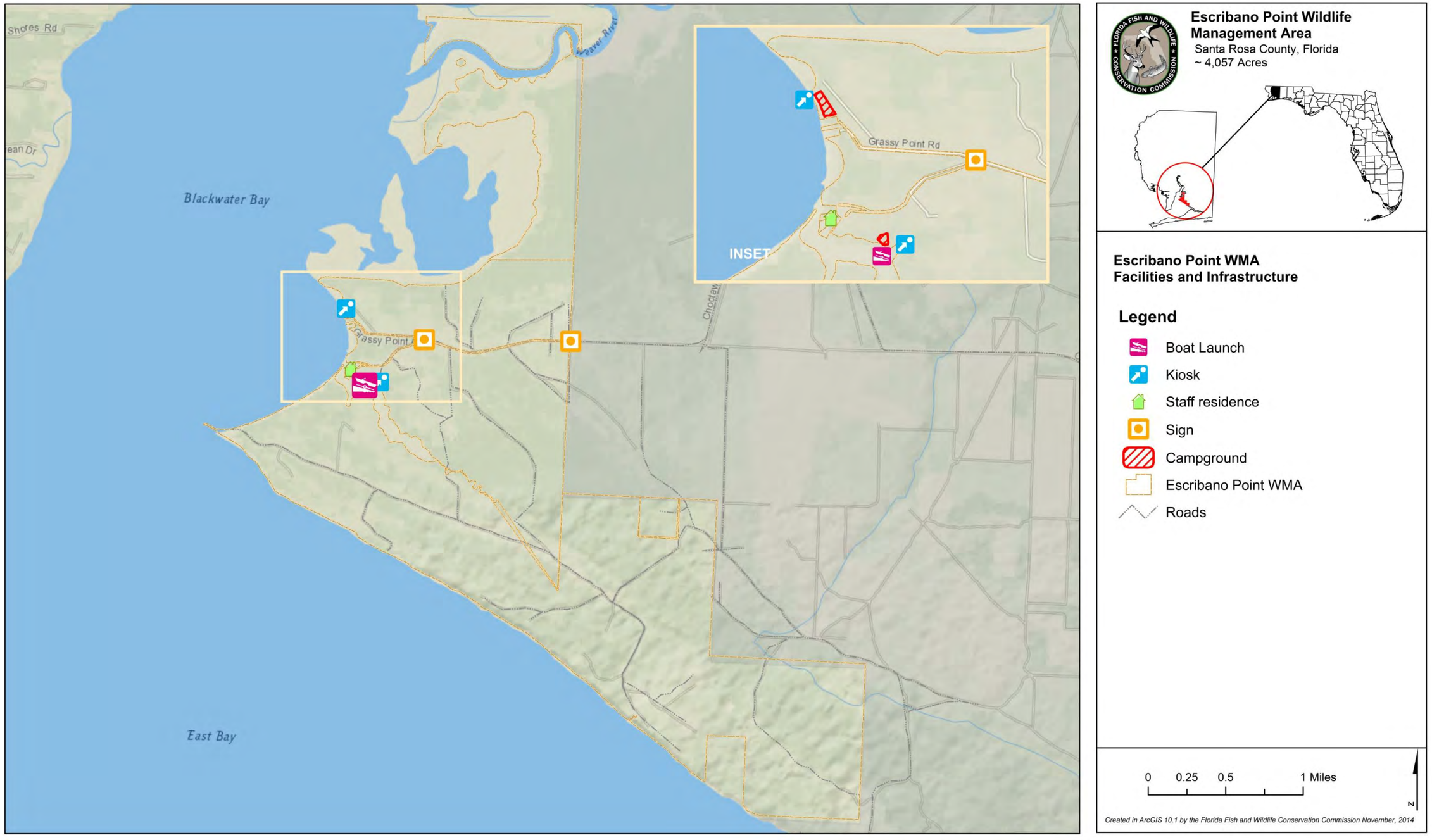


Figure 11. Facilities and Infrastructure at EPWMA

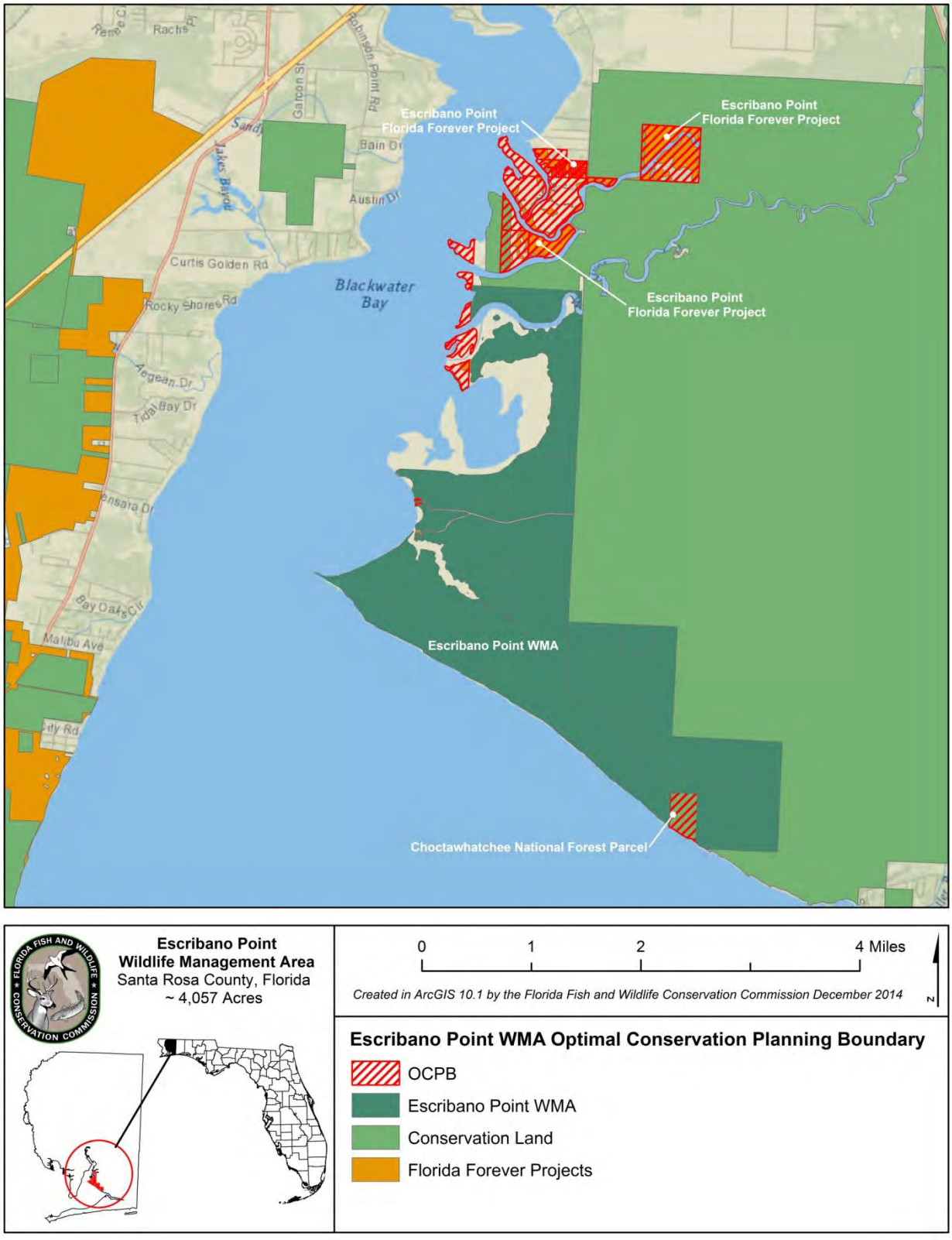


Figure 12. EPWMA Optimal Conservation Planning Boundary

- Local, state, and federal planning proposals
- Non-governmental organization conservation proposals

Continued conservation of these lands may be aided by available voluntary landowner stewardship programs, conservation easements, and in some cases, potential voluntary conservation acquisitions. Participation in any FWC conservation effort is entirely voluntary and at the sole choice of willing landowners.

Private landowners seeking assistance with habitat management will likely find it offered within FWC's LAP. The FWC employs biologists who are available to provide wildlife-related assistance with land-use planning and habitat management. There are many forms of assistance that include technical, financial, educational, and various forms of recognition that seek to award landowners who manage their wildlife habitat responsibly. More information on FWC's LAP program and online habitat management tools are available online at: http://myfwc.com/conservation/special-initiatives/lap/ .

5.11.4 FWC Florida Forever Additions and Inholdings Acquisition List

Currently, FWC has identified approximately 614 acres of potential additions or privately held inholdings for EPWMA, which includes the 335 acres that remain to be acquired in the Escribano Point Florida Forever project. These additions are located adjacent to the Yellow River and Blackwater Bay in Township 01N, Range 27W, Sections 29, 30, 31; Township 01N, Range 28W, Section 36; Township 01S, Range 27W Sections 6 and 1; and Township 01S, Range 28W, Section 14. Upon completion of the CAS, additions to the FWC Florida Forever Additions and Inholdings acquisition list may be recommended.

5.12 Research Opportunities

The FWC intends to cooperate with researchers, universities, and others as feasible and appropriate. For EPWMA, the FWC will continue to assess and identify research needs, and pursue research and environmental education partnership opportunities as appropriate. Research proposals involving the use of the area are evaluated on an individual basis. All research activities on the EPWMA must have prior approval by the FWC.

Marsh at EPWMA, *FWC*

5.13 Cooperative Management and Special Uses

5.13.1 Cooperative Management

The FWC is responsible for the overall management and operation of EPWMA as set forth in the lease agreements with the Board of Trustees. In keeping with the lease agreements, and in order to conduct its management operations in the most effective and efficient

manner, the FWC cooperates with other agencies to achieve management goals and objectives described in this Management Plan. These include cooperating with the DHR to ensure the requirements of the Management Procedures Guidelines - Management of Archaeological and Historical Resources document (Appendix 13.13) are followed with regard to any ground-disturbing activities. In addition, the FFS is a designated cooperating agency, and assists FWC by providing technical assistance on forest resource management. Also, the FWC cooperates and consults with the NWFWMD and the DEP for the monitoring and management of both ground and surface water resources and the overall management of EPWMA.

The FWC participates as a partner in the steering committee for the GCPEP. The FWC has developed cross agency burn plan with the GCPEP and participates in other collaborative efforts between agency partners for the management of regional natural resources. The FWC collaborates with U.S. DOD Air Force and Navy partners including Eglin AFB, Naval Outlying Landing Field (NOLF) Choctaw and Naval Air Station (NAS) Whiting Field for overall management of EPWMA and public access to the area.

5.13.2 First Responder and Military Training

First-responder (public governmental police department or agency, fire and emergency medical service personnel) training and military training are conditionally allowed on EPWMA. Such activities are considered allowable uses only when undertaken intermittently for short periods of time, and in a manner that does not impede the management and public use of EPWMA, and causes no measurable long-term impact to the natural resources of the area. Additionally, FWC staff must be notified and approve the training through issuance of a permit prior to any such training taking place on EPWMA. Any first-responder or military training that is not low-impact, intermittent and occasional would require an amendment to this Management Plan, and therefore will be submitted by the FWC to the DSL and the ARC for review, consideration, and approval prior to authorization.

Additionally, the Gulf Regional Air Space Initiative (GRASI) is a continuation of ongoing, mutually beneficial cooperation among the Department of Defense (DOD) and its military branches, including the United States Air Force (USAF), State and regional agencies, on issues related to military readiness and conservation. The GRASI was initiated to prepare for the addition to the regional airspace (Northwest Florida) of the Joint Strike Fighter (F-35), as well as additional training needs of air and ground units of the military. The GRASI's primary purpose for FWC-managed lands is to allow important military ground training activities on areas where related ground-support air activities can also be safely conducted, and thereby relieve congestion in other restricted airspaces.

The FWC participates in GRASI along with a consortium of military, state and regional agencies (FWC, DACS, NWFWMD, DEP, The Nature Conservancy [TNC], Florida

Department of Economic Opportunity [DEO], USFS, NPS, DOD and USAF). The GRASI consortium of agencies have worked to assess and recognize mutually compatible areas for training that minimize adverse impacts to natural resources and public recreational opportunities. As a result of this effort, the FWC has identified and provided to the military a list of FWC-managed lands with potential for GRASI training areas. To further determine the suitability of the recommended FWC-managed areas, the FWC and military personnel will coordinate site visits for areas of interest.

In addition, a GRASI Memorandum of Agreement (MOA; Appendix 13.15) between the FWC and the USAF was developed and signed by the FWC. Similar MOAs between other GRASI consortium entities and the USAF have also been developed and enacted. In general, the FWC GRASI MOA outlines management responsibilities and activities of the participating entities that are considered compatible among all parties and that are not expected to unreasonably impact the managed lands. The GRASI MOA further calls for FWC and USAF personnel to work cooperatively to develop an "Annual Operations Plan."

To advance our shared national and State interests, the FWC will continue to coordinate and cooperate with the USAF, other branches of the military, and other GRASI consortium members to achieve the goals of GRASI, and fulfill the commitments established in the FWC GRASI MOA. As with first-responder and other training described above, GRASI-related military training activities that are not low-impact, intermittent and occasional would require an amendment to this Management Plan, and therefore will be submitted by the FWC to the DSL and the ARC for review, consideration, and approval prior to authorization.

5.13.3 Apiaries

Currently, there are no apiaries operating on EPWMA. However, use of apiaries is conditionally approved for EPWMA and is deemed to be consistent with purposes for acquisition, is in compliance with the Conceptual State Lands Management Plan, and is consistent with the FWC agency mission, goals, and objectives as expressed in the agency Strategic Plan and priorities document (Appendix 13.11). Location, management, and administration of apiaries on EPWMA will be guided by the FWC Apiary Policy (Appendix 13.12).

5.14 Climate Change

Because of Florida's unique ecology and topography, any potential impacts as a result of climate change may be particularly acute and affect multiple economic, agricultural, environmental, and health sectors across the state. The impact of climate change on wildlife and habitat may already be occurring, from eroding shorelines and coral bleaching to increases in forest fires and saltwater intrusion into inland freshwater wetlands.

The Intergovernmental Panel on Climate Change (IPCC), a multi-national scientific body, reports that climate change is likely proceeding at a rate where there will be unavoidable impacts to humans, wildlife, and habitat. Given current levels of heat-trapping greenhouse gas emissions, shifts in local, regional, and national climate patterns including changes in precipitation, temperature, increased frequency and intensity of extreme weather events, rising sea levels, tidal fluctuations, and ocean acidification are projected. The current trend of global temperature increase has appeared to accelerate in recent decades, and continued greenhouse gas emissions may result in projected global average increases of 2 –11.5° F by the end of the century.[16]

This apparent change in global climate has the potential to disrupt natural processes; in some areas, climate change may cause significant degradation of ecosystems that provide services such as clean and abundant water, sustainable natural resources, protection from flooding, as well as hunting, fishing and other recreational opportunities. Consequently, climate change is a challenge not only because of its likely direct effects, but also because of its potential to amplify the stress on ecosystems, habitats, and species from existing threats such as exponential increases in surface and ground water use, habitat loss due to increased urbanization, introduction of invasive species, and fire suppression.

Potential impacts that may be occurring as a result of climate change include: change in the timing of biological processes, such as flowering, breeding, hibernation, and migration,[17, 18, 19] more frequent invasions and outbreaks of exotic invasive species,[20] and loss of habitat in coastal areas due to sea level rise.[21] Some species are projected to adjust to these conditions through ecological or evolutionary adaptation, whereas others are projected to exhibit range shifts as their distributions track changing climatic conditions. Those species that are unable to respond to changing climatic conditions are projected to go extinct. Some estimates suggest that as many as 20% - 30% of the species currently assessed by the IPCC are at risk of extinction within this century if global mean temperatures exceed increases of 2.7 – 4.5° F.[22] A number of ecosystems are projected to be affected at temperature increases well below these levels.

At this time, the potential effects of climate change on Florida's conservation lands are just beginning to be studied and are not yet well understood. For example, the FWC has begun a process for currently developing climate change adaptation strategies for monitoring, evaluating, and determining what specific actions, if any, may be recommended to ameliorate the projected impacts of climate change on fish and wildlife resources, native vegetation, and the possible spread of exotic and invasive species. Currently, the FWC is continuing its work on the development of these potential adaptation strategies. However, as noted above, the effects of climate change may become more frequent and severe within the time period covered by this Management Plan.

For these reasons, there is a continuing need for increased information and research to enable adaptive management to cope with potential long-term climate change impacts. The most immediate actions that FWC can take are to work with partners to gather the best scientific data possible for understanding natural processes in their current state, model possible impacts and subsequent changes from climate change, develop adaptive management strategies to enhance the resiliency of natural communities to adapt to climate change, and formulate criteria and monitoring for potential impacts when direct intervention may be necessary to protect a species. To this end, when appropriate, the FWC will participate in organizations such as the Peninsular Florida Land Conservation Cooperative or similar organizations so that the FWC continues to gain understanding and share knowledge of key issues related to potential climate change. In addition, the FWC will consider the need for conducting vulnerability assessments to model the potential effects of climate change, especially sea level rise and storm events, on imperiled species and their habitats on FWC managed land.

Shorebirds at the Escribano Point, *FWC*

The low-lying coastal habitats, such as salt marsh and hardwood swamp natural communities that are found on the EPWMA are projected to face the most direct and dramatic impacts of climate change, particularly from a projected rising sea level and from the projected increased frequency and intensity of coastal storms.[23, 24, 24, 26] The potential loss of habitat may result in the loss of species using that habitat, including migrating and nesting birds. Storm events also cause considerable physical damage to native vegetation along vulnerable shorelines, impacting nesting habitat for sea life and shorebirds. The projected rise in sea levels may decrease the availability and abundance of prey for wading birds that forage in shallow waters on the expansive tidal flats of the Gulf Coast. Climate change may amplify and hasten these effects, potentially at rates that exceed the normal resiliency of plant communities to recover, shift or adapt accordingly.[27, 28] Projected salt water intrusion into the subsurface freshwater lens from potential sea level rise and saltwater inundation of surface freshwaters from storm surges may alter coastal ecosystems and freshwater marshes, possibly resulting in more salt-tolerant aquatic plant communities. Elements of climate change that may potentially affect EPWMA include inundation and saltwater intrusion from sea level rise, more frequent and more potent storm events, alteration of vegetation reproductive cycles and changes in the fire regime.

A 2013 report by TNC modeled the impacts of sea level rise in five significant estuarine systems in the Gulf of Mexico, including Pensacola Bay. The Pensacola Bay study site

covered over 155,600 acres of marshes, coastal forests, tidal flats, cypress and tidal swamps, beaches and oyster reefs and encompassed the 860,000 acres of the Pensacola Bay system. The study applied a Sea Level Affecting Marsh Model (SLAMM) simulation to three SLR scenarios (0.7 meter, 1 meter, and 2 meter) through the year 2100 [29]. Under each SLR scenario, the model predicted a substantial loss of coastal forest (-18%), and a substantial gain of salt marsh (3,468%), transitional salt marsh (4,376%) and tidal freshwater marsh (3,333%).[29]

Habitat reduction for species in the study area under the one meter SLR scenario included a 75% or greater loss for Florida burrhead (*Echinodorus floridanus*), blackmouth shiner, and Florida pondweed (*Potamogeton floridanus*); a 50%-75% loss for narrowleaf naiad (*Najas filifolia*); 26-50% loss for bog spicebush (*Lindera subcoriacea*) and Escambia map turtle; 10-25% loss for Santa Rosa beach mouse (*Peromyscus polionotus leucocephalus*), Perdido Key beach mouse (*P. polionotus trissyllepsis*) and saltmarsh topminnow; and a less than 10% loss for reticulated flatwoods salamander, piping plover, white-top pitcherplant, Kral's yellow-eyed grass (*Xyris stricta* var. *obscura*) and gulf sturgeon (*Acipenser oxyrinchus desotoi*) [29]. Sea-level rise potential inundation scenarios at EPWMA ranging from one to six meters are depicted in Figure 13.

In addition to the SLR implications of climate change, the report applied the Climate Change Vulnerability Index to three of the vulnerable species analyzed at the Pensacola Bay site. The piping plover and Alabama beach mouse (*Peromyscus polionotus ammobates*) were found to be highly vulnerable to the overall effects of climate change. Highly vulnerable was defined as "abundance and/or range extent within geographical area assessed likely to decrease significantly by 2050."[29] Hairy-peduncled beakrush was found to be moderately vulnerable to the effects of climate change. Moderately vulnerable was defined in the report as "abundance and/or range extent within geographical area assessed likely to decrease by 2050."[29]

To address the potential impacts of climate change on the EPWMA, Goals and Objectives have been developed as a component of this Management Plan (Section 6.13). Depending on the recommendations of the adaptive management strategies described above, additional specific goals and objectives to mitigate potential climate change impacts may be developed for the EPWMA Management Plan in the future.

5.15 Soil and Water Conservation

Soil disturbing activities will be confined to areas that have the least likelihood of experiencing erosion challenges (see Section 2.1.2 and Figure 5. EPWMA-Soils). On areas that have been disturbed prior to acquisition, an assessment will be made to determine if soil erosion is occurring, and if so, appropriate measures will be implemented to stop or control the effects of this erosion.

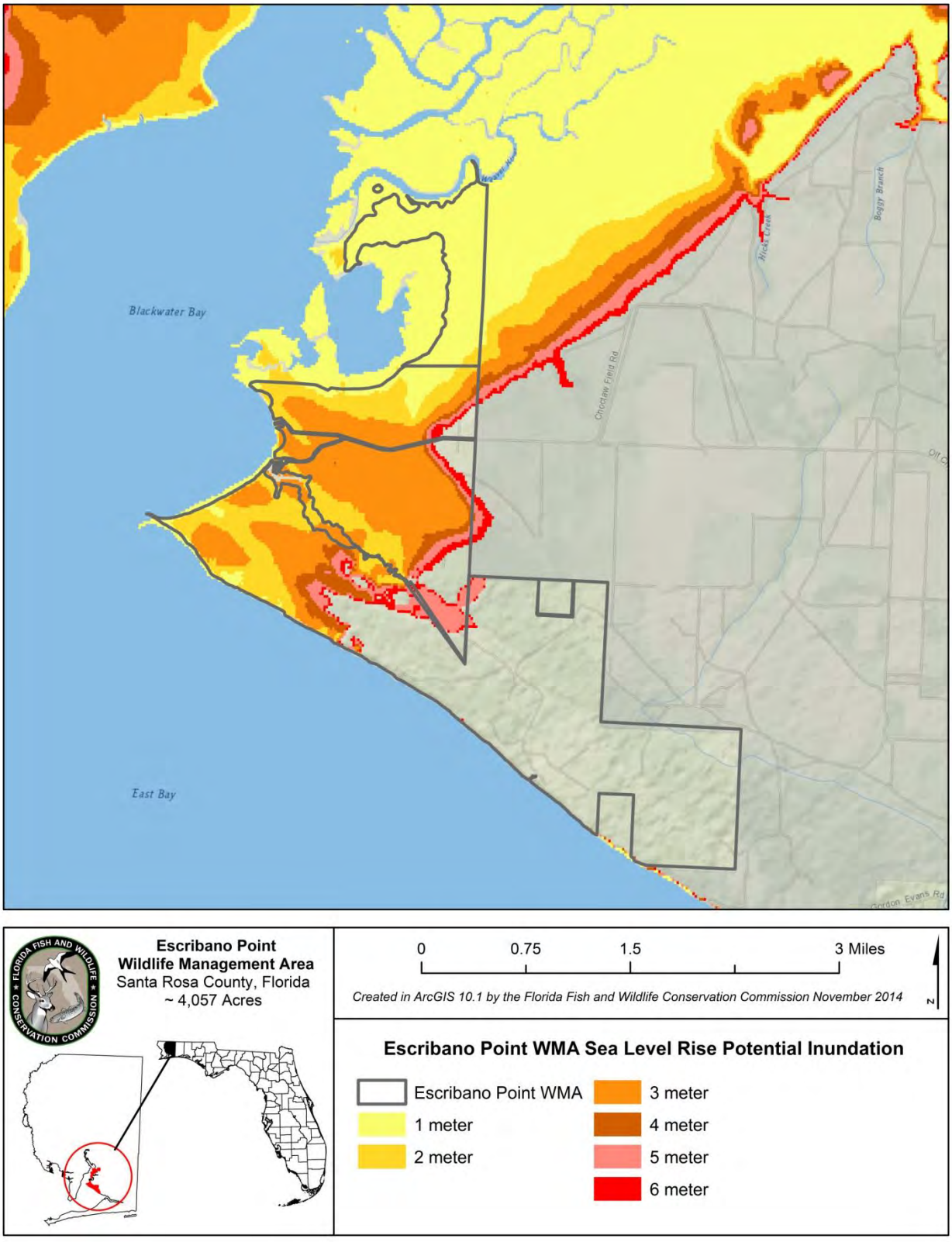


Figure 13. Sea Level Rise Potential Inundation - EPWMA

6 Resource Management Goals and Objectives

The management goals described in this section are considered broad, enduring statements designed to guide the general direction of management actions to be conducted in order to achieve an overall desired future outcome for EPWMA. The objectives listed within each management goal offer more specific management guidance and measures, and are considered the necessary steps to be completed to accomplish the management goals. Many of the objectives listed have specific end-of-the-calendar-year target dates for completion and all of them are classified as having either **short-term** (2015-2016) or **long-term** (2017-2025) timelines for completion.

6.1 Habitat Restoration and Improvement

Goal: Improve extant habitat and restore disturbed areas.

Short-term

6.1.1 Conduct prescribed burning on 500 acres of fire adapted communities per year on the area, including sandhills, mesic flatwoods, and scrubby flatwoods.

6.1.2 Maintain 1,000 acres of fire adapted communities (62%) on the area within 2 - 3 year target fire return interval.

6.1.3 Contract for mapping of current and historic natural communities on the area by 2015.

6.1.4 Develop and implement a prescribed burning plan for the area.

6.1.5 Conduct habitat/natural community improvement on 50 acres of the area per year including roller chopping, Gyro-Trac, mowing, herbicide, and other viable vegetation management techniques (Figure 14).

6.1.6 Conduct habitat/natural community improvement activities on 158 acres of the area through removal of shoreline debris from prior hurricanes to enhance and improve shoreline habitat (Figure 14).

6.1.7 Develop and implement OBVM on the area.

6.1.8 Continue to coordinate and cooperate with the GCPEP, the National Wild Turkey Foundation (NWTF), and other partners on potential grant funding opportunities for natural community restoration.

Long-term

6.1.9 Continue to conduct prescribed burning on 500 acres of fire adapted communities on the area per year, including sandhills, mesic flatwoods, and scrubby flatwoods.

6.1.10 Maintain 1,600 acres of fire adapted communities (100%) on the area within 2-4 year target fire return interval.

6.1.11 Continue to implement OBVM on the area.

6.1.12 Continue to conduct habitat/natural community improvement on 25 acres of the area per year including roller chopping, Gyro-Trac, mowing, herbicide, and other viable vegetation management techniques (Figure 14).

6.1.13 Evaluate the need for longleaf pine reforestation efforts on approximately 200 acres of pine plantation conversion sites on the area and implement reforestation if determined appropriate to achieve restoration goals and OBVM objectives.

6.1.14 Evaluate the need to conduct timber harvest for the purposes of habitat restoration on approximately 200 acres on the Grassy Point tract (Figure 14).

6.1.15 Continue to coordinate and cooperate with the GCPEP, the NWTF, and other partners on potential grant funding opportunities for natural community restoration.

6.1.16 Continue to implement the area's prescribed burning plan.

6.2 Imperiled and Focal Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration

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

Short-term

6.2.1 Develop and implement a WCPR strategy for the area by 2017.

6.2.2 Monitor imperiled and focal species on the area based on the WCPR strategy.

6.2.3 Continue to collect opportunistic wildlife and plant species occurrence data for rare and imperiled species on the area.

6.2.4 Conduct a baseline herpetological survey on the area.

6.2.5 Continue herpetological surveying and monitoring.

6.2.6 Conduct a rare and imperiled plant survey.

6.2.7 Continue a salt marsh topminnow survey in adjacent waters.

Long-term

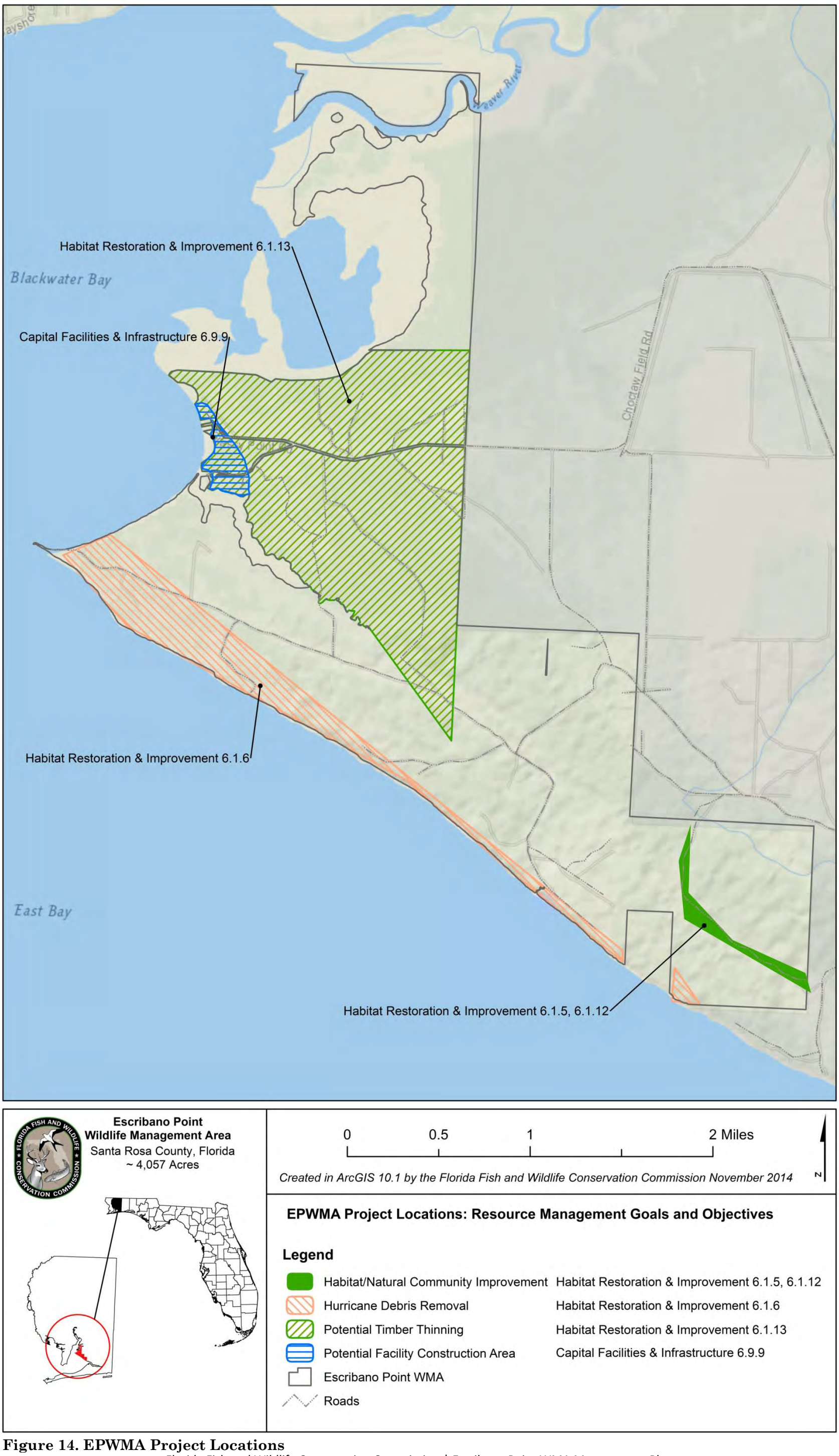


Figure 14. EPWMA Project Locations

6.2.8 Continue to implement the area's WCPR strategy by managing identified habitats and monitoring identified species.

6.2.9 Continue to monitor imperiled and focal species based on the WCPR strategy.

6.2.10 Continue to collect opportunistic wildlife and plant species occurrence data for rare and imperiled species on the area.

6.2.11 Continue herpetological surveying and monitoring.

6.2.12 Continue to conduct a salt marsh topminnow survey in adjacent waters.

6.2.13 Conduct a shorebird survey on the area using FWC's "Breeding Bird Protocol for Florida's Seabirds and Shorebirds."

6.3 Other Wildlife (Game and Non-game) Habitat Maintenance, Enhancement, Restoration, or Population Restoration

Goal: Monitor, maintain, improve, or restore game and non-game species populations and habitats.

Short-term

6.3.1 Continue to collect opportunistic wildlife and plant species occurrence data.

6.3.2 Develop a deer camera survey protocol for the area.

Long-term

6.3.3 Continue to collect opportunistic wildlife and plant species occurrence data.

6.3.4 Conduct a deer camera survey for the area.

6.3.5 Conduct an invertebrate survey on the area.

6.3.6 Conduct a breeding bird survey on the area.

6.3.7 Conduct a neo-tropical migratory bird survey on the area.

6.4 Exotic and Invasive Species Maintenance and Control

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

Short-term

6.4.1 Annually treat at least 10 acres of EPPC Category I and Category II invasive exotic plant species on the area.

6.4.2 Implement control measures on mimosa, cogon grass, Chinese tallow, guinea grass, and Japanese climbing fern found on the area.

6.4.3 Survey and map invasive exotic plant species on the area by 2015.

6.4.4 Monitor for exotic animal and plant species on the area.

6.4.5 Continue to participate in the Six Rivers Cooperative Invasive Species Management Area (CISMA).

Long-term

6.4.6 Continue to annually treat at least 10 acres of EPPC Category I and Category II invasive exotic plant species on the area.

6.4.7 Continue to monitor for exotic animal and plant species on the area.

6.4.8 If deemed necessary, implement control measures on exotic and nuisance animal species found on the area including hunting and trapping as feasible.

6.4.9 Continue to participate in the Six Rivers CISMA.

6.5 Public Access and Recreational Opportunities

Goal: Provide public access and recreational opportunities.

Short-term

6.5.1 Maintain public access and recreational opportunities to allow for a recreational carrying capacity of 100 visitors per day on the area.

6.5.2 Continue to provide a website, two kiosks, an online camping permitting and reservation system, and a bird list for the area.

6.5.3 Evaluate the potential for two miles of new hiking trails on the area.

6.5.4 Develop a RMP for the area by 2016.

6.5.5 Continue to provide hunting opportunities for deer, turkey, migratory birds, wild hog, and small game on the area.

6.5.6 Continue to provide fishing opportunities on the area.

6.5.7 Continue FWC staff participation in local education and outreach programs and events and include information about the EPWMA in these programs.

6.5.8 Continue to provide paddling opportunities on appropriate waterways.

6.5.9 Continue to provide camping opportunities on the area.

Long-term

6.5.10 Implement recommendations from the area's RMP.

6.5.11 Monitor the area's trails annually for visitor impacts.

6.5.12 Reassess the area's recreational opportunities every three years.

6.5.13 Continue to provide hunting opportunities on the area for deer, turkey, migratory birds, wild hog, and small game.

6.5.14 Continue to provide paddling opportunities on appropriate waterways.

6.5.15 Develop additional public access and recreational opportunities to allow for a carrying capacity of 155 visitors per day on the area.

6.5.16 Coordinate development of paddling trails with the Office of Greenways and Trails' Yellow River State Paddling Trail and the Florida Circumnavigational Saltwater Paddling Trail.

6.5.17 Develop up to two miles of hiking trails and up to five miles of paddling trails on the area.

6.5.18 Continue to provide fishing opportunities on appropriate waterways.

6.5.19 Develop hiking trail and paddling trail maps and new interpretive panels for the area's kiosks.

6.5.20 Continue to provide camping opportunities on the area.

6.5.21 Cooperate with other agencies, Santa Rosa County, stakeholders, and regional landowners to investigate regional recreational opportunities including linking hiking, and multi-use trail systems between adjacent public areas and to link the area's website with the Santa Rosa County's tourism website.

6.5.22 Continue to identify partnerships that could provide for environmental educational programs and outreach.

6.5.23 Continue FWC staff participation at local education and outreach programs and events and include information about the EPWMA in these programs.

6.5.24 Work with the United States Forest Service and the Florida Trail Association to explore opportunities for locating a route of the nearby Florida National Scenic Trail on the area.

6.6 Hydrological Preservation and Restoration

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

Short-term

6.6.1 Conduct or obtain a comprehensive hydrological assessment and restoration plan to identify potential hydrology restoration needs.

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

6.6.3 Continue to cooperate with the NWFWMD for the monitoring of surface and ground water quality and quantity.

Long-term

6.6.4 As recommended by the hydrology assessment and restoration plan, install and maintain low-water crossings as appropriate to maintain and enhance natural hydrological functions.

6.6.5 Implement other appropriate hydrological improvements of the hydrological restoration plan on the area as feasible.

6.6.6 Restore the natural hydrologic condition and functions to areas with altered hydrology.

6.6.7 Continue to cooperate with the NWFWMD for the monitoring of surface and ground water quality and quantity.

6.7 Forest Resource Management

Goal: Manage timber resources to improve or restore natural communities for the benefit of wildlife.

Short-term

6.7.1 Cooperate with the FFS to complete a Timber Assessment for the area.

6.7.2 Consult with the FFS or a professional forestry consultant regarding forest management activities as appropriate.

Long-term

6.7.3 Evaluate the need to prepare and implement a Forest Management Plan including reforestation, harvesting, and prescribed burning activities based on restoration and

maintenance needs of the natural communities and other goals established for management of EPWMA.

6.7.4 Continue to consult with the FFS or a professional forestry consultant regarding forest management activities as appropriate.

6.8 Cultural and Historical Resources

Goal: Protect, preserve and maintain cultural and historic resources.

Short-term

6.8.1 Ensure all known archaeological and historic sites are recorded in the DHR Master Site file.

6.8.2 Continue to monitor, protect, and preserve as necessary17 identified archaeological and historical sites located on the area.

6.8.3 Coordinate with the DHR to conduct a cultural resource survey on the area.

6.8.4 Continue to follow the DHR's Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties for the management of cultural and historic resources.

Long-term

6.8.5 Coordinate and cooperate with the DHR in designing site plans for development of infrastructure.

6.8.6 Coordinate and cooperate with the DHR to manage and maintain known existing cultural resources.

6.8.7 Continue to monitor, protect, and preserve as necessary 17 identified archaeological and historical sites located on the area.

6.8.8 Coordinate with the DHR for cultural resource management guideline staff training.

6.8.9 Continue to follow the DHR's Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties for the management of cultural and historic resources.

6.8.10 Design and develop new interpretive materials for cultural and historical interpretation of the area's cultural and historic resources.

6.9 Capital Facilities and Infrastructure

Goal: Develop the capital facilities and infrastructure necessary to meet the goals and objectives of this Management Plan.

Short-term

6.9.1 Continue to maintain three facilities, including one residence and two campgrounds on the area.

6.9.2 Maintain two miles of roads on the area.

6.9.3 Construct and maintain three new facilities (two entrance packages and a shop building) and up to two miles of trails on the area.

6.9.4 Improve or repair three facilities and two miles of roads on the area.

Long-term

6.9.5 Monitor the area's trails and infrastructure annually for visitor impacts.

6.9.6 Continue to maintain six facilities on the area (one residence, two campgrounds, two entrance packages and a shop building).

6.9.7 Continue to maintain the area's two miles of roads.

6.9.8 Continue to maintain up to two miles of trails existing on site.

6.9.9 Construct three additional facilities (a dock, a camping and picnicking facility, and a wildlife viewing platform) and approximately two miles of roads on the area (Figure 14).

6.9.10 Improve or repair three facilities on the area (two campgrounds and one boat launch).

6.10 Research Opportunities

Goal: Explore and pursue cooperative research opportunities.

Short-term

6.10.1 Continue to cooperate with the FWC-Fish and Wildlife Research Institute (FWRI) on ongoing saltmarsh topminnow survey.

6.10.2 Consult with the WCPR strategy regarding information gaps and research needs for species surrounding the EPWMA.

Long-term

6.10.3 Explore and pursue cooperative research opportunities through universities, FWC-FWRI, etc.

6.10.4 Continue to cooperate with researchers, universities, and others as appropriate.

6.10.5 Continue to assess the need for and pursue research and environmental education

partnership opportunities as appropriate.

6.10.6 Continue to cooperate with FWC-FWRI on ongoing saltmarsh topminnow survey.

6.10.7 Consult with the WCPR strategy regarding information gaps and research needs for species surrounding the EPWMA.

6.11 Land Conservation and Stewardship Partnerships

Goal: Enhance fish and wildlife conservation, resource, and operational management through development of an optimal boundary.

Short-term

6.11.1 Identify potential important wildlife habitat, landscape-scale linkages, wildlife corridors, and operational/resource management needs.

6.11.2 Identify and develop conservation stewardship partnerships.

6.11.3 Identify and pursue conservation acquisition needs.

6.11.4 Develop and maintain a GIS shapefile and other necessary data to facilitate nominations from the FWC OCPB and for FWC's LAP and Land Acquisition Programs.

6.11.5 Develop a CAS for the area.

6.11.6 Contact and inform adjoining landowners about the FWC LAP to pursue non-acquisition conservation stewardship, partnerships, and potential conservation easements.

6.11.7 Continue to work and partner with the NFWF and the TPL to pursue the acquisition of the remaining parcels on the FWC acquisition list for EPWMA.

6.11.8 Identify potential non-governmental organization partnerships and grant program opportunities.

6.11.9 Determine efficacy of conducting an adjacent landowner's assistance/conservation stewardship partnership workshop.

6.11.10 Identify potential conservation easements donations.

6.11.11 Evaluate and determine if any portions of EPWMA are no longer needed for conservation purposes, and therefore may be designated as surplus lands.

Long-term

6.11.12 To minimize fragmentation of the area, continue to identify strategic parcels to

revise the completed OCPB for EPWMA as appropriate and necessary.

6.11.13 Continue to identify and develop conservation stewardship partnerships.

6.11.14 Continue to identify and pursue conservation acquisition needs.

6.11.15 Continue to maintain a GIS shapefile and other necessary data to facilitate nominations from the FWC OCPB and for the FWC LAP and Land Acquisition Program.

6.11.16 Continue to work and partner with the NFWF and the TPL to pursue the acquisition of the remaining parcels on the FWC acquisition list for EPWMA.

6.11.17 Continue to pursue acquisition of parcels added to the FWC acquisition list as acquisition work plan priorities and funding allow.

6.11.18 As feasible, continue to periodically contact and meet with adjacent landowners for willingness to participate in the area's CAS and coordinate landowner assistance/conservation stewardship partnership workshops as deemed appropriate.

6.11.19 Coordinate and conduct landowner assistance/conservation stewardship partnership workshop(s) as necessary and appropriate.

6.11.20 Continue to identify potential conservation easements donations.

6.11.21 Continue to evaluate and determine if any portions of EPWMA are no longer needed for conservation purposes, and therefore may be designated as surplus lands.

6.12 Cooperative Management and Special Uses

Goal: Provide access and use of EPWMA to current cooperative managers and continue collaborative management efforts.

Short-term

6.12.1 Continue to cooperate with partner agencies and organizations on Gulf Restoration funding (RESTORE Act, NRDA, and NFWF) for the area.

6.12.2 Continue to participate as a partner in the GCPEP.

6.12.3 Continue to collaborate with DOD partners (Eglin AFB, NOLF Choctaw) on the overall management of EPWMA.

6.12.4 Coordinate and cooperate with DOD military branches to allow for training opportunities for military personnel such as GRASI and other initiatives as

appropriate and compatible with the conservation of EPWMA.

Long-term

6.12.5 Continue to cooperate with partner agencies and organizations on Gulf Restoration funding (RESTORE Act, NRDA, and NFWF) for the area.

6.12.6 Continue to participate as a partner in the GCPEP.

6.12.7 Continue to collaborate with DOD partners (Eglin AFB, NOLF Choctaw) on the overall management of EPWMA.

6.12.8 Coordinate and cooperate with DOD military branches to allow for training opportunities for military personnel such as GRASI and other initiatives as appropriate and compatible with the conservation of EPWMA.

6.13 Climate Change

Goal: Develop appropriate adaptation strategies in response to projected climate change effects and their potential impacts on natural resources, including fish and wildlife, and the operational management of the EPWMA.

Long-term

6.13.1 Coordinate with FWC-FWRI Climate Change Adaptation Initiative to identify potential impacts of projected climate change on fish and wildlife resources and operational management of the EPWMA.

6.13.2 Incorporate appropriate climate change adaptation strategies into the WCPR for the EPWMA.

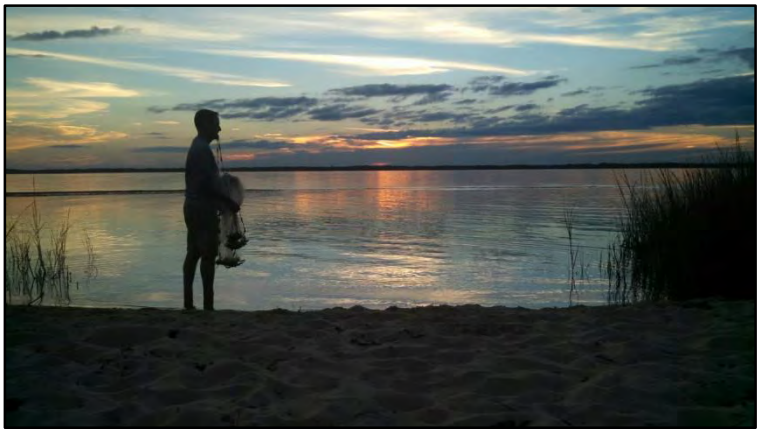
6.13.3 As appropriate, update the EPWMA Prescribed Fire Plan to incorporate new scientific information regarding projected climate change, such as increased frequency of drought, on the fire regime of EPWMA's fire-adapted habitats.

6.13.4 As science, technology, and climate policy evolve, educate natural resource management partners and the public about the agency's policies, programs and efforts to study, document and address potential climate change; assess the need to incorporate climate change into FWC's public education curriculum.

7 Schedule: Timelines for Completion of Resource Management Goals and Objectives

The following section presents the short- and long-term goals and objectives for the management of EPWMA graphically in a timeline format. These timelines directly reflect

the short- and long-term goals and objectives presented above in Section 6.



Cast netting at EPWMA, *FWC*

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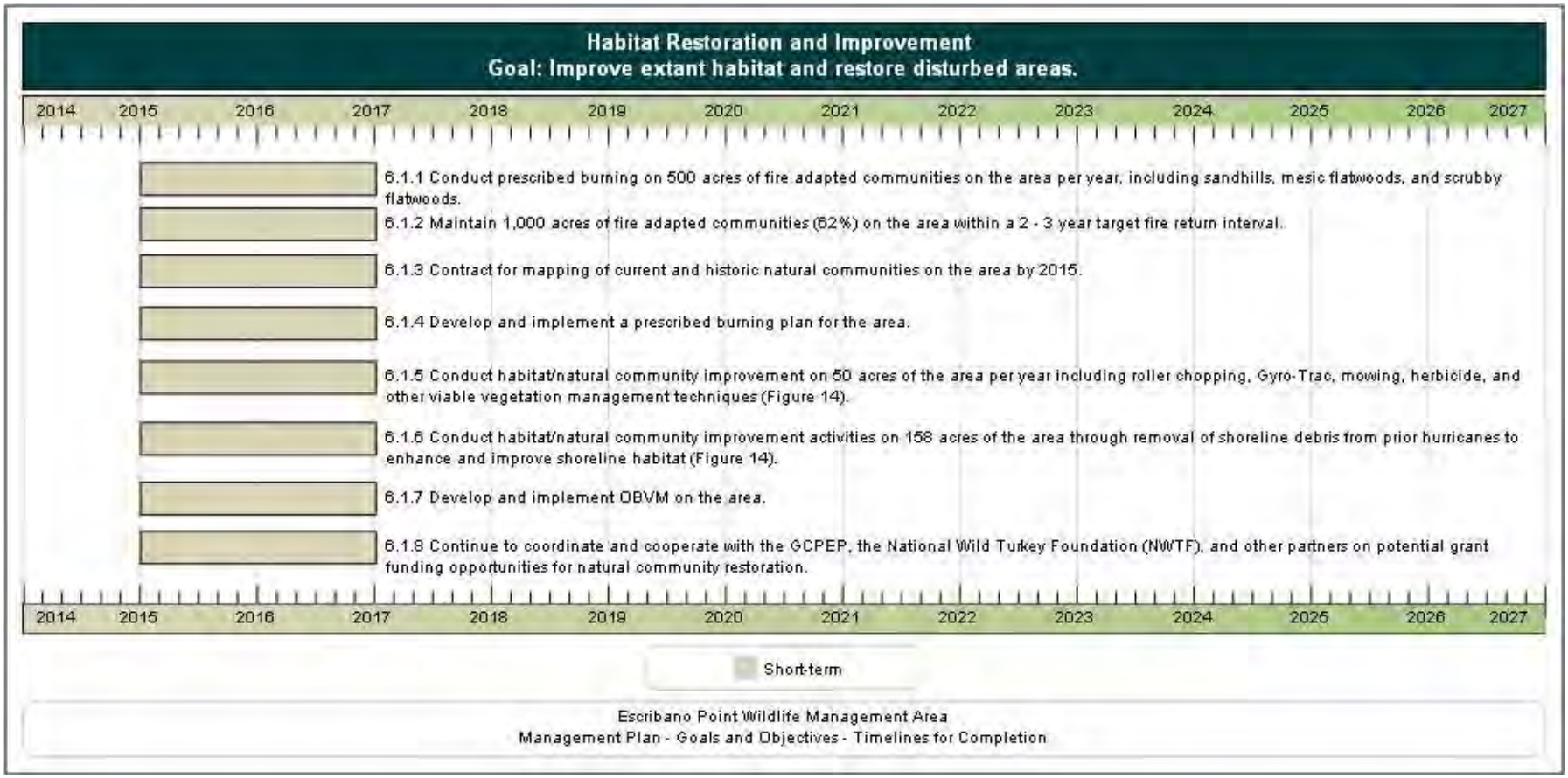
Habitat Restoration and Improvement
Goal: Improve extant habitat and restore disturbed areas.
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6.1.1 Conduct prescribed burning on 500 acres of fire adapted communities on the area per year, including sandhills, mesic flatwoods, and scrubby flatwoods.
6.1.2 Maintain 1,000 acres of fire adapted communities (62%) on the area within a 2 - 3 year target fire return interval.
6.1.3 Contract for mapping of current and historic natural communities on the area by 2015.
6.1.4 Develop and implement a prescribed burning plan for the area.
6.1.5 Conduct habitat/natural community improvement on 50 acres of the area per year including roller chopping, Gyro-Trac, mowing, herbicide, and other viable vegetation management techniques (Figure 14).
6.1.6 Conduct habitat/natural community improvement activities on 158 acres of the area through removal of shoreline debris from prior hurricanes to enhance and improve shoreline habitat (Figure 14).
6.1.7 Develop and implement OBVM on the area.
6.1.8 Continue to coordinate and cooperate with the GCPEP, the National Wild Turkey Foundation (NWTF), and other partners on potential grant funding opportunities for natural community restoration.
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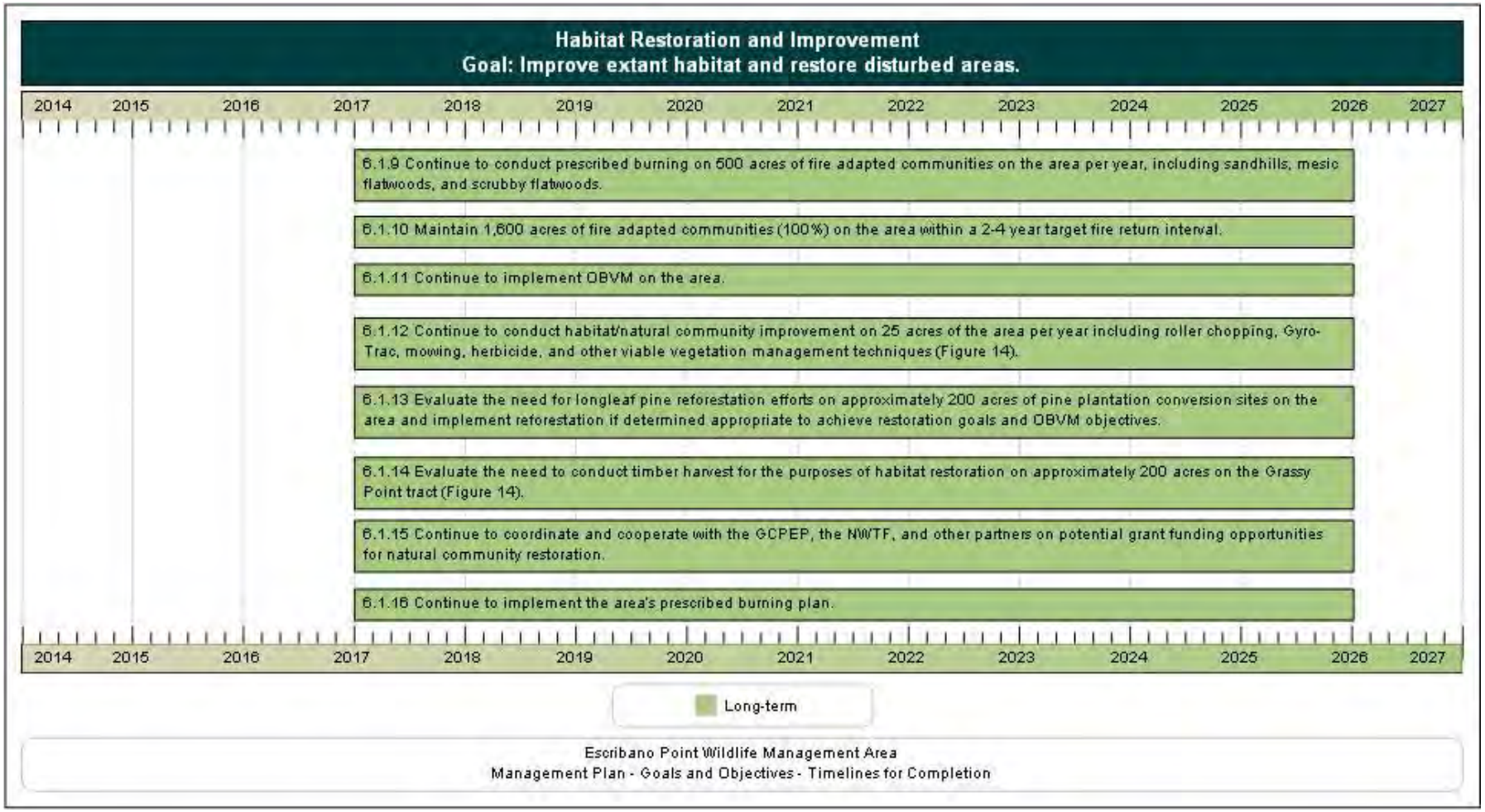
Short-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Habitat Restoration and Improvement
Goal: Improve extant habitat and restore disturbed areas.
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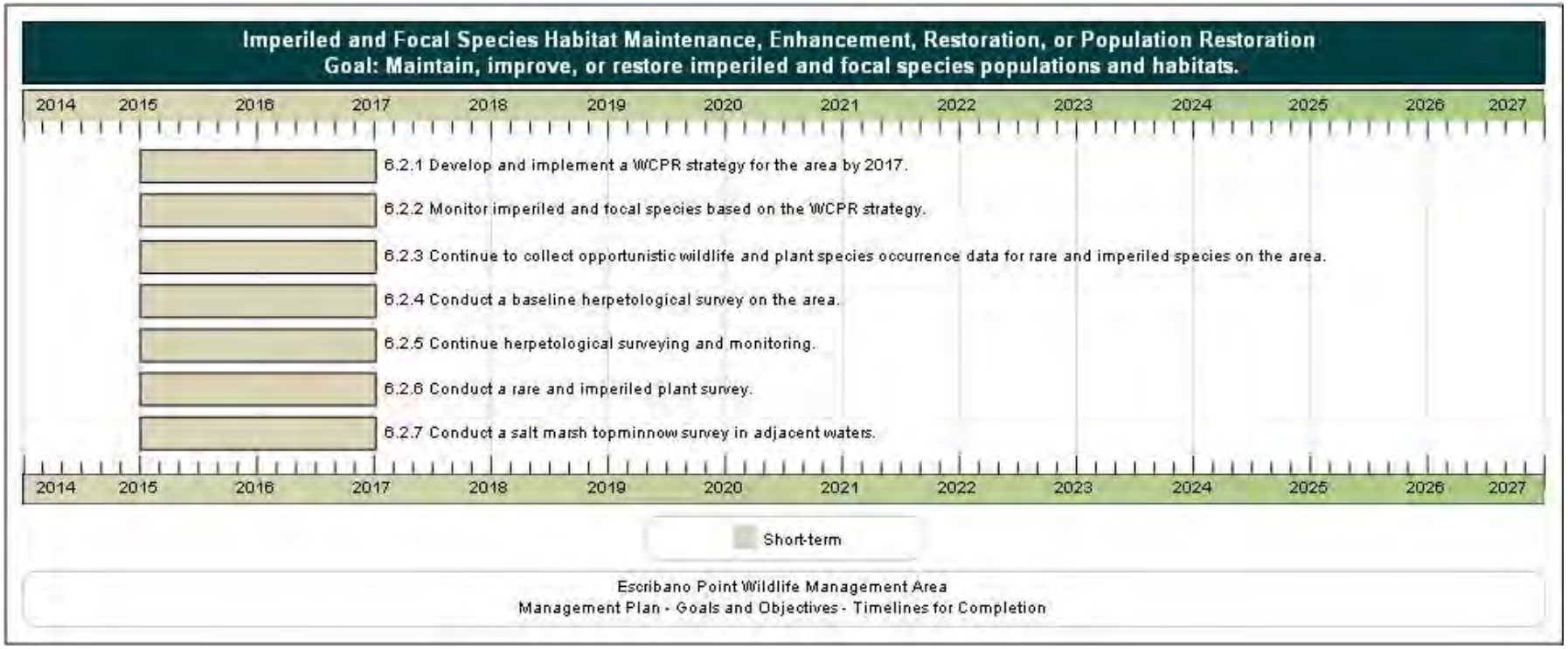
6.1.9 Continue to conduct prescribed burning on 500 acres of fire adapted communities on the area per year, including sandhills, mesic flatwoods, and scrubby flatwoods.
6.1.10 Maintain 1,600 acres of fire adapted communities (100%) on the area within a 2-4 year target fire return interval.
6.1.11 Continue to implement OBVM on the area.
6.1.12 Continue to conduct habitat/natural community improvement on 25 acres of the area per year including roller chopping, Gyro-Trac, mowing, herbicide, and other viable vegetation management techniques (Figure 14).
6.1.13 Evaluate the need for longleaf pine reforestation efforts on approximately 200 acres of pine plantation conversion sites on the area and implement reforestation if determined appropriate to achieve restoration goals and OBVM objectives.
6.1.14 Evaluate the need to conduct timber harvest for the purposes of habitat restoration on approximately 200 acres on the Grassy Point tract (Figure 14).
6.1.15 Continue to coordinate and cooperate with the GCPEP, the NWTF, and other partners on potential grant funding opportunities for natural community restoration.
6.1.16 Continue to implement the area's prescribed burning plan.
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Imperiled and Focal Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration
Goal: Maintain, improve, or restore imperiled and focal species populations and habitats.
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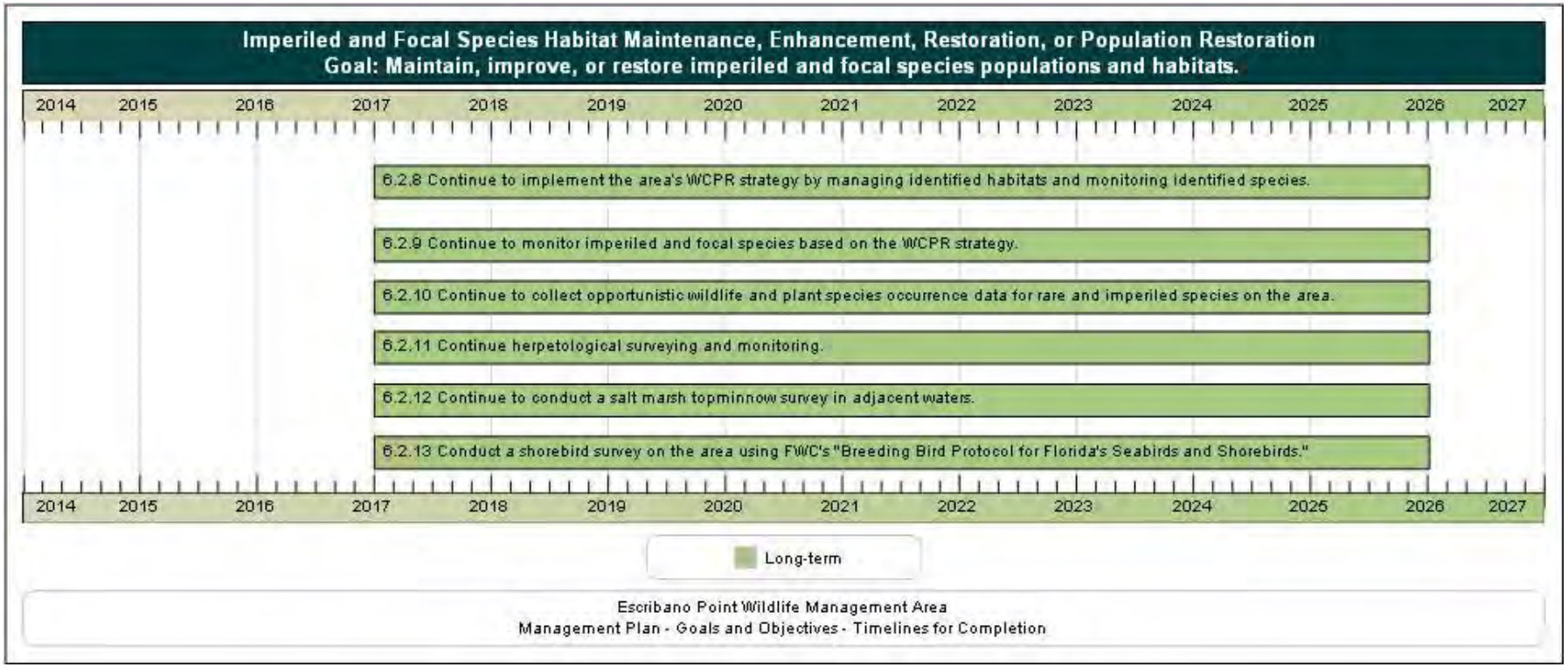
6.2.1 Develop and implement a WCPR strategy for the area by 2017.
6.2.2 Monitor imperiled and focal species based on the WCPR strategy.
6.2.3 Continue to collect opportunistic wildlife and plant species occurrence data for rare and imperiled species on the area.
6.2.4 Conduct a baseline herpetological survey on the area.
6.2.5 Continue herpetological surveying and monitoring.
6.2.6 Conduct a rare and imperiled plant survey.
6.2.7 Conduct a salt marsh topminnow survey in adjacent waters.
Short-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Imperiled and Focal Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration
Goal: Maintain, improve, or restore imperiled and focal species populations and habitats.
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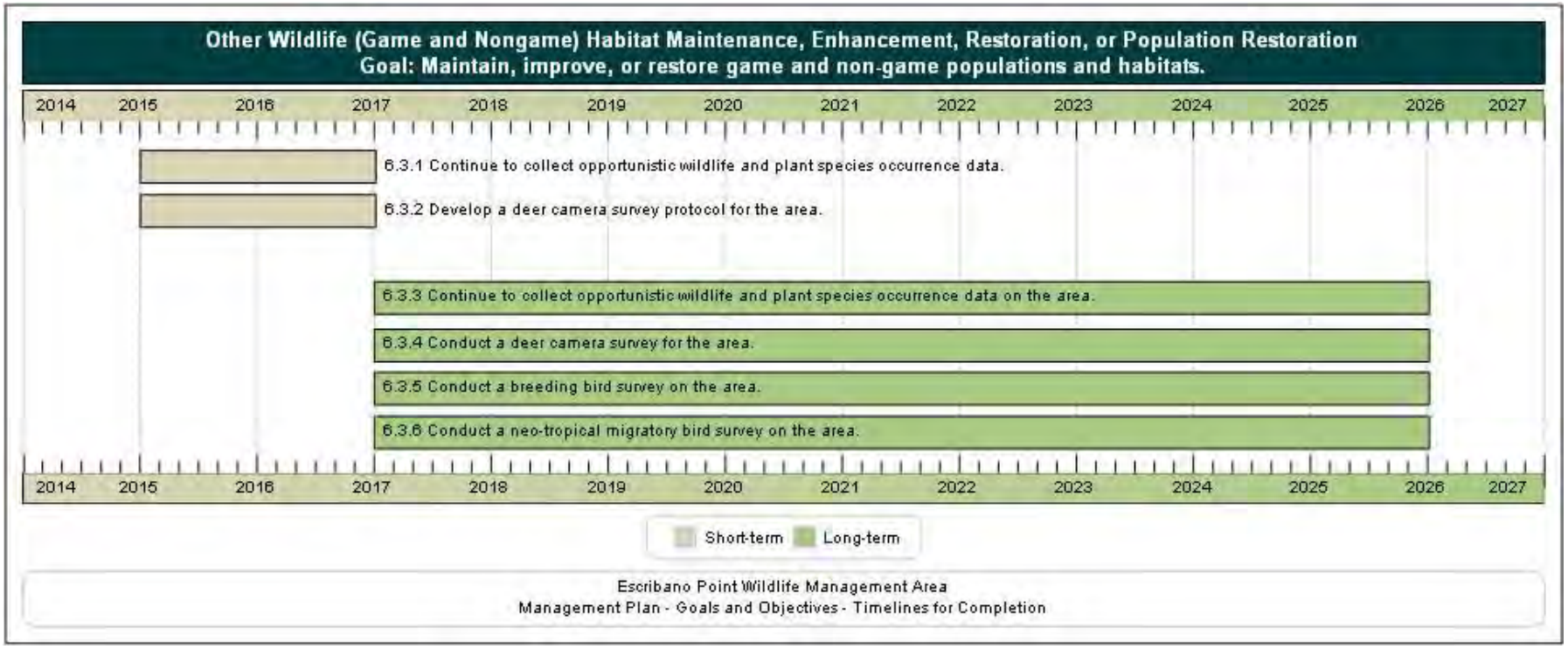
6.2.8 Continue to implement the area's WCPR strategy by managing identified habitats and monitoring identified species.
6.2.9 Continue to monitor imperiled and focal species based on the WCPR strategy.
6.2.10 Continue to collect opportunistic wildlife and plant species occurrence data for rare and imperiled species on the area.
6.2.11 Continue herpetological surveying and monitoring.
6.2.12 Continue to conduct a salt marsh topminnow survey in adjacent waters.
6.2.13 Conduct a shorebird survey on the area using FWC's "Breeding Bird Protocol for Florida's Seabirds and Shorebirds."
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Other Wildlife (Game and Nongame) Habitat Maintenance, Enhancement, Restoration, or Population Restoration
Goal: Maintain, improve, or restore game and non-game populations and habitats.
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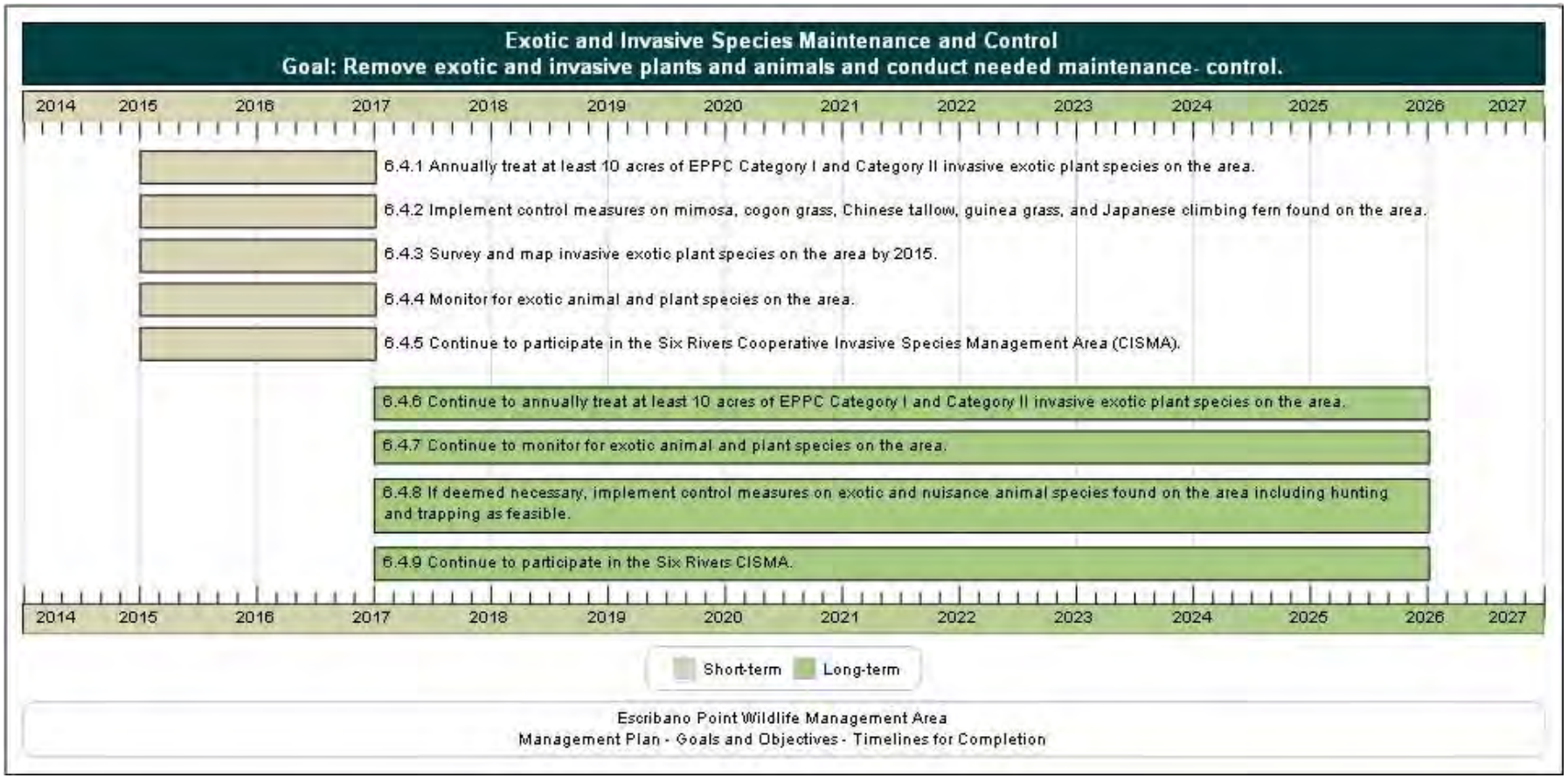
2027
6.3.1 Continue to collect opportunistic wildlife and plant species occurrence data.
6.3.2 Develop a deer camera survey protocol for the area.
6.3.3 Continue to collect opportunistic wildlife and plant species occurrence data on the area.
6.3.4 Conduct a deer camera survey for the area.
6.3.5 Conduct a breeding bird survey on the area.
6.3.6 Conduct a neo-tropical migratory bird survey on the area.
Short-term
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Exotic and Invasive Species Maintenance and Control
Goal: Remove exotic and invasive plants and animals and conduct needed maintenance- control.
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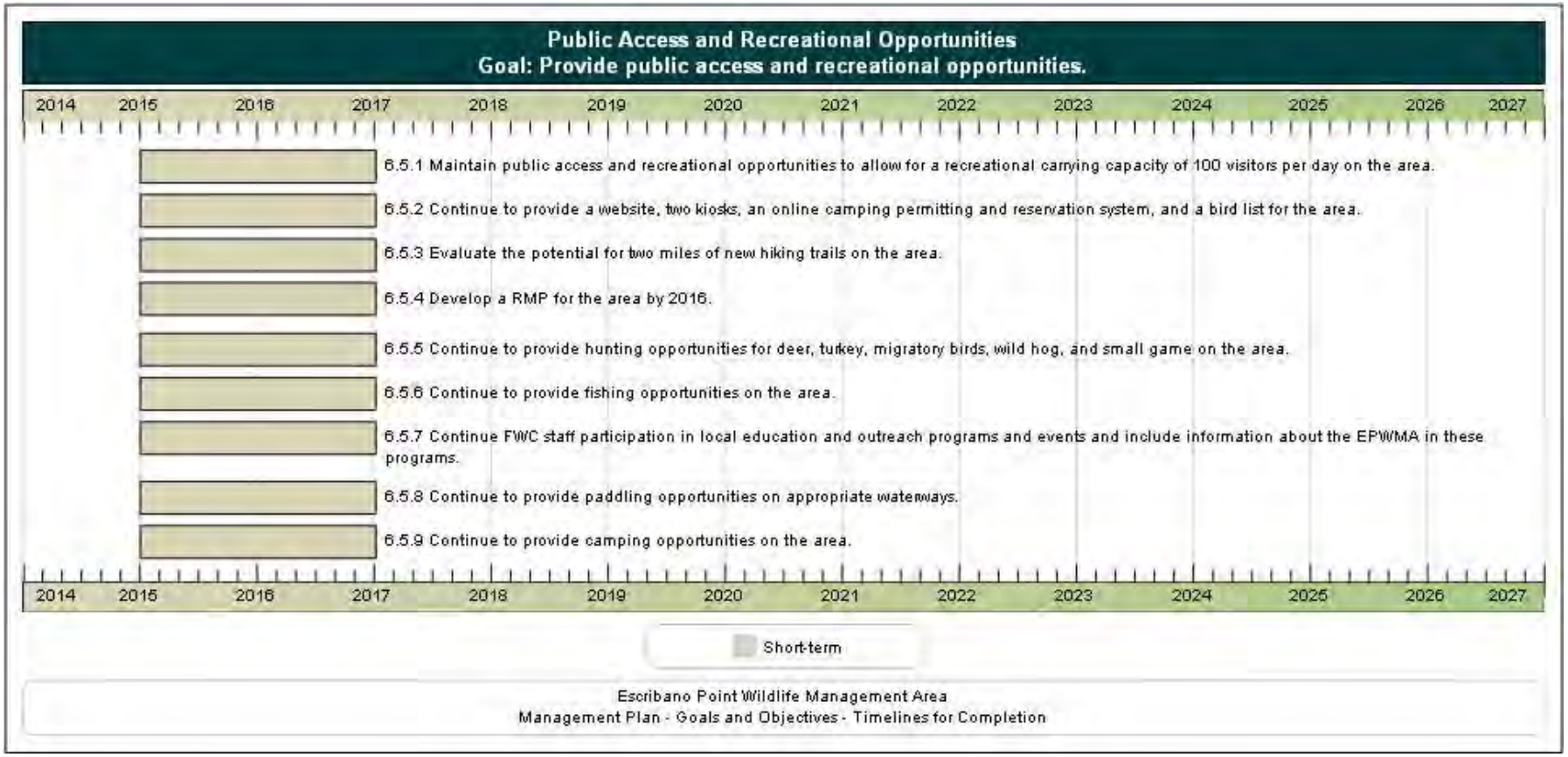
6.4.1 Annually treat at least 10 acres of EPPC Category I and Category II invasive exotic plant species on the area.
6.4.2 Implement control measures on mimosa, cogon grass, Chinese tallow, guinea grass, and Japanese climbing fern found on the area.
6.4.3 Survey and map invasive exotic plant species on the area by 2015.
6.4.4 Monitor for exotic animal and plant species on the area.
6.4.5 Continue to participate in the Six Rivers Cooperative Invasive Species Management Area (CISMA).
6.4.6 Continue to annually treat at least 10 acres of EPPC Category I and Category II invasive exotic plant species on the area.
6.4.7 Continue to monitor for exotic animal and plant species on the area.
6.4.8 If deemed necessary, implement control measures on exotic and nuisance animal species found on the area including hunting and trapping as feasible.
6.4.9 Continue to participate in the Six Rivers CISMA.
Short-term
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Public Access and Recreational Opportunities
Goal: Provide public access and recreational opportunities.
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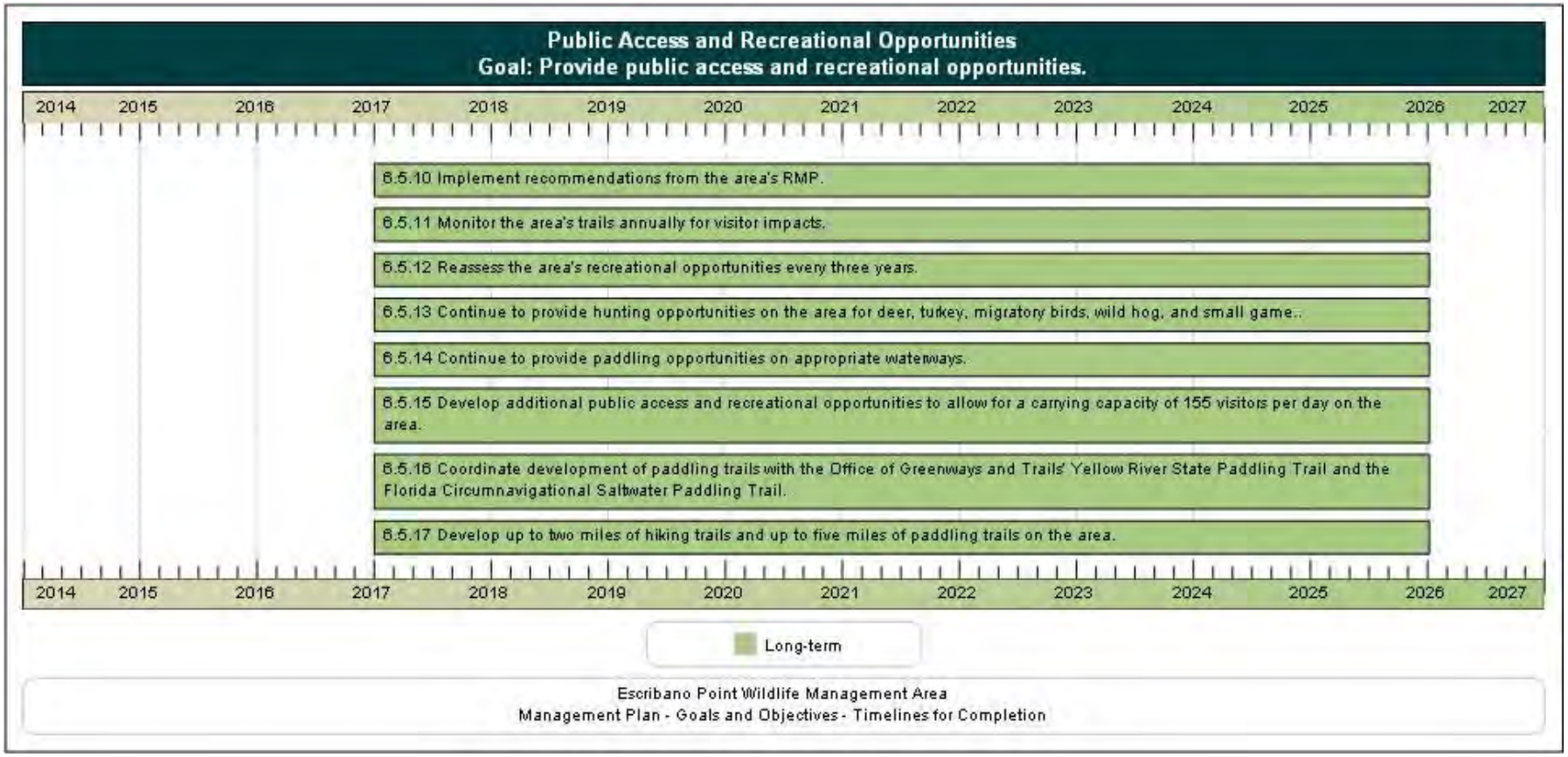
6.5.1 Maintain public access and recreational opportunities to allow for a recreational carrying capacity of 100 visitors per day on the area.
6.5.2 Continue to provide a website, two kiosks, an online camping permitting and reservation system, and a bird list for the area.
6.5.3 Evaluate the potential for two miles of new hiking trails on the area.
6.5.4 Develop a RMP for the area by 2016.
6.5.5 Continue to provide hunting opportunities for deer, turkey, migratory birds, wild hog, and small game on the area.
6.5.6 Continue to provide fishing opportunities on the area.
6.5.7 Continue FWC staff participation in local education and outreach programs and events and include information about the EPWMA in these programs.
6.5.8 Continue to provide paddling opportunities on appropriate waterways.
6.5.9 Continue to provide camping opportunities on the area.
Short-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Public Access and Recreational Opportunities
Goal: Provide public access and recreational opportunities.
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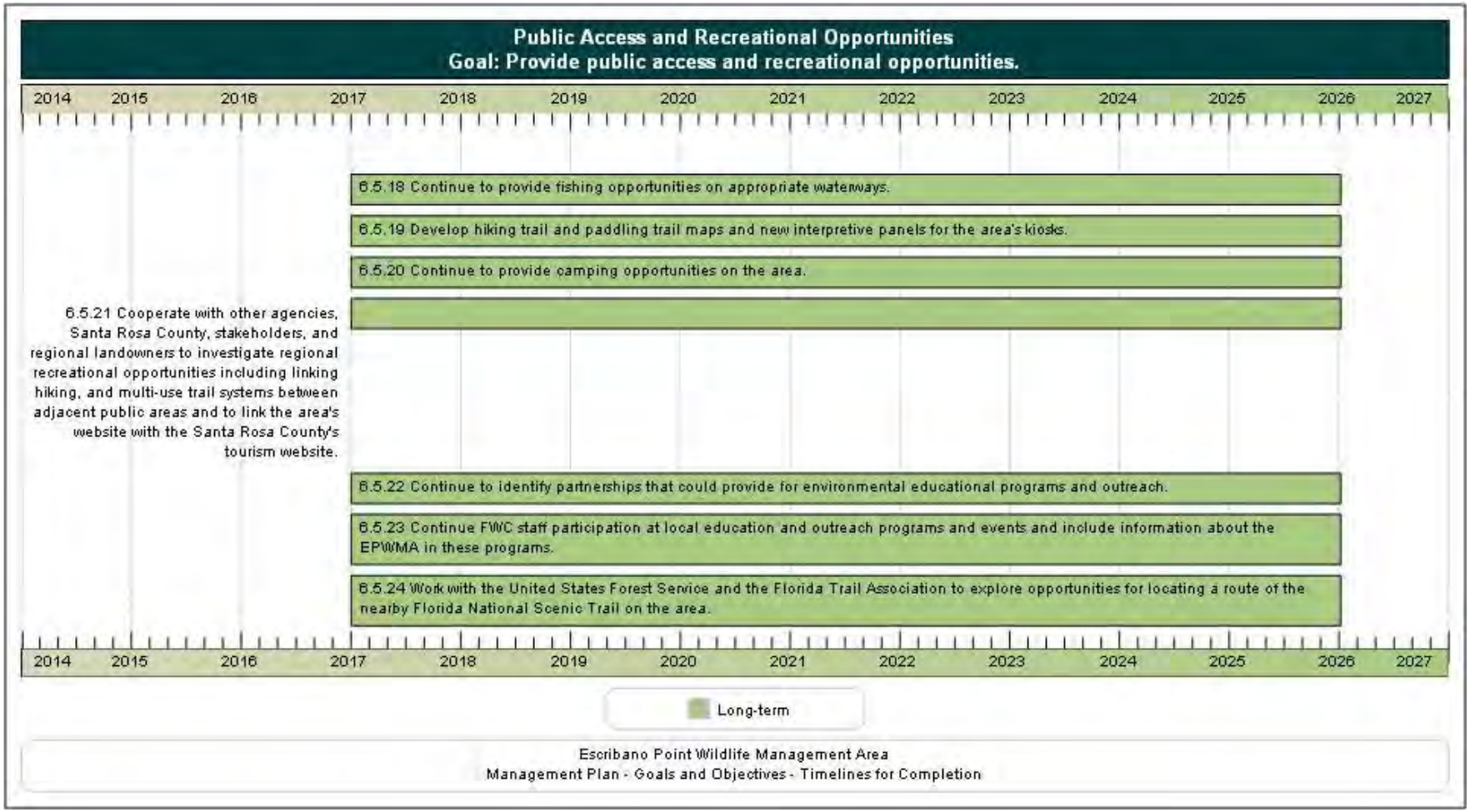
6.5.10 Implement recommendations from the area's RMP.
6.5.11 Monitor the area's trails annually for visitor impacts.
6.5.12 Reassess the area's recreational opportunities every three years.
6.5.13 Continue to provide hunting opportunities on the area for deer, turkey, migratory birds, wild hog, and small game..
6.5.14 Continue to provide paddling opportunities on appropriate waterways.
6.5.15 Develop additional public access and recreational opportunities to allow for a carrying capacity of 155 visitors per day on the area.
6.5.16 Coordinate development of paddling trails with the Office of Greenways and Trails' Yellow River State Paddling Trail and the Florida Circumnavigational Saltwater Paddling Trail.
6.5.17 Develop up to two miles of hiking trails and up to five miles of paddling trails on the area.
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Public Access and Recreational Opportunities
Goal: Provide public access and recreational opportunities.
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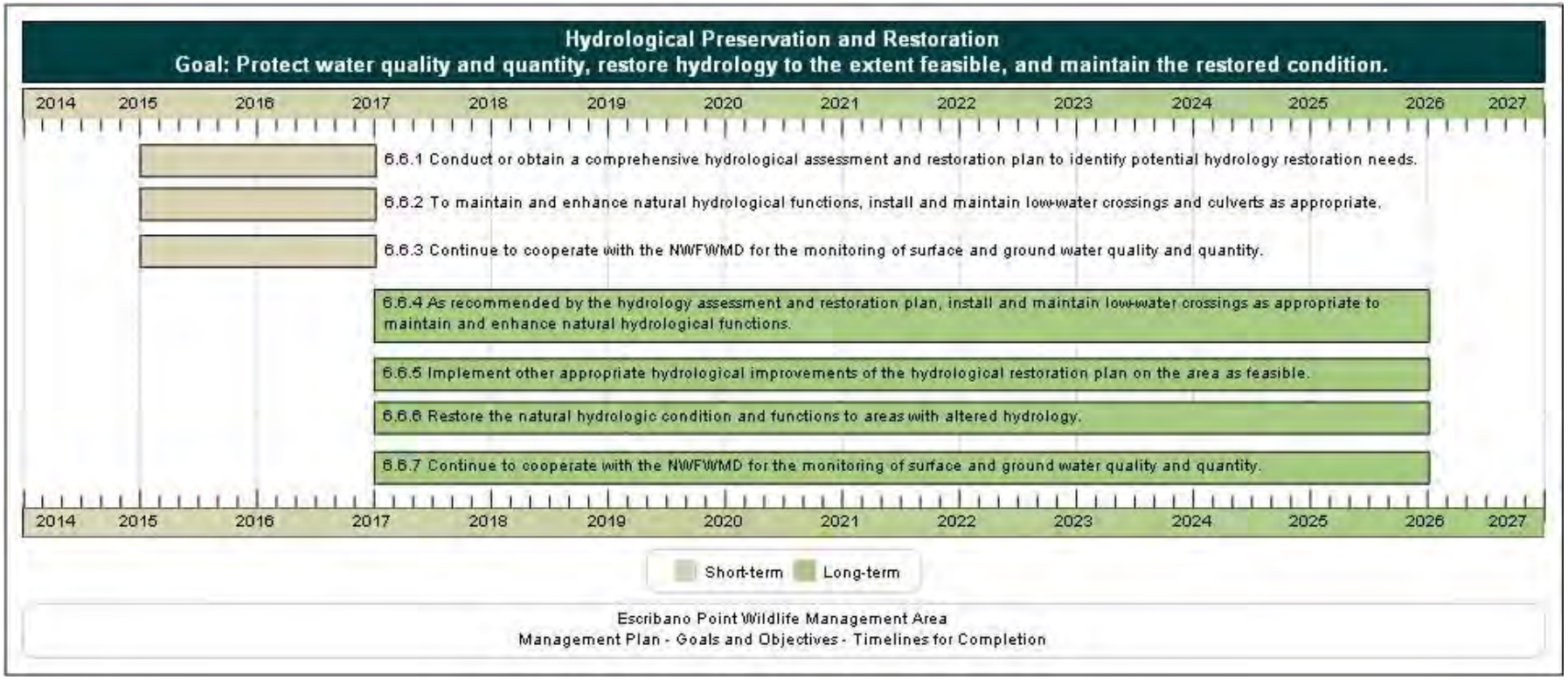
6.5.18 Continue to provide fishing opportunities on appropriate waterways.
6.5.19 Develop hiking trail and paddling trail maps and new interpretive panels for the area's kiosks.
6.5.20 Continue to provide camping opportunities on the area.
6.5.21 Cooperate with other agencies, Santa Rosa County, stakeholders, and regional landowners to investigate regional recreational opportunities including linking hiking, and multi-use trail systems between adjacent public areas and to link the area's website with the Santa Rosa County's tourism website.
6.5.22 Continue to identify partnerships that could provide for environmental educational programs and outreach.
6.5.23 Continue FWC staff participation at local education and outreach programs and events and include information about the EPWMA in these programs.
6.5.24 Work with the United States Forest Service and the Florida Trail Association to explore opportunities for locating a route of the nearby Florida National Scenic Trail on the area.
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Hydrological Preservation and Restoration
Goal: Protect water quality and quantity, restore hydrology to the extent feasible, and maintain the restored condition.
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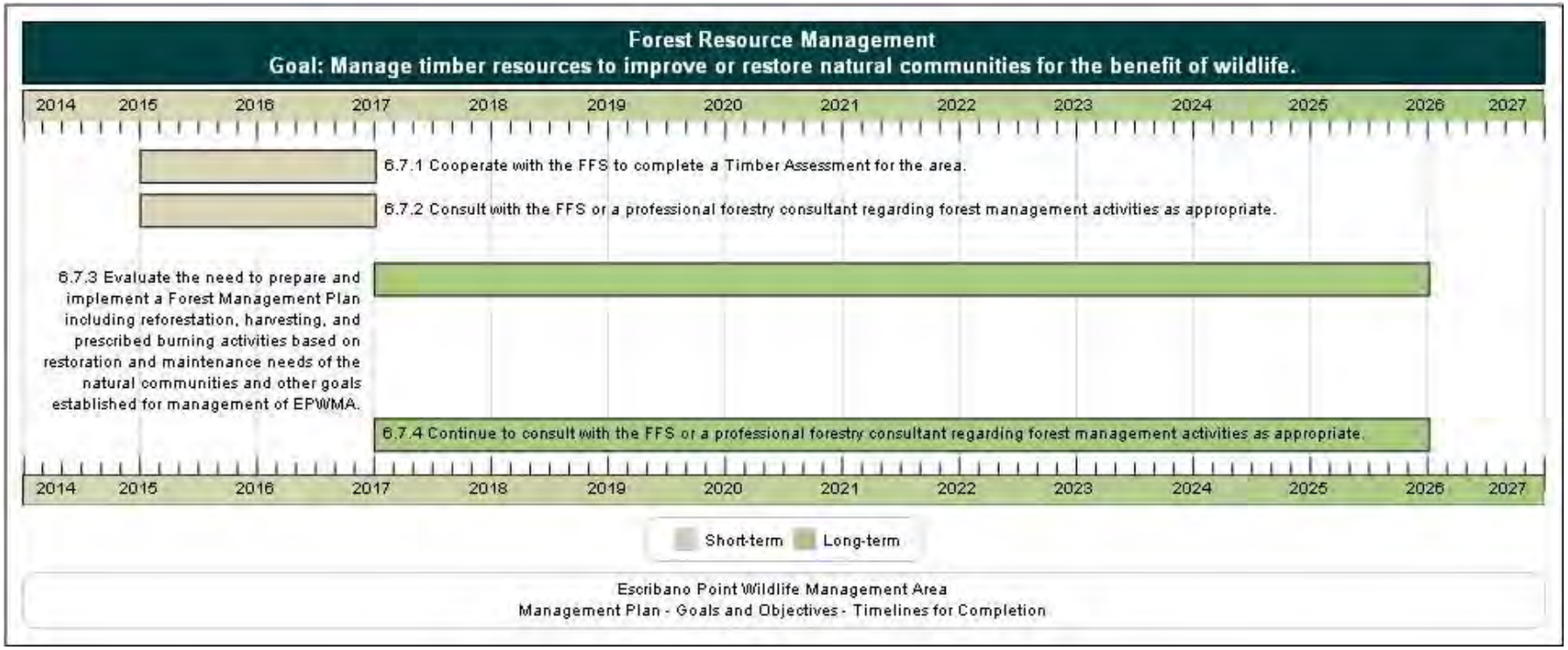
6.6.1 Conduct or obtain a comprehensive hydrological assessment and restoration plan to identify potential hydrology restoration needs.
6.6.2 To maintain and enhance natural hydrological functions, install and maintain low-water crossings and culverts as appropriate.
6.6.3 Continue to cooperate with the NWFWMD for the monitoring of surface and ground water quality and quantity.
6.6.4 As recommended by the hydrology assessment and restoration plan, install and maintain low-water crossings as appropriate to maintain and enhance natural hydrological functions.
6.6.5 Implement other appropriate hydrological improvements of the hydrological restoration plan on the area as feasible.
6.6.6 Restore the natural hydrologic condition and functions to areas with altered hydrology.
6.6.7 Continue to cooperate with the NWFWMD for the monitoring of surface and ground water quality and quantity.
Short-term
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Forest Resource Management
Goal: Manage timber resources to improve or restore natural communities for the benefit of wildlife.
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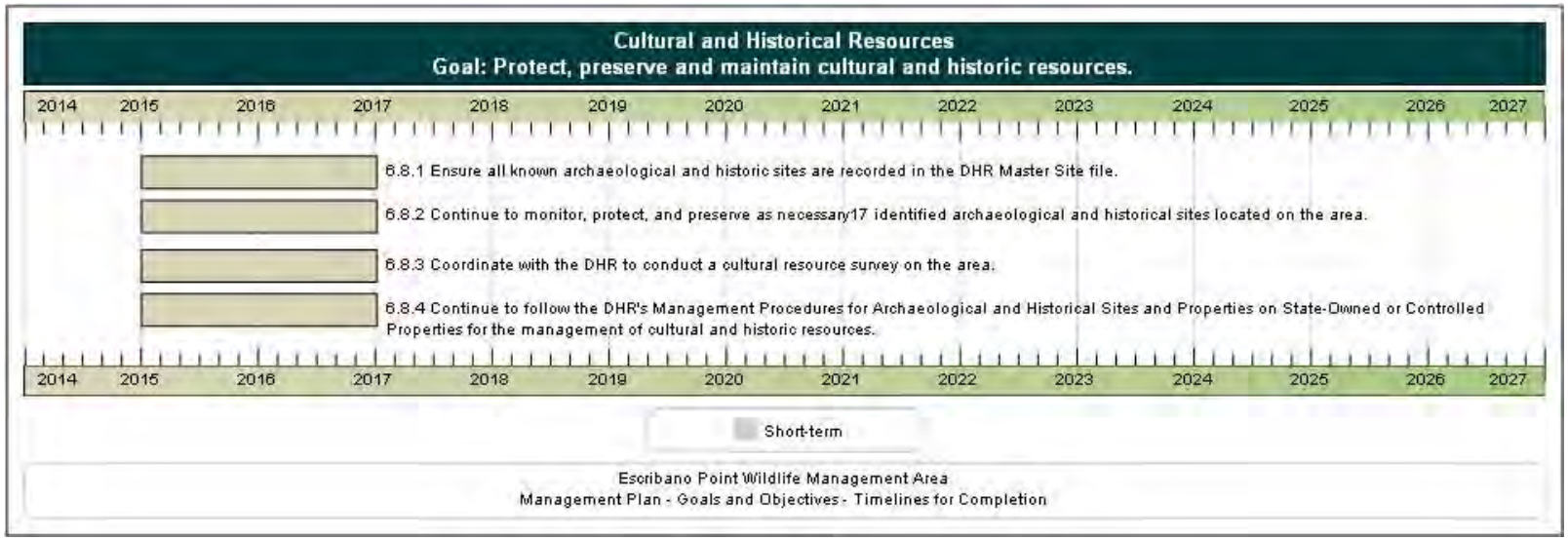
6.7.1 Cooperate with the FFS to complete a Timber Assessment for the area.
6.7.2 Consult with the FFS or a professional forestry consultant regarding forest management activities as appropriate.
6.7.3 Evaluate the need to prepare and implement a Forest Management Plan including reforestation, harvesting, and prescribed burning activities based on restoration and maintenance needs of the natural communities and other goals established for management of EPWMA.
6.7.4 Continue to consult with the FFS or a professional forestry consultant regarding forest management activities as appropriate.
Short-term
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Cultural and Historical Resources
Goal: Protect, preserve and maintain cultural and historic resources.
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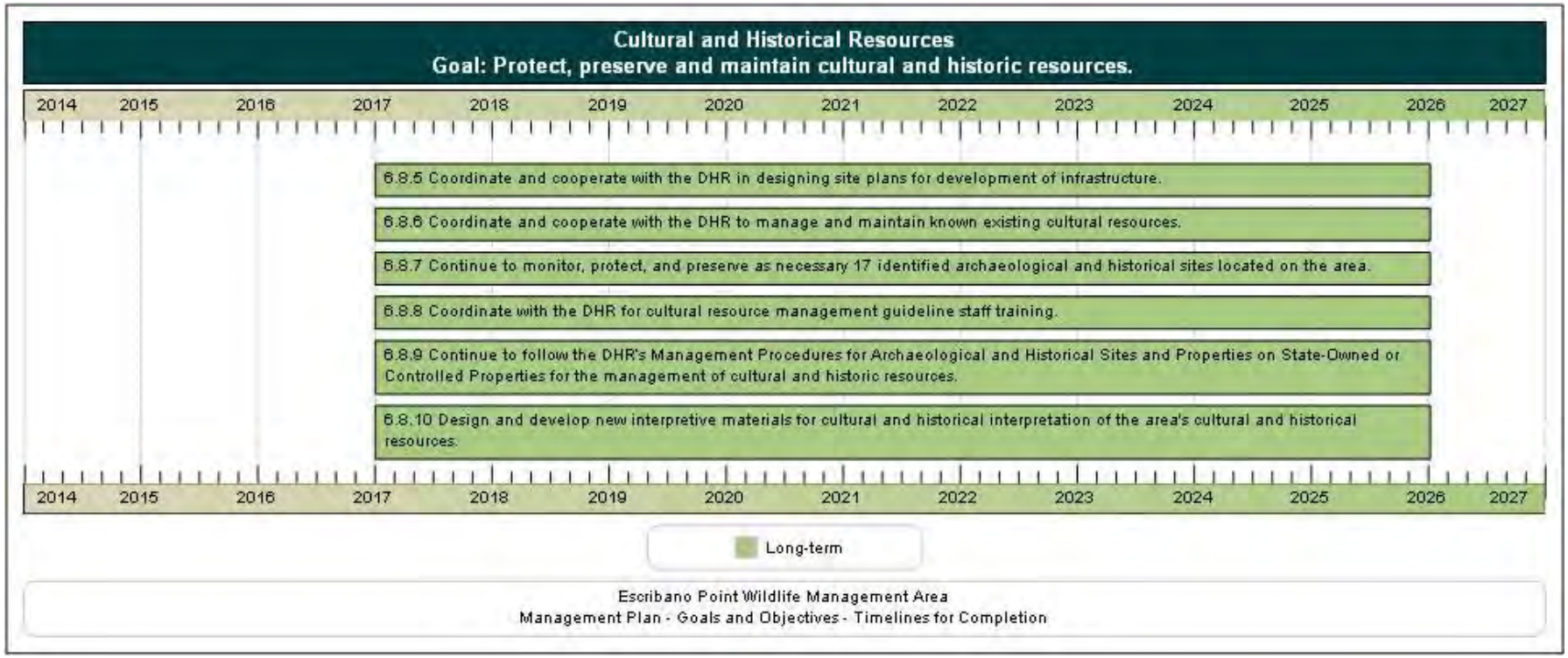
6.8.1 Ensure all known archaeological and historic sites are recorded in the DHR Master Site file.
6.8.2 Continue to monitor, protect, and preserve as necessary17 identified archaeological and historical sites located on the area.
6.8.3 Coordinate with the DHR to conduct a cultural resource survey on the area.
6.8.4 Continue to follow the DHR's Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties for the management of cultural and historic resources.
Short-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Cultural and Historical Resources
Goal: Protect, preserve and maintain cultural and historic resources.
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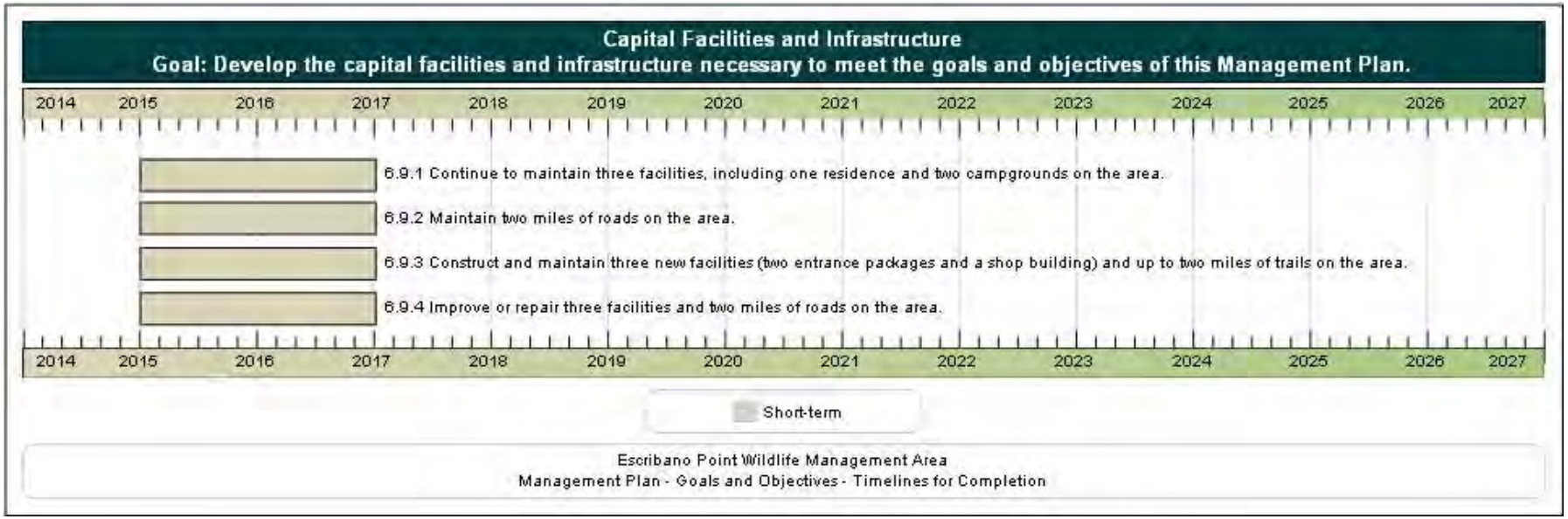
6.8.5 Coordinate and cooperate with the DHR in designing site plans for development of infrastructure.
6.8.6 Coordinate and cooperate with the DHR to manage and maintain known existing cultural resources.
6.8.7 Continue to monitor, protect, and preserve as necessary 17 identified archaeological and historical sites located on the area.
6.8.8 Coordinate with the DHR for cultural resource management guideline staff training.
6.8.9 Continue to follow the DHR's Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties for the management of cultural and historic resources.
6.8.10 Design and develop new interpretive materials for cultural and historical interpretation of the area's cultural and historical resources.
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Capital Facilities and Infrastructure
Goal: Develop the capital facilities and infrastructure necessary to meet the goals and objectives of this Management Plan.
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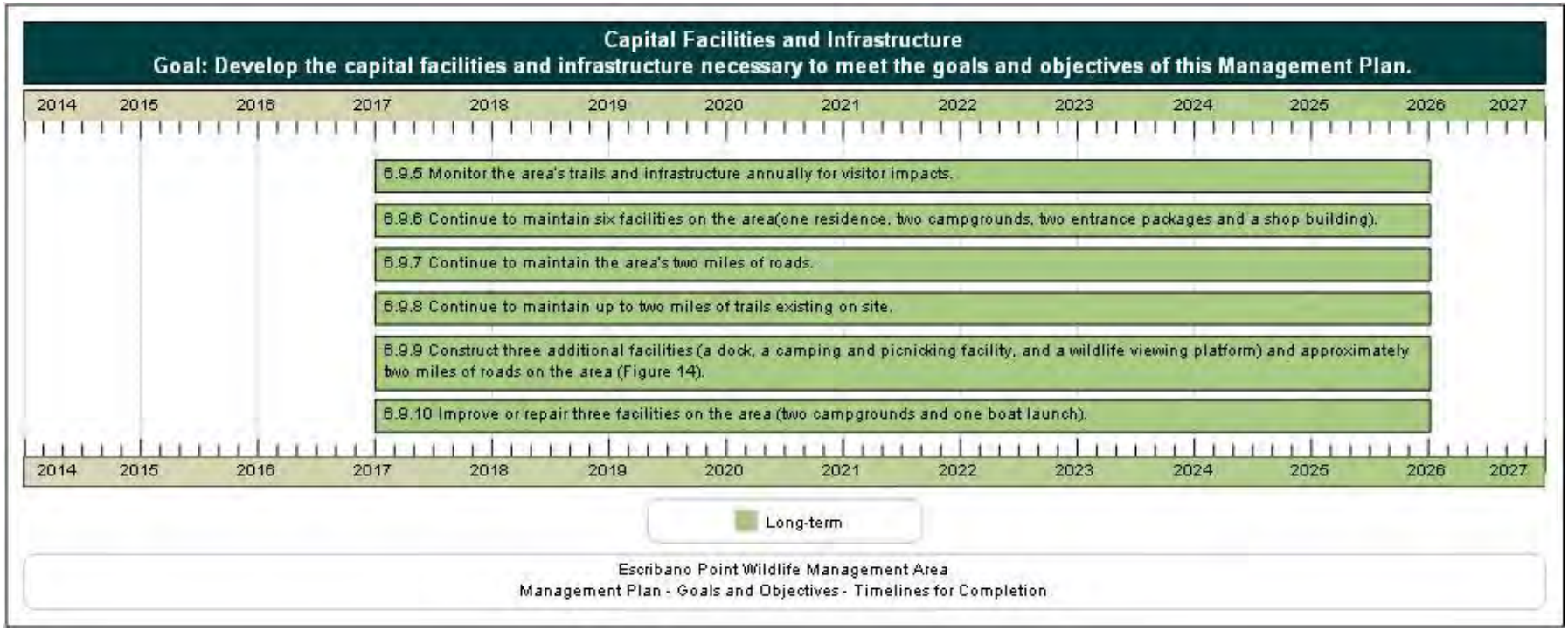
2027
6.9.1 Continue to maintain three facilities, including one residence and two campgrounds on the area.
6.9.2 Maintain two miles of roads on the area.
6.9.3 Construct and maintain three new facilities (two entrance packages and a shop building) and up to two miles of trails on the area.
6.9.4 Improve or repair three facilities and two miles of roads on the area.
Short-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Capital Facilities and Infrastructure
Goal: Develop the capital facilities and infrastructure necessary to meet the goals and objectives of this Management Plan.
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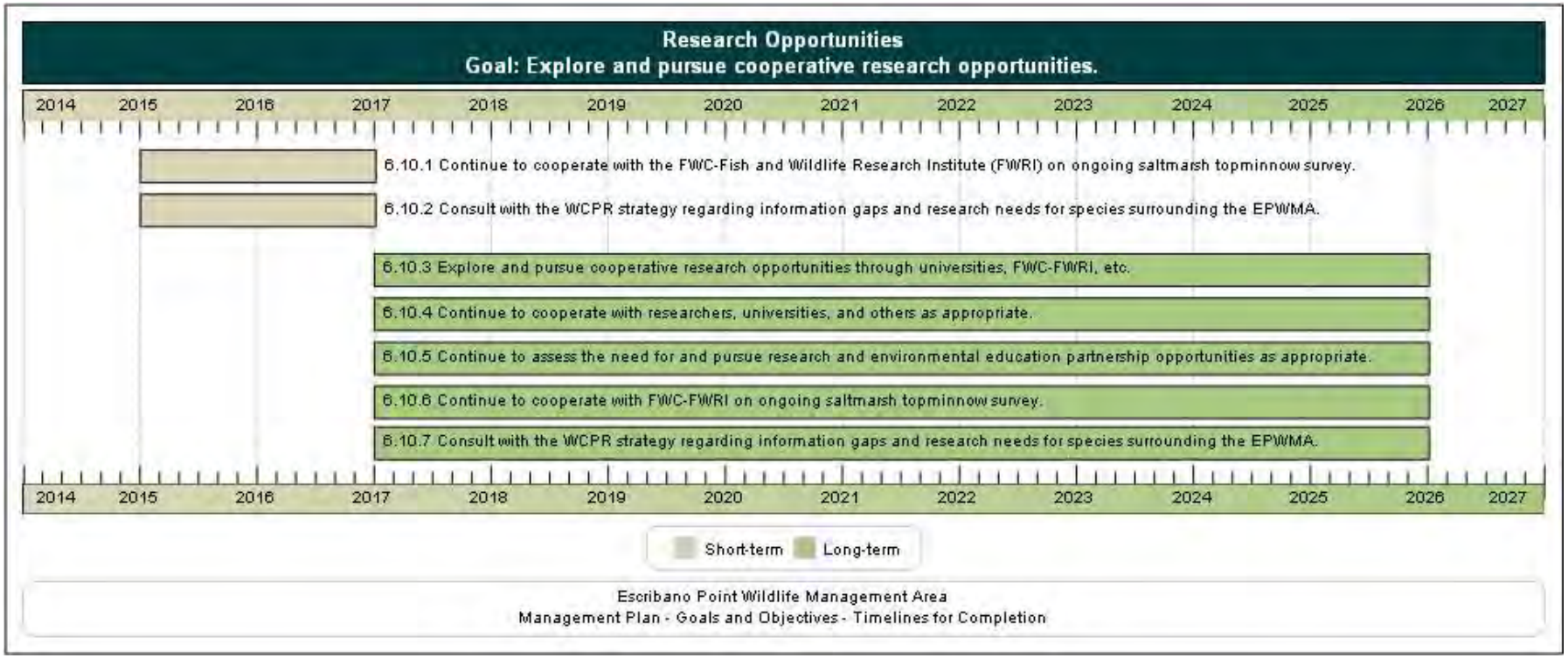
6.9.5 Monitor the area's trails and infrastructure annually for visitor impacts.
6.9.6 Continue to maintain six facilities on the area(one residence, two campgrounds, two entrance packages and a shop building).
6.9.7 Continue to maintain the area's two miles of roads.
6.9.8 Continue to maintain up to two miles of trails existing on site.
6.9.9 Construct three additional facilities (a dock, a camping and picnicking facility, and a wildlife viewing platform) and approximately two miles of roads on the area (Figure 14).
6.9.10 Improve or repair three facilities on the area (two campgrounds and one boat launch).
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Research Opportunities
Goal: Explore and pursue cooperative research opportunities.
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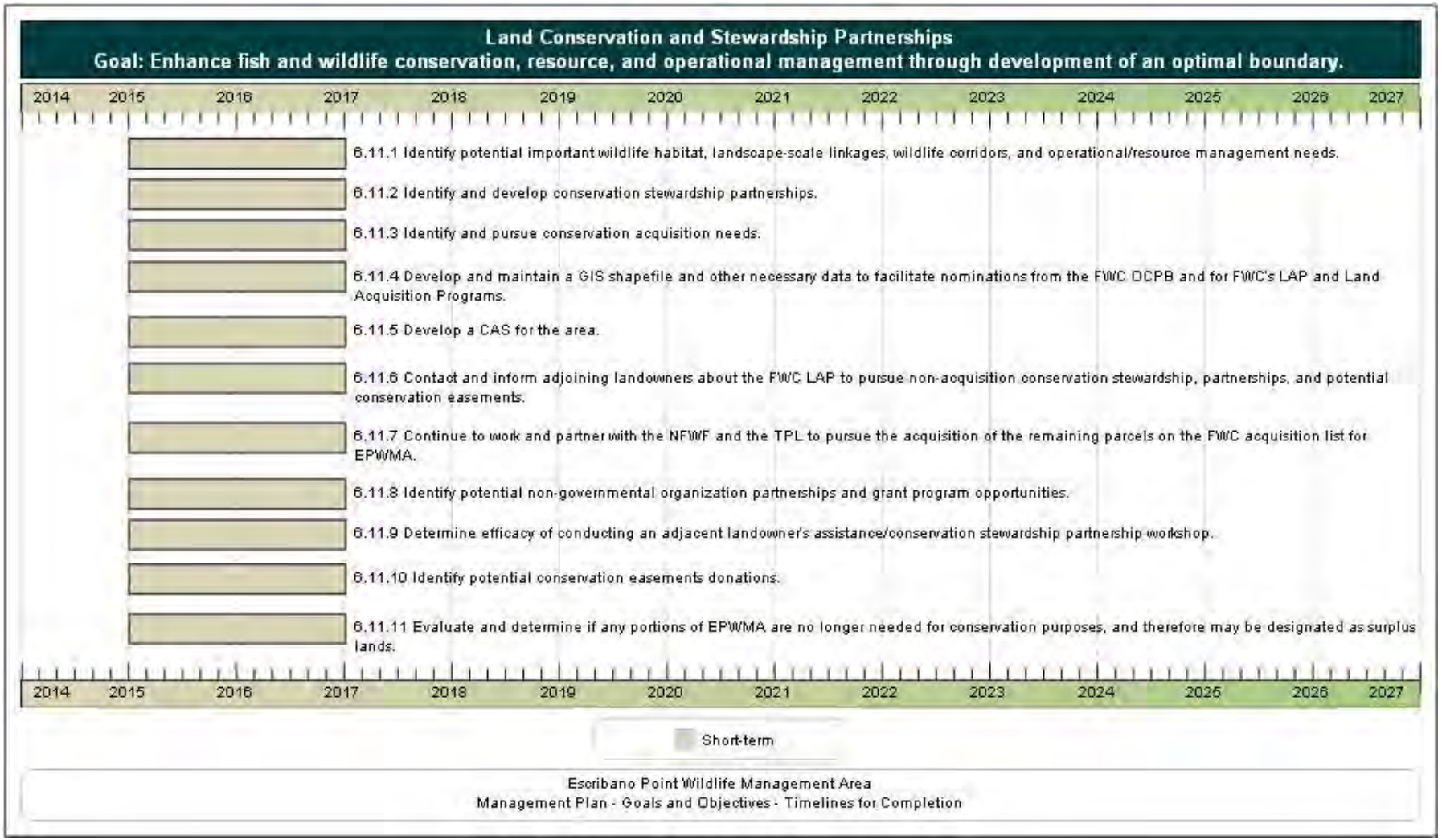
6.10.1 Continue to cooperate with the FWC-Fish and Wildlife Research Institute (FWRI) on ongoing saltmarsh topminnow survey.
6.10.2 Consult with the WCPR strategy regarding information gaps and research needs for species surrounding the EPWMA.
6.10.3 Explore and pursue cooperative research opportunities through universities, FWC-FWRI, etc.
6.10.4 Continue to cooperate with researchers, universities, and others as appropriate.
6.10.5 Continue to assess the need for and pursue research and environmental education partnership opportunities as appropriate.
6.10.6 Continue to cooperate with FWC-FWRI on ongoing saltmarsh topminnow survey.
6.10.7 Consult with the WCPR strategy regarding information gaps and research needs for species surrounding the EPWMA.
Short-term
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Land Conservation and Stewardship Partnerships
Goal: Enhance fish and wildlife conservation, resource, and operational management through development of an optimal boundary.
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6.11.1 Identify potential important wildlife habitat, landscape-scale linkages, wildlife corridors, and operational/resource management needs.
6.11.2 Identify and develop conservation stewardship partnerships.
6.11.3 Identify and pursue conservation acquisition needs.
6.11.4 Develop and maintain a GIS shapefile and other necessary data to facilitate nominations from the FWC OCPB and for FWC's LAP and Land Acquisition Programs.
6.11.5 Develop a CAS for the area.
6.11.6 Contact and inform adjoining landowners about the FWC LAP to pursue non-acquisition conservation stewardship, partnerships, and potential conservation easements.
6.11.7 Continue to work and partner with the NFWF and the TPL to pursue the acquisition of the remaining parcels on the FWC acquisition list for EPWMA.
6.11.8 Identify potential non-governmental organization partnerships and grant program opportunities.
6.11.9 Determine efficacy of conducting an adjacent landowner's assistance/conservation stewardship partnership workshop.
6.11.10 Identify potential conservation easements donations.
6.11.11 Evaluate and determine if any portions of EPWMA are no longer needed for conservation purposes, and therefore may be designated as surplus lands.
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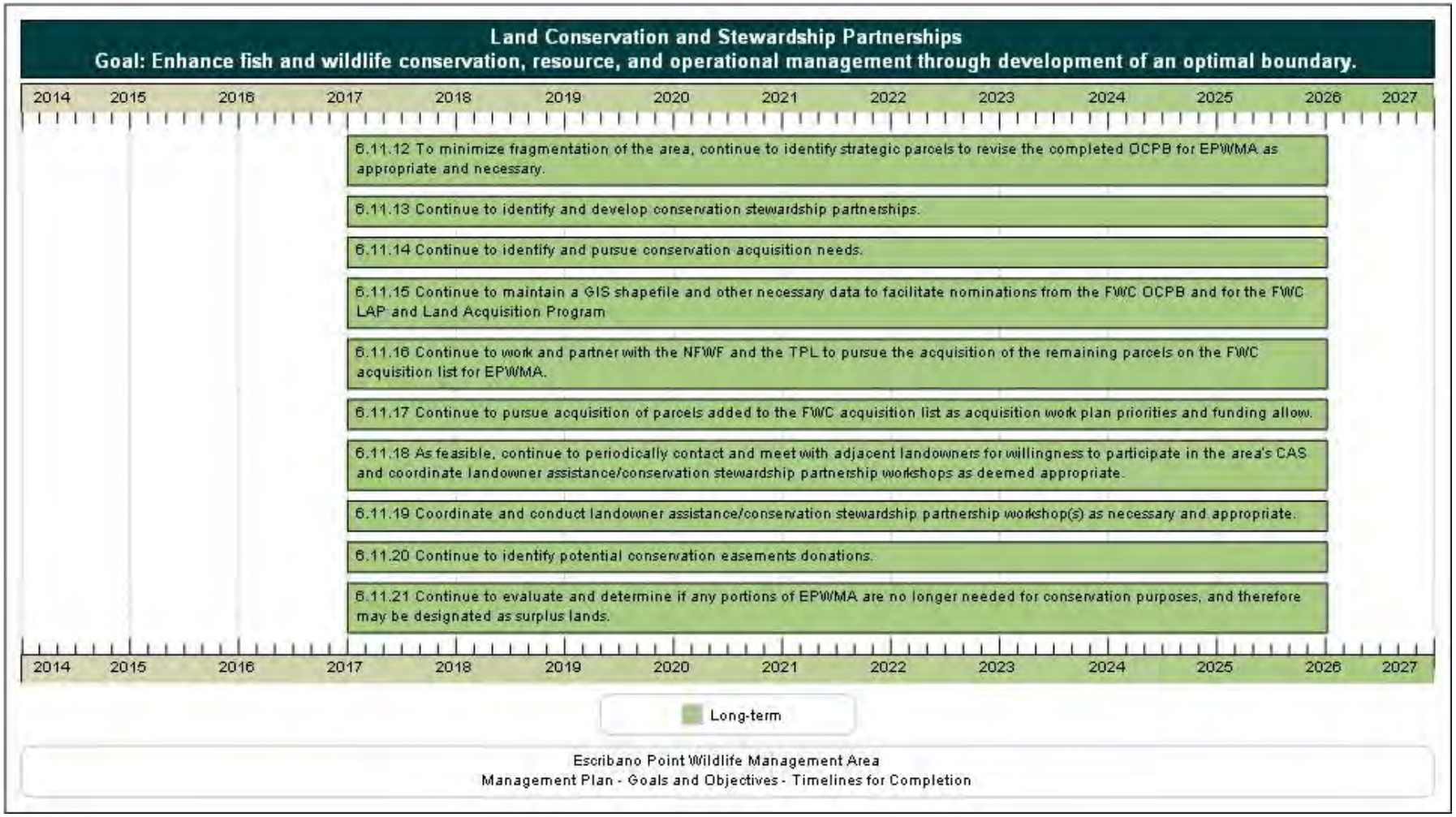
Short-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Land Conservation and Stewardship Partnerships
Goal: Enhance fish and wildlife conservation, resource, and operational management through development of an optimal boundary.
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6.11.12 To minimize fragmentation of the area, continue to identify strategic parcels to revise the completed OCPB for EPWMA as appropriate and necessary.
6.11.13 Continue to identify and develop conservation stewardship partnerships.
6.11.14 Continue to identify and pursue conservation acquisition needs.
6.11.15 Continue to maintain a GIS shapefile and other necessary data to facilitate nominations from the FWC OCPB and for the FWC LAP and Land Acquisition Program
6.11.16 Continue to work and partner with the NFWF and the TPL to pursue the acquisition of the remaining parcels on the FWC acquisition list for EPWMA.
6.11.17 Continue to pursue acquisition of parcels added to the FWC acquisition list as acquisition work plan priorities and funding allow.
6.11.18 As feasible, continue to periodically contact and meet with adjacent landowners for willingness to participate in the area's CAS and coordinate landowner assistance/conservation stewardship partnership workshops as deemed appropriate.
6.11.19 Coordinate and conduct landowner assistance/conservation stewardship partnership workshop(s) as necessary and appropriate.
6.11.20 Continue to identify potential conservation easements donations.
6.11.21 Continue to evaluate and determine if any portions of EPWMA are no longer needed for conservation purposes, and therefore may be designated as surplus lands.
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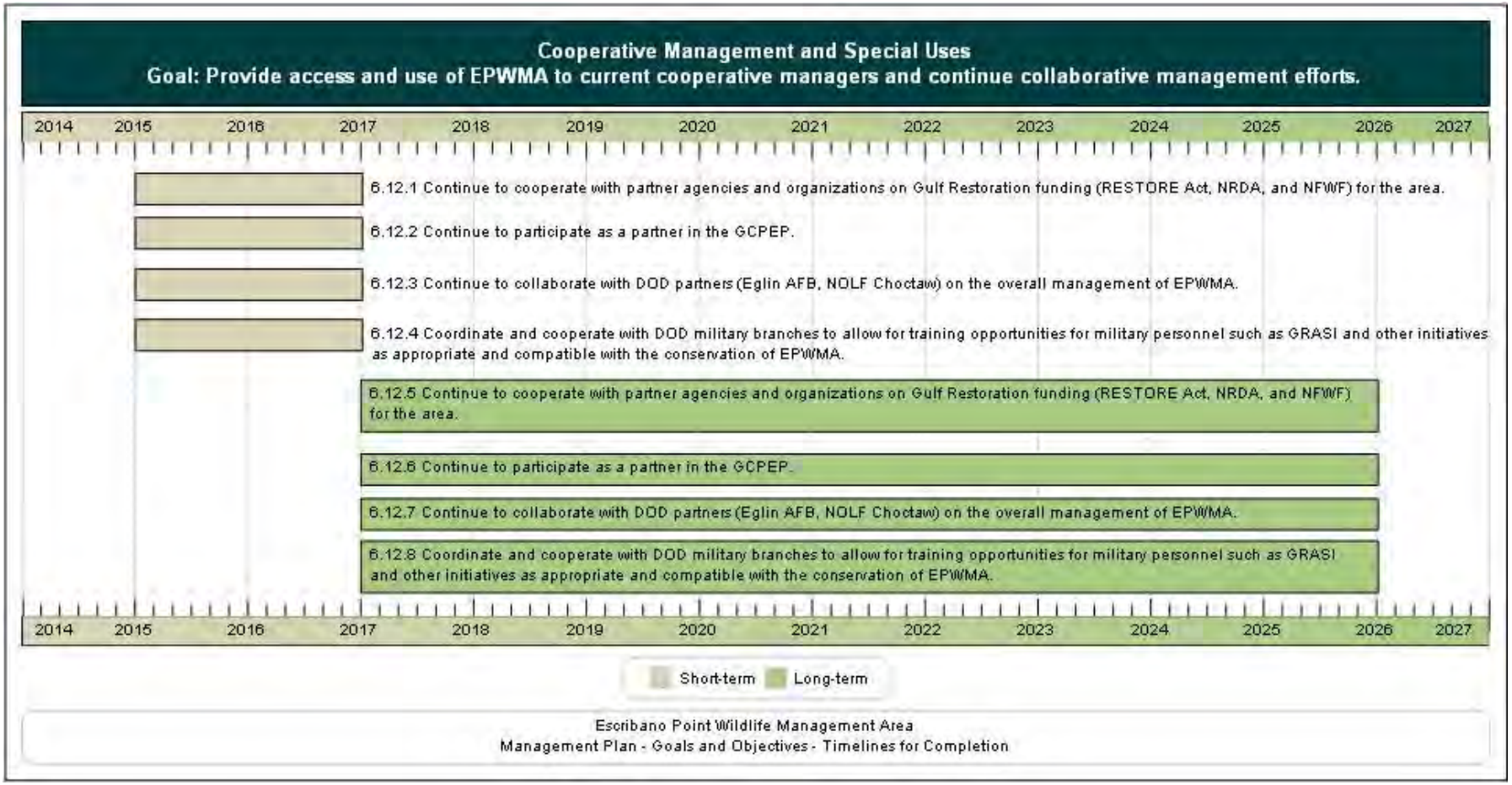
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Cooperative Management and Special Uses
Goal: Provide access and use of EPWMA to current cooperative managers and continue collaborative management efforts.
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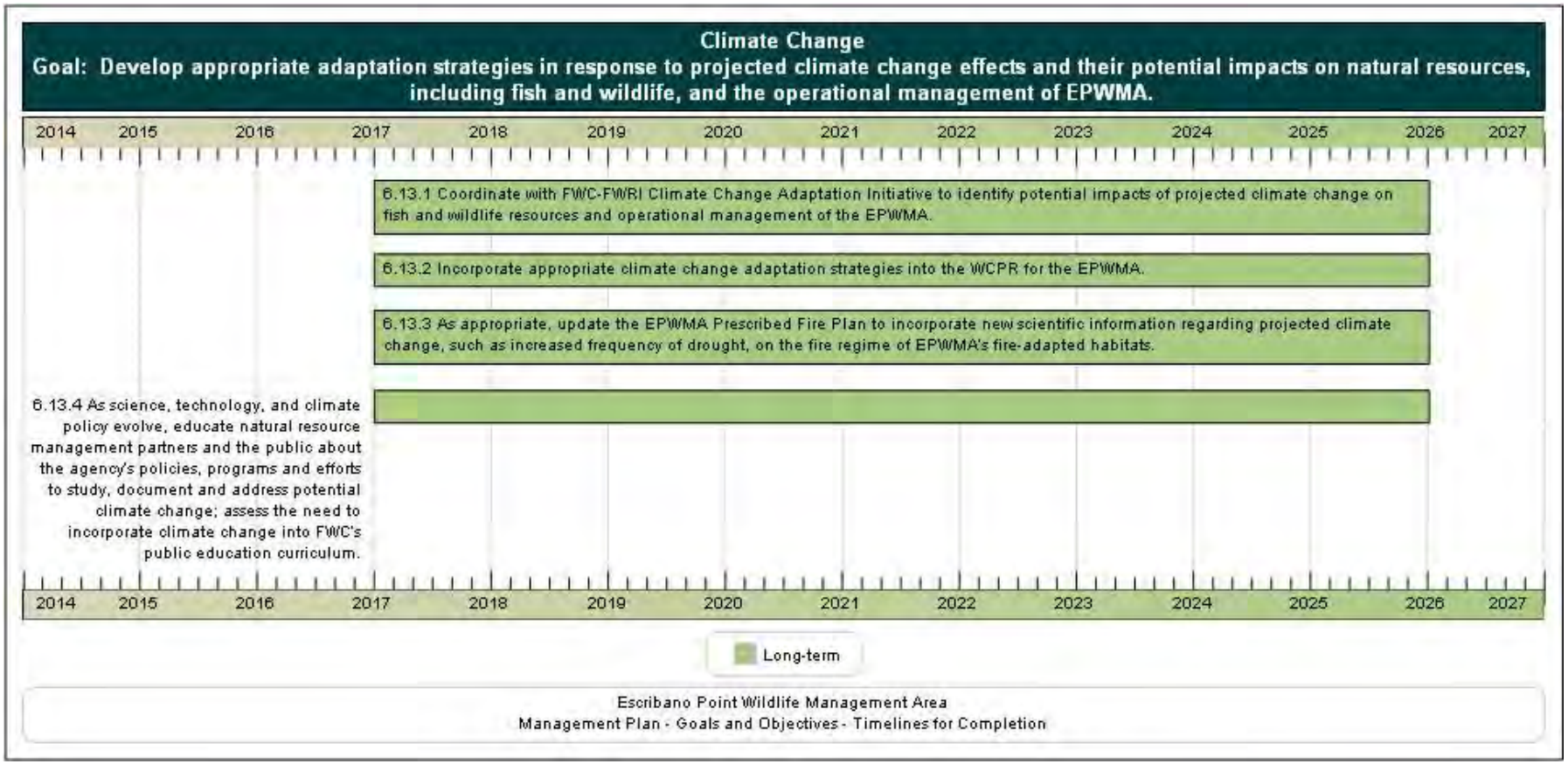
6.12.1 Continue to cooperate with partner agencies and organizations on Gulf Restoration funding (RESTORE Act, NRDA, and NFWF) for the area.
6.12.2 Continue to participate as a partner in the GCPEP.
6.12.3 Continue to collaborate with DOD partners (Eglin AFB, NOLF Choctaw) on the overall management of EPWMA.
6.12.4 Coordinate and cooperate with DOD military branches to allow for training opportunities for military personnel such as GRASI and other initiatives as appropriate and compatible with the conservation of EPWMA.
6.12.5 Continue to cooperate with partner agencies and organizations on Gulf Restoration funding (RESTORE Act, NRDA, and NFWF) for the area.
6.12.6 Continue to participate as a partner in the GCPEP.
6.12.7 Continue to collaborate with DOD partners (Eglin AFB, NOLF Choctaw) on the overall management of EPWMA.
6.12.8 Coordinate and cooperate with DOD military branches to allow for training opportunities for military personnel such as GRASI and other initiatives as appropriate and compatible with the conservation of EPWMA.
Short-term
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion


Climate Change
Goal: Develop appropriate adaptation strategies in response to projected climate change effects and their potential impacts on natural resources, including fish and wildlife, and the operational management of EPWMA.
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6.13.1 Coordinate with FWC-FWRI Climate Change Adaptation Initiative to identify potential impacts of projected climate change on fish and wildlife resources and operational management of the EPWMA.
6.13.2 Incorporate appropriate climate change adaptation strategies into the WCPR for the EPWMA.
6.13.3 As appropriate, update the EPWMA Prescribed Fire Plan to incorporate new scientific information regarding projected climate change, such as increased frequency of drought, on the fire regime of EPWMA's fire-adapted habitats.
6.13.4 As science, technology, and climate policy evolve, educate natural resource management partners and the public about the agency's policies, programs and efforts to study, document and address potential climate change; assess the need to incorporate climate change into FWC's public education curriculum.
Long-term
Escribano Point Wildlife Management Area
Management Plan - Goals and Objectives - Timelines for Completion

8 Resource Management Challenges and Strategies

The following section identifies and describes further management needs and challenges associated with the EPWMA and provides solution strategies that will address these challenges. These specific challenges may not be fully addressed in the broader goals and objectives section above, and are thereby provided here.

8.1 Challenge: There are several prohibited activities occurring on the EPWMA including but not limited to facility vandalism, littering, dumping, and off-road vehicle travel that have negative impacts on sensitive plant communities and water quality, degrade aesthetic qualities of the area, and damage wildlife species or their habitats.

8.1.1 Strategy: Through news media outlets, postings at entrance kiosks, and signage, inform public about these activities and their detrimental effects on the area.

8.1.2 Strategy: Install additional gates and fences/guard rails adjacent to gates as needed to control off-road vehicle access.

8.1.3 Strategy: Improve compliance with designated road regulations through directed law enforcement patrols of problem areas.

8.1.4 Strategy: Locate staff residence on site to assist with monitoring and reporting illegal activities.

8.2 Challenge: Access to the EPWMA from Eglin AFB is not clearly defined.

8.2.1 Strategy: Continue to coordinate with Eglin AFB to establish permanent access rights to the area.

8.3 Challenge: Currently the extensive use and access of the area by boaters is resulting in some prohibited uses.

8.3.1 Strategy: Through news media outlets and signage, inform public about these activities and their detrimental effects on the area.

8.3.2 Strategy: Improve compliance with designated boating access and use regulations through directed law enforcement patrols of problem areas.

8.3.3 Strategy: Coordinate with boating user groups to inform the public about boater regulations on the area and conservation education to protect the sensitive shoreline wildlife and resources.

9 Cost Estimates and Funding Sources

The following represents the actual and unmet budgetary needs for managing the lands and resources of EPWMA. This cost estimate was developed using data developed by the FWC and other cooperating entities, and is based on actual costs for land management activities, equipment purchase and maintenance, and for development of fixed capital facilities. Funds needed to protect and manage the property and to fully implement the recommended program are derived primarily from the Land Acquisition Trust Fund and from State Legislative appropriations. However, private conservation organizations may be cooperators with the agency for funding of specific projects. Alternative funding sources, such as monies available through mitigation, may be sought to supplement existing funding.

The cost estimate below, although exceeding what the FWC typically receives through the appropriations process, is estimated to be what is necessary for optimal management, and is consistent with the current and planned resource management and operation of EPWMA. Cost estimate categories are those currently recognized by the FWC and the Land Management Uniform Accounting Council. More information on these categories, as well as the Fiscal Year 2014-2015 operational plan showing detailed cost estimates by activity and categories of expenditures, may be found in Appendix 13.14.

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Escribano Point WMA Management Plan Cost Estimate

Maximum expected one year expenditure

Resource Management	Expenditure	Priority
Exotic Species Control	$14,536	(1)
Prescribed Burning	$28,181	(1)
Cultural Resource Management	$6,751	(1)
Timber Management	$10,710	(1)
Hydrological Management	$114,058	(1)
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	$107,621	(1)
Subtotal	**$281,857**	
Administration		
General administration	**$9,588**	(1)
Support		
Land Management Planning	$34,266	(1)
Land Management Reviews	$17,028	(3)
Training/Staff Development	$72,119	(1)
Vehicle Purchase	$144,068	(2)
Vehicle Operation and Maintenance	$11,252	(1)
Other (Technical Reports, Data Management, etc.)	$16,296	(1)
Subtotal	**$295,029**	
Capital Improvements		
New Facility Construction	$363,775	(2)
Facility Maintenance	$61,471	(1)
Subtotal	**$425,246**	
Visitor Services/Recreation		
Info./Education/Operations	**$18,525**	(1)
Law Enforcement		
Resource protection	**$3,705**	(1)
Total	**$1,033,951**	*

Priority schedule:

Bold	**(1) Immediate (annual)**
Normal	(2) Intermediate (3-4 years)
Italic	*(3) Other (5+ years)*

*Based on the characteristics and requirements of this area, 2 FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

Escribano Point WMA Management Plan Cost Estimate

Ten-year projection

Resource Management	**Expenditure**	**Priority**
Exotic Species Control	$127,715	(1)
Prescribed Burning	$247,599	(1)
Cultural Resource Management	$59,318	(1)
Timber Management	$94,095	(1)
Hydrological Management	$1,002,125	(1)
Other (Restoration, Enhancement, Surveys, Monitoring, etc.)	$945,573	(1)
Subtotal	**$2,476,425**	
Administration		
General administration	**$84,244**	(1)
Support		
Land Management Planning	$301,067	(1)
Land Management Reviews	$48,746	(3)
Training/Staff Development	$633,642	(1)
Vehicle Purchase	$506,980	(2)
Vehicle Operation and Maintenance	$98,863	(1)
Other (Technical Reports, Data Management, etc.)	$143,181	(1)
Subtotal	**$1,732,479**	
Capital Improvements		
New Facility Construction	$1,050,760	(2)
Facility Maintenance	$540,089	(1)
Subtotal	**$1,590,848**	
Visitor Services/Recreation		
Info./Education/Operations	**$162,766**	(1)
Law Enforcement		
Resource protection	**$32,556**	(1)
Total	**$6,079,318**	*

Priority schedule:

Bold	**(1) Immediate (annual)**
Normal	(2) Intermediate (3-4 years)
Italic	*(3) Other (5+ years)*

*Based on the characteristics and requirements of this area, 2 FTE positions would be optimal to fully manage this area. All land management funding is dependent upon annual legislative appropriations.

10 Analysis of Potential for Contracting Private Vendors for Restoration and Management Activities

The following management and restoration activities have been considered for outsourcing to private entities. It has been determined that items selected as "approved" below are those that FWC either does not have in-house expertise to accomplish or which can be done at less cost by an outside provider of services. Those items selected as "conditional" items are those that could be done either by an outside provider or by the agency at virtually the same cost or with the same level of competence. Items selected as "rejected" represent those for which FWC has in-house expertise and/or which the agency has found it can accomplish at less expense than through contracting with outside sources:

	Approved	**Conditional**	**Rejected**
• Dike and levee maintenance			✓
• Exotic species control			✓
• Mechanical vegetation treatment			✓
• Public contact and educational facilities development			✓
• Prescribed burning			✓
• Timber harvest activities	✓		
• Vegetation inventories	✓		

11 Compliance with Federal, State, and Local Governmental Requirements

The operational functions of FWC personnel are governed by the agency's Internal Management Policies and Procedures (IMPP) Manual. The IMPP Manual provides internal guidance regarding many subjects affecting the responsibilities of agency personnel including personnel management, safety issues, uniforms and personal appearance, training, as well as accounting, purchasing, and budgetary procedures.

When public facilities are developed on areas managed by the FWC, 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).

Uses planned for EPWMA are in compliance with the Conceptual State Lands Management Plan and its requirement for "balanced public utilization," and are in compliance with the mission of the FWC as described in its Agency Strategic Plan (Appendix 13.11). Such uses also comply with the authorities of the FWC as derived from Article IV, Section 9 of the Florida Constitution as well as the guidance and directives of Chapters 372, 253, 259, 327, 370, 403, 870, 375, 378, 379, 487, and 597 FS.

The FWC has developed and utilizes an Arthropod Control Plan for EPWMA in compliance with Chapter 388.4111 F.S. (Appendix 13.17). This plan was developed in cooperation with the local Santa Rosa County arthropod control agency. This plan is also in conformance with the Local Government Comprehensive Plan as approved and adopted for Santa Rosa County, Florida, (Appendix 13.18).

12 Endnotes

[1] Bureau of Economic and Business Research. 2014. *Santa Rosa Population Projections* [Data file]. Retrieved from http://www.bebr.ufl.edu/bebr-products/series/Florida%20County%20Population%20Projections

[2] United States Department of Agriculture, Soil Conservation Service. Soil Survey of Santa Rosa County, Florida. 1980. Retrieved from http://ufdc.ufl.edu/UF00025739/00001/5j?search=santa+%3drosa

[3] Schneider, J.W., Upchurch S.B., Chen, J., and Cain, C. 2004. Simulation of Groundwater Flow in North Florida and South-Central Georgia. SDII Global Corporation. Tampa, Florida, 3 p.

[4] Geologic Units in Santa Rosa County, Florida. United States Geological Survey.2014. Retrieved from http://mrdata.usgs.gov/geology/state/fips-unit.php?code=f12113

[5] Florida Natural Areas Inventory (FNAI). 2010. Guide to the natural communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, FL.

[6] Lewis, F.G. 2010. East Bay/Blackwater Bay/Lower Yellow River Preliminary Baseline Resource Characterization. Northwest Florida Water Management District. Retrieved from http://www.nwfwmd.state.fl.us/system/assets/822/original/EastBayResourceCharacterization.pdf

[7] Florida Department of Environmental Protection. 2007. Sand and Gravel Aquifer. Retrieved from http://www.dep.state.fl.us/swapp/aquifer.asp#SGA

[8] Bartel, R.L., Bonekemper, J.A., Countryman, R.A., Macmillan, T.L., Potts, R.R., Pratt, T.R., Richards, C.J., Womble, R.D. 2000. Regional Water Supply Plan for Santa Rosa, Okaloosa, and Walton Counties. Northwest Florida Water Management District, Havana, Florida. Retrieved from http://www.nwfwmd.state.fl.us/system/assets/604/original/rwsp2Title_page.pdf

[9] Section V Conservation Element. City of Milton Comprehensive Plan Volume II Technical Document.1990. Retrieved from http://www.ci.milton.fl.us/city_services/planning/comp_plan/vol2sec5.pdf

[10] U.S Department of the Interior, Bureau of Land Management. 2008. Florida: Reasonable Foreseeable Development Scenario for Fluid Minerals. Jackson, Mississippi. Retrieved from http://www.blm.gov/pgdata/etc/medialib/blm/es/jackson_field_office/planning/planning_pdf_florida.Par.65103.File.pdf

[11] Florida Department of Environmental Protection. 2005. Memo dated October 21, 2005 from T. Greenhalgh and C. Kromhout to L. Minasian. Subject: Escribano Point BOT Lands. Florida Geological Survey, Tallahassee, Florida, USA.

[12] Aldridge, C. L., M. S. Boyce and R. K. Baydack. 2004. Adaptive management of prairie grouse: how do we get there? Wildlife Society Bulletin 32:92-103.

[13] Wilhere, G. F. 2002. Adaptive management in Habitat Conservation Plans. Conservation Biology 16:20-29.

[14] Walters, C. J. and R. Hilborn. 1978. Ecological optimization and adaptive management. Annual Review of Ecology and Systematics 9:157–188.

[15] Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas, Final Report (1999).

[16] Karl, T. R., J. M. Melillo, and T. C. Peterson (Eds.). 2009. Global Climate Change Impacts in the United States. Cambridge University Press. New York, NY.

[17] McCarty, J. P. 2001. Ecological consequences of recent climate change. Conservation Biology 15:320-331.

[18] Walther, G. R., E. Post, P. Convey, A. Menzel, C. Parmesan, T. J. . Beebee, J. M. Fromentin, O. Hoegh-Guldberg, and F. Bairlein. 2002. Ecological responses to recent climate change. Nature 416:389–395.

[19] Parmesan, C. 2006. Ecological and evolutionary responses to recent climate change. Annual Review of Ecology, Evolution, and Systematics 37:637-669.

[20] Logan, J. A., and J. A. Powell. 2009. Ecological consequences of climate change altered forest insect disturbance regimes. In Climate Warming in Western North America: Evidence and Environmental Effects (F. H. Wagner, Ed.). University of Utah Press, Salt Lake City, UT.

[21] Stevenson, J. C., M. S. Kearney, and E. W. Koch. 2002. Impacts of sea level rise on tidal wetlands and shallow water habitats: A case study from Chesapeake Bay. American

Fisheries Society Symposium 32:23-36.

[22] IPCC. 2007b. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK.

[23] Emanuel, K.A. 1987. The Dependence of Hurricane Intensity on Climate. Nature 326: 483-485.

[24] Emanuel, K.A. 2005. Increasing Destructiveness of Tropical Cyclones Over the Past 30 Years.

[25] Webster et al. 2005; Webster, P. J., et al. 2005. Changes in Tropical Cyclone Number, Duration, and Intensity, in a Warming Environment. Science 309: 1844–1846.

[26] Mann, M.E. and K.A. Emanuel. 2006. Atlantic Hurricane Trends Linked to Climate Change. Eos Trans. AGU 87: 233-244.

[27] Stanton, E.A. and F. Ackerman. 2007. Florida and Climate Change: The Costs of Inaction. Tufts University Global Development and Environment Institute and Stockholm Environment Institute–US Center, Tufts University, Medford, MA.

[28] Clough, J.S. 2008. Application of the Sea-Level Affecting Marshes Model (SLAMM 5.0) to Crystal River NWR. Warren Pinnacle Consulting, Inc. for U.S. Fish and Wildlife Service. 46 pp.

[29] Geselbracht, L., K. Freeman, A. Birch, D. Gordon, A. Knight, M. O'Brien, and J. Oetting. 2013. Modeling and Abating the Impacts of Sea Level Rise on Five Significant Estuarine Systems in the Gulf of Mexico, Final Report to the U.S. Environmental Protection Agency – Gulf of Mexico Program, Project # MX-95463410-2. The Nature Conservancy.

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13 Appendices

13.1 Lease Agreement and Amendments

SAL3

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

1,166.1 Acres

LEASE AGREEMENT

Lease Number 4447

This lease is made and entered into this 11th day of February, 2004, between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR", and the STATE OF FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, hereinafter referred to as "LESSEE".

WITNESSETH:

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

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

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

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

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

3. TERM: The term of this lease shall be for a period of fifty years, commencing on February 11, 2004 and ending on February 10, 2054, unless sooner terminated pursuant to the provisions of this lease.

4. PURPOSE: LESSEE shall manage the leased premises only for the conservation and protection of natural and historical resources and resource based public outdoor recreation which is compatible with the conservation

and protection of these public lands, as set forth in subsection 259.032(11), Florida Statutes, along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph 7 of this lease.

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

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

7. MANAGEMENT PLAN: LESSEE shall prepare and submit a Management Plan for the leased premises, in accordance with Section 253.034, Florida Statutes, and subsection 18-2.021(4), Florida Administrative Code, within twelve months of the effective date of this lease. The Management Plan shall be submitted for approval to the Department of Environmental Protection, Division of State Lands, Office of Environmental Services, Mail Station 140, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. The Management Plan shall emphasize the original management concept as approved by LESSOR at the time of acquisition, which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall provide the basic guidance for all management activities. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

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

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

9. INSURANCE REQUIREMENTS: LESSEE shall procure and maintain fire and extended risk insurance coverage, in accordance with Chapter 284, F.S., for any buildings and improvements located on the leased premises by preparing and delivering to the Division of Risk Management, Department of Insurance, a completed Florida Fire Insurance Trust Fund Coverage Request Form and a copy of this lease immediately upon erection of any structures as allowed by paragraph 4 of this lease. A copy of said form and immediate notification in writing of any erection or removal of structures or other improvements on the leased premises and any changes affecting the value of the improvements shall be submitted to the following: Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

10. LIABILITY: LESSEE shall assist in the investigation of injury or damage claims either for or against LESSOR or the State of Florida pertaining to LESSEE'S respective areas of responsibility under this lease or arising out of LESSEE'S respective management programs or activities and shall contact LESSOR regarding the legal action deemed appropriate to remedy such damage or claims.

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

12. EASEMENTS: All easements including, but not limited to, utility easements are expressly prohibited without the prior written approval of

LESSOR. Any easement not approved in writing by LESSOR shall be void and without legal effect.

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

14. POST CLOSING RESPONSIBILITIES: In an effort to define responsibilities of the LESSOR and LESSEE with regard to resolving post closing management issues, the parties agree to the following:

a. After consultation with the LESSEE, LESSOR agrees to provide the LESSEE with the title, survey and environmental products procured by the LESSOR, prior to closing.

b. LESSOR will initiate surveying services to locate and mark boundary lines of specific parcels when necessary for immediate agency management and will provide a boundary survey of the entire acquisition project at the conclusion of all acquisition within the project boundary. Provided, however, the LESSEE may request individual parcel boundary surveys, if necessary, prior to the conclusion of acquisition activities within the project boundaries.

c. Unless otherwise agreed to by LESSEE, LESSOR shall at its sole cost and expense, make a diligent effort to resolve all issues pertaining to all title defects, survey matters or environmental contamination associated with the leased premises, including but not limited to trash and debris, which were either known or should have been reasonably known by LESSOR at the time LESSOR acquired the leased premises. Notwithstanding the foregoing, LESSOR will not be responsible for any of LESSEE'S attorney's fees, costs, or liability or damages incurred by the LESSEE in resolving any issue in which the LESSEE is named as a party in any litigation or other legal or administrative proceeding.

d. With regard to all title defects, survey matters, or environmental contamination associated with the leased premises

which were not known or could not have been reasonably known by LESSOR at the time LESSOR acquired the leased premises, LESSOR and LESSEE agree to cooperate in developing an appropriate strategy for jointly resolving these matters. LESSOR acknowledges and understands that LESSEE is unable to commit any substantial amount of their routine operating funds for the resolution of any title defect, survey matter, or environmental contamination associated with the lease premises. Notwithstanding the foregoing, LESSOR will not be responsible for any of LESSEE'S attorney's fees, costs, or liability or damages incurred by the LESSEE in resolving any issue in which the LESSEE is named as a party in any litigation or other legal or administrative proceeding.

15. SURRENDER OF PREMISES: Upon termination or expiration of this lease LESSEE shall surrender the leased premises to LESSOR. In the event no further use of the leased premises or any part thereof is needed, written notification shall be made to the Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, at least six months prior to the release of all or any part of the leased premises. Notification shall include a legal description, this lease number and an explanation of the release. The release shall only be valid if approved by LESSOR through execution of a release of lease instrument with the same formality as this lease. Upon release of all or any part of the leased premises or upon expiration or termination of this lease, all permanent improvements, including both physical structures and modifications to the leased premises, shall become the property of LESSOR, unless LESSOR gives written notice to LESSEE to remove any or all such improvements at the expense of LESSEE. The decision to retain any improvements upon termination of this lease shall be at LESSOR'S sole discretion. Prior to surrender of all or any part of the leased premises, a representative of the Division of State Lands shall perform an on-site inspection and the keys to any buildings on the leased premises shall be turned over to the Division. If the leased premises and

improvements located thereon do not meet all conditions set forth in paragraphs 18 and 21 herein, LESSEE shall pay all costs necessary to meet the prescribed conditions.

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

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

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

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

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

21. MAINTENANCE OF IMPROVEMENTS: LESSEE shall maintain the real property contained within the leased premises and any improvements located thereon,

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

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

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

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

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

to, mortgages or construction liens against the leased premises or against any interest of LESSOR therein.

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

27. DAMAGE TO THE PREMISES: (a) LESSEE shall not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises or adjacent properties, any act which may result in damage or depreciation of value to the leased premises or adjacent properties, or any part thereof. (b) LESSEE shall not generate, store, produce, place, treat, release or discharge any contaminants, pollutants or pollution, including, but not limited to, hazardous or toxic substances, chemicals or other agents on, into, or from the leased premises or any adjacent lands or waters in any manner not permitted by law. For the purposes of this lease, "hazardous substances" shall mean and include those elements or compounds defined in 42 USC Section 9601 or which are contained in the list of hazardous substances adopted by the United States Environmental Protection Agency (EPA) and the list of toxic pollutants designated by the United States Congress or the EPA or defined by any other federal, state or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic or dangerous waste, substance, material, pollutant or contaminant. "Pollutants" and "pollution" shall mean those products or substances defined in Chapters 376 and 403, Florida Statutes, and the rules promulgated thereunder, all as amended or updated from time to time. In the event of LESSEE'S failure to comply with this paragraph, LESSEE shall, at its sole cost and expense, promptly commence and diligently pursue any legally required closure, investigation, assessment, cleanup, decontamination, remediation, restoration and monitoring of (1) the leased premises, and (2) all off-site ground and surface waters and lands affected by LESSEE'S such failure to comply, as may be necessary to bring the leased premises and affected off-site waters and lands into full compliance with all applicable federal,

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

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

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

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

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

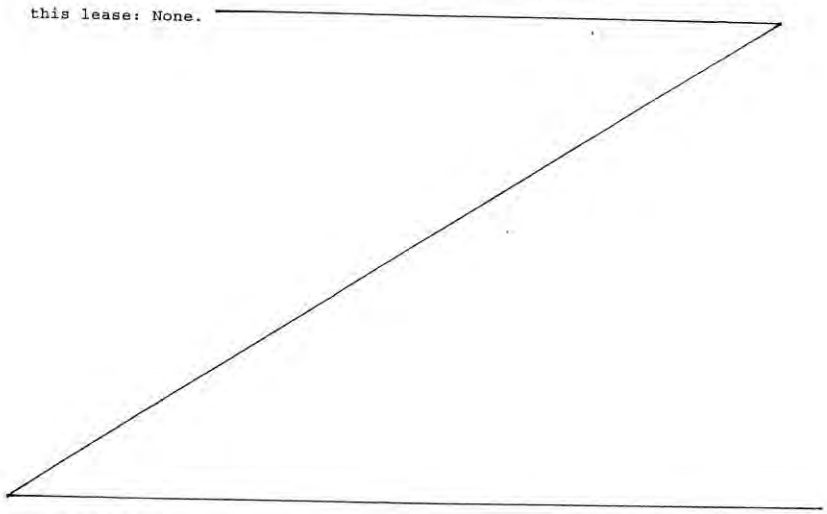
32. TIME: Time is expressly declared to be of the essence of this lease.

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

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

35. ADMINISTRATIVE FEE: LESSEE shall pay LESSOR an annual administrative fee of $300. The initial annual administrative fee shall be payable within thirty days from the date of execution of this lease agreement and shall be prorated based on the number of months or fraction thereof remaining in the fiscal year of execution. For purposes of this lease agreement, the fiscal year shall be the period extending from July 1 to June 30. Each annual payment thereafter shall be due and payable on July 1 of each subsequent year.

36. SPECIAL CONDITIONS: The following special conditions shall apply to this lease: None.



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

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

Judy Woodard
Witness

Judy Woodard
Print/Type Witness Name

Mahogany Simmons
Witness

Mahogany Simmons
Print/Type Witness Name

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

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 11th day of February 2004, by Gloria C. Nelson, as Operations and Management Consultant Manager, Bureau of Public Land Administration, Division of State Lands, Florida Department of Environmental Protection, acting as agent on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida.

Theresa M. Brady
Notary Public, State of Florida

Print\Type Notary Name

Commission Number:

Commission Expires:

Theresa M. Brady
Commission # DD081826
Expires Jun. 2, 2006
Bonded Thru
Atlantic Bonding Co., Inc.

Approved as to Form and Legality

By: Gary L. Nelson
DEP Attorney

Page 11 of 20
Lease No. 4447

R07/29/02

STATE OF FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

Witness
Print/Type Witness Name

Witness
Print/Type Witness Name

By: _____ (SEAL)

Print/Type Name Victor J. Heller Assistant Executive Director

Title: Asst. Exec. Director

"LESSEE"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 30th day of January 2004, by Victor J. Heller, as Assistant Executive Director, State of Florida Fish and Wildlife Conservation Commission. He/she is personally known to me or produced _____ as identification.

Notary Public, State of Florida

JIMMIE C. BEVIS

Print/Type Notary Name

Commission Number:

Commission Expires:

Jimmie C. Bevis
MY COMMISSION # DD077239 EXPIRES
December 28, 2005
BONDED THRU TROY FAIN INSURANCE, INC.

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
1/27/04
Commission Attorney

Page 12 of 20
Lease No. 4647

8/7/29/92

EXHIBIT "A"

LEGAL DESCRIPTION OF THE LEASED PREMISES

This Instrument Prepared By and
Please Return To:
Elaine Vergara
American Government Services Corporation
3812 W. Linebaugh Avenue
Tampa, FL 33624
AGS # 12400

WARRANTY DEED
(STATUTORY FORM - SECTION 689.02, F.S.)

THIS INDENTURE, made this 25th day of September, A.D. 2003, between **William Allen Pullum, Individually and as Co-Trustee of the E.H. Pullum Revocable Trust, Betty Jean Pullum, Individually and as Co-Trustee of the E.H. Pullum Revocable Trust, Bobby J. Parker, Bill E. Parker, Dale E. Rice, Sr., and LaRita Fern Parker Lowe,** whose address is: **8494 Navarre Parkway, Navarre, FL 32566 (WAP & BJP), 1544 Texas Parkway, Crestview, FL 32536(DR), 8461 Loosa Drive, Crestview, FL 32539(BJP), 720 Adams Drive, Crestview, FL 32536(BEP), 6475 Garden City Road, Crestview, FL 32539(LFPL),,** grantor, and the **BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA,** whose post office address is c/o Florida Department of Environmental Protection, Division of State Lands, 3900 Commonwealth Boulevard, Mail Station 115, Tallahassee, FL 32399-3000, grantee,

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and their heirs, legal representatives, successors and assigns. "Grantor" and "grantee" are used for singular and plural, as the context requires and the use of any gender shall include all genders.)

WITNESSETH: That the said grantor, for and in consideration of the sum of Ten Dollars and other good and valuable considerations, to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's successors and assigns forever, the following described land situate, lying and being in Santa Rosa County, Florida, to-wit:

See Exhibit "A" attached hereto and by reference made a part hereof.

Property Appraiser's Parcel Identification Number: 31-1S-27-0000-00100-0000; 23-1S-27-0000-00100-0000; 07-1S-27-0000-00100-0000; and 06-1S-27-0000-00200-0000

This conveyance is subject to easements, restrictions, limitations, and conditions of record if any now exist, but any such interests that may have been terminated are not hereby re-imposed.

This property is not the homestead property of the grantor, nor contiguous to homestead property, as such homestead is defined under Florida law.

AND the said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF the grantor has hereunto set grantor's hand and seal, the day and year first above written.

Signed, sealed and delivered in the presence of:

(Signature of First Witness)

John W. Brooks
(Printed, Typed or Stamped Name of First Witness)

Rebecca L. Price
(Signature of Second Witness)

Rebecca L. Price
(Printed, Typed or Stamped Name of Second Witness)

William Allen Pullum, Individually and as Co-Trustee of the E.H. Pullum Revocable Trust

STATE OF FLORIDA
COUNTY OF SANTA ROSA

The foregoing instrument was acknowledged before me this 25th day of Sept., 2003, by William Allen Pullum, Individually and as Co-Trustee of the E.H. Pullum Revocable Trust. Such person (Notary Public must check applicable box):

(✓) is personally known to me.
( ) produced a driver license.
( ) produced _____ as identification.

Rebecca L. Price
Notary Public

(NOTARY PUBLIC SEAL)

REBECCA L. PRICE
MY COMMISSION # CC 954759
EXPIRES: September 28, 2004
Bonded Thru Notary Public Underwriters

_____
(Printed, Typed or Stamped Name of Notary Public)

Commission No.: _____

My Commission Expires: _____

(Signature of First Witness)

JOHN W. BROOKS
(Printed, Typed or Stamped Name of First Witness)

(Signature of Second Witness)

Rebecca L. Price
(Printed, Typed or Stamped Name of Second Witness)

Betty Jean Pullum, Individually and as Co-Trustee of the E. H. Pullum Revocable Trust

STATE OF FLORIDA
COUNTY OF SANTA ROSA

The foregoing instrument was acknowledged before me this 25th day of Sept., 2003, by **Betty Jean Pullum, Individually and as Co-Trustee of the E. H. Pullum Revocable Trust.** Such person (Notary Public must check applicable box):

(✓) is personally known to me.
( ) produced a driver license.
( ) produced _____ as identification.

(NOTARY PUBLIC SEAL)

REBECCA L. PRICE
MY COMMISSION # CC 954759
EXPIRES: September 28, 2004
Bonded Thru Notary Public Underwriters

Notary Public

(Printed, Typed or Stamped Name of Notary Public)

Commission No.: _____

My Commission Expires: _____

(Signature of First Witness)

Bobby J. Parker

(Printed, Typed or Stamped Name of First Witness)

(Signature of Second Witness)

(Printed, Typed or Stamped Name of Second Witness)

STATE OF Florida
COUNTY OF Okaloosa

The foregoing instrument was acknowledged before me this 25th day of September, 2003, by **Bobby J. Parker**. Such person (Notary Public must check applicable box):

(X) is personally known to me.
( ) produced a driver license.
( ) produced _____ as identification.

(NOTARY PUBLIC SEAL)

SHARON T. HUDGENS
MY COMMISSION # DD 046554
EXPIRES: September 4, 2005
Bonded Thru Budget Notary Services

Notary Public

(Printed, Typed or Stamped Name of Notary Public)

Commission No.: DD046554

My Commission Expires: 9/4/05

(Signature of First Witness)

Bill E. Parker

(Printed, Typed or Stamped Name of First Witness)

(Signature of Second Witness)

(Printed, Typed or Stamped Name of Second Witness)

STATE OF Florida
COUNTY OF Okaloosa

The foregoing instrument was acknowledged before me this 25th day of September, 2003, by **Bill E. Parker**. Such person (Notary Public must check applicable box):

(X) is personally known to me.
( ) produced a driver license.
( ) produced _____ as identification.

(NOTARY PUBLIC SEAL)

SHARON T. HUDGENS
MY COMMISSION # DD 046554
EXPIRES: September 4, 2005
Bonded Thru Budget Notary Services

Notary Public

(Printed, Typed or Stamped Name of Notary Public)

Commission No.: DD 046554

My Commission Expires: 9/4/05

(Signature of First Witness)

Dale E. Rice, Sr. by Dale E. Rice, Jr., as his attorney-in-fact

(Printed, Typed or Stamped Name of First Witness)

(Signature of Second Witness)

(Printed, Typed or Stamped Name of Second Witness)

STATE OF Florida
COUNTY OF Okaloosa

The foregoing instrument was acknowledged before me this 25th day of September, 2003, by **Dale E. Rice, Sr. by Dale E. Rice, Jr., as his attorney-in-fact.** Such person (Notary Public must check applicable box):

(X) is personally known to me.
( ) produced a driver license.
( ) produced _____ as identification.

(NOTARY PUBLIC SEAL)

Notary Public

SHARON T. HUDGENS
MY COMMISSION # DD 046554
EXPIRES: September 4, 2005
Bonded Thru Budget Notary Services

(Printed, Typed or Stamped Name of Notary Public)

Commission No.: DD 046554

My Commission Expires: 9/4/05

Donna L Hosley
(Signature of First Witness)

LaRita Fern Parker Lowe
LaRita Fern Parker Lowe

Donna L Medina
(Printed, Typed or Stamped Name of First Witness)

Sharon T. Hudgens
(Signature of Second Witness)

Sharon T. Hudgens
(Printed, Typed or Stamped Name of Second Witness)

STATE OF Florida
COUNTY OF Okaloosa

The foregoing instrument was acknowledged before me this 25th day of September, 2003, by **LaRita Fern Parker Lowe**. Such person (Notary Public must check applicable box):

(X) is personally known to me.
( ) produced a driver license.
( ) produced _____ as identification.

(NOTARY PUBLIC SEAL)

Sharon T. Hudgens
Notary Public

SHARON T. HUDGENS
MY COMMISSION # DD 046554
EXPIRES: September 4, 2005
Bonded Thru Budget Notary Services

Sharon T. Hudgens
(Printed, Typed or Stamped Name of Notary Public)

Commission No.: DD 046554

My Commission Expires: 9/4/05

EXHIBIT "A"

All of Section 6, Township 1 South, Range 27 West, Santa Rosa County, Florida except Lot 1 as shown on the General Land Office Plat of said Township 1 South Range 27 West approved in 1829, also described as all of Section 6, Township 1 South, Range 27 West, Santa Rosa County, Florida except Lots 1 and 2 as shown on the General Land Office Plat of the resurvey of the north tier of sections in said Township 1 South Range 27 West approved in 1853.

AND

Lots 1 and 2, Section 7, Township 1 South, Range 27 West, Santa Rosa County, Florida.

AND

Lots 1, 7, and 8, Section 23, Township 1 South, Range 27 West, Santa Rosa County, Florida.

AND

Section 31, Township 1 South, Range 27 West, Santa Rosa County, Florida, less and excepting therefrom Lot 1 of said Section 31.

Escribano Point
Parcel 1 - Estate of E.H. Pullum; Parker; Rice; & Low
Page 1 of 1

BSM REVIEWED
By NC Date 3.31.23

Page 20 of 20
Lease No. 4447

R07/29/02

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
DIVISION OF HABITAT AND SPECIES CONSERVATION

MEMORANDUM

Date: June 21, 2007

To: Juanita Whiddon, Records, through Don Smith

CC: Billy Sermons, w/ amendment
Pat Bowman, w/ amendment
David Alden, w/ cover memo only
Rosa Torres, w, cover memo only

From: Rich Mospens
HSC/THCR

RE: Amendment No. 1 to IITF Lease No. 4447, addition of 130 acres, more or less, to Escribano Point Parcels of the Yellow River Wildlife Management Area

Included herewith please find a fully executed original of the referenced amendment, which adds approximately 130 acres to the WMA, along with the routing form and a map.

Let me know if there are any questions pertaining to this matter.

Gregory S. Brown, CFA
Santa Rosa County
Property Appraiser

6495 Caroline Street
Milton, Florida 32570

(850) 983-1880 Voice
(850) 623-1284 Fax
info@srcpa.org

SANTA ROSA_HOME

BACK TO SEARCH PAGE

Map Help Click Here

Zoom Out | Zoom In | Zoom County | Zoom to Box | Print Page

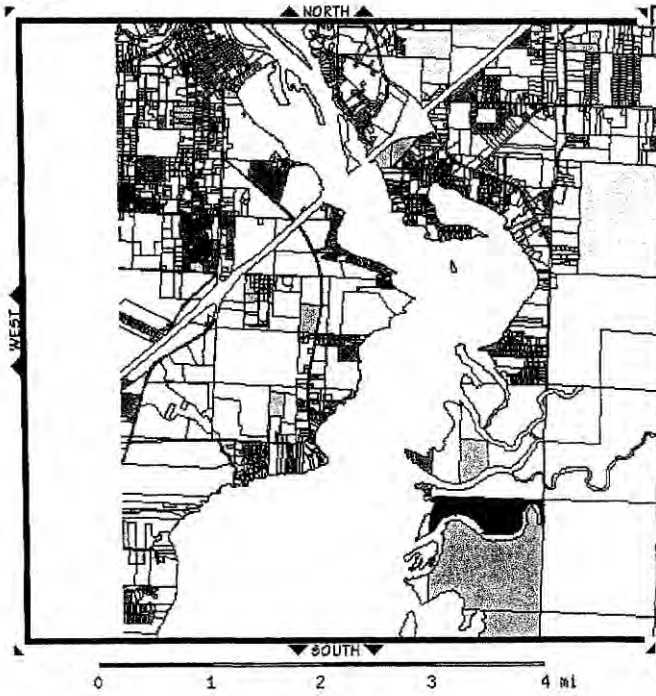
Center Map On Selected Parcel

Zoom To The Selected Parcel

Show:
- [x] Roads
- [ ] Subdivisions
- [ ] Lot Numbers
- [x] Yearly Sales

Sales for year:
2003 | 2004 | 2005

- [ ] Soil Types
- [ ] Last 4 Parcel Digits



PARCEL INFORMATION TABLE	
Parcel	06-1S-27-0000-00100-0000 (Click for Complete Card)
Use	STATE
	104.00
OWNERSHIP INFORMATION	
	TIITF/STATE OF FLORIDA
Address	MURPHY ACT LAND C/O DEP TALLAHASSEE, FL 32399-
dress	
VALUES	
lue	156,000
ural Value	0
Value	0
ue	0
ue	156,000
d Value	156,000
Value	156,000
Value	0
eaded	N

LAST 2 SALES			
	Price	Vacant	Qual

ATL1

130 Acres

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

AMENDMENT NUMBER ONE TO LEASE NUMBER 4447
ESCRIBANO POINT

THIS LEASE AMENDMENT is entered into this 9th day of April, 2007, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR" and the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, successor in interest to the FLORIDA GAME AND FRESH WATER FISH COMMISSION, referred to as "LESSEE";

W I T N E S S E T H

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

WHEREAS, on February 11, 2004, LESSOR and LESSEE entered into Lease Number 4447; and

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

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

1. The legal description of the leased premises set forth in Exhibit "A" of Lease Number 4447 is hereby amended to include the real property described in Exhibit "A," attached hereto, and by reference made a part hereof.

2. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of the Lease Number 4447, except as amended, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE.

3. It is understood and agreed by LESSOR and LESSEE that this Amendment Number ONE to Lease Number 4447 is hereby binding upon the parties hereto and their successors and assigns.

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

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

Dave Fennell
Witness

DAVE FENNELL
Print/Type Witness Name

Judy Woodard
Witness

Judy Woodard
Print/Type Witness Name

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

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 9th day of APRIL, 2007, by Gloria C. Barber, Operations and Management Consultant Manager, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

Sylvia S. Roberts
Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

Sylvia S. Roberts
Commission # DD468884
Expires September 6, 2009
Bonded Troy Fain - Insurance, Inc 800-385-7019

Approved as to Form and Legality

By: Sally L. Hilsen
DEP Attorney

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, successor in interest to the FLORIDA GAME AND FRESH WATER FISH COMMISSION

Witness

Richard C Mospens
Print/Type Witness Name

Magda Soliman
Witness

Magda Soliman
Print/Type Witness Name

By: Edwin J Mayer (SEAL)

Edwin J Mayer
Print/Type Name

Title: Dep Dir, HSC

"LESSEE"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 3rd day of April, 2007, by Edwin J. Mayer as Dep Dir HSC. on behalf of the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, successor in interest to the FLORIDA GAME AND FRESH WATER FISH COMMISSION. He/she is personally known to me.

Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

P S. McChesney
Commission # DD524435
Expires April 28, 2010
Bonded Troy Fain Insurance, Inc 800-385-7019

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
Commission Attorney

EXHIBIT "A"

Lot 1 of Section 6, Township 1 South, Range 27 West, Santa Rosa County, Florida as shown on the General Land Office Plat of said Township 1 South Range 27 West approved in 1829, also described as Lots 1 and 2 of Section 6, Township 1 South, Range 27 West, Santa Rosa County, Florida as shown on the General Land Office Plat of the resurvey of the north tier of sections in said Township 1 South Range 27 West approved in 1853.

Exhibit "A"
Page 4 of 4 Pages
Amendment Number 1 to Lease No. 4447

ATL1

1,541.90 Acres

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

AMENDMENT NUMBER *TWO* TO LEASE NUMBER *4447*
ESCRIBANO POINT

THIS LEASE AMENDMENT is entered into this 14th day of MAY 2013, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR" and the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, successor in interest to the FLORIDA GAME AND FRESH WATER FISH COMMISSION, referred to as "LESSEE";

W I T N E S S E T H

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

WHEREAS, on February 11, 2004, LESSOR and LESSEE entered into Lease Number *4447*; and

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

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

1. The legal description of the leased premises set forth in Exhibit "A" of Lease Number *4447* is hereby amended to include the real property described in Exhibit "A," attached hereto, and by reference made a part hereof.

2. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of the Lease Number *4447*, except as amended, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE as of the date of

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

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

Witness

Print/Type Witness Name

Witness

Print/Type Witness Name

By: _____ (SEAL)
CHERYL C. MCCALL, CHIEF
BUREAU OF PUBLIC LAND
ADMINISTRATION, DIVISION OF
STATE LANDS, STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 14th day of MAY, 2013, by Cheryl C. McCall, Chief, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. He is personally known to me.

Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

Notary Public State of Florida
Kathy C Griffin
My Commission EE148787
Expires 11/27/2015

Approved as to Form and Legality

By: _____
DEP Attorney

FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

Witness

By: Lawson E Snyder (SEAL)

Richard C Mosgrove
Print/Type Witness Name

LAWSON E SNYDER
Print/Type Name

Witness

Title: Dep Div Director

Robin E. Woodward
Print/Type Witness Name

"LESSEE"

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
Commission Attorney

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 7 day of May, 2013, by Lawson E Snyder as Dep Div Director, on behalf of the FLORIDA FISH and WILDLIFE CONSERVATION COMMISSION. He/she is personally known to me.

Notary Public, State of Florida

Jamie C Sorin
Print/Type Notary Name

Commission Number:

Commission Expires:

JAMIE C. SORIN
Commission # EE 059535
Expires January 30, 2015
Bonded Thru Troy Fain Insurance 800-385-7019

File # 201257721
OR BK 3197 Pages 965 - 968
RECORDED 12/10/12 12:11:11
Mary M. Johnson, Clerk
Santa Rosa County, Florida
Doc D $0.70
DEPUTY CLERK KLJ
#4
Trans # 548915

This Instrument Prepared By:
Peter Fodor, Esq.
Division Legal Director
The Trust for Public Land
306 North Monroe Street
Tallahassee, Florida 32301

Property Appraiser's Parcel
ID Number: 141S280000007000000, 141S280000008000000,
151S280000001000000, 191S270000002000000,
201S270000001000000, 221S270000001000000,
231S270000002000000, 321S270000001000000,
and 331S270000001000000

APPROVED AS TO FORM AND LEGALITY

FEB 14 2013

BY: MICHAEL D. MORELLY (DEP ATTORNEY)

SPECIAL WARRANTY DEED

THIS INDENTURE, made as of the 7 day of December A.D. 2012 between **THE TRUST FOR PUBLIC LAND, a nonprofit California corporation**, whose address is 306 N. Monroe St., Tallahassee, FL 32301, "GRANTOR," and, the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA ("Trustees"), whose address is Florida Department of Environmental Protection ("DEP"), Division of State Lands, 3900 Commonwealth Blvd., Mail Station 115, Tallahassee, Florida 32399-3000, "GRANTEE."

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and their heirs, legal representatives, successors and assigns. "Grantor" and "grantee" are used for singular and plural, as the context requires and the use of any gender shall include all genders.)

WITNESSETH: That the said GRANTOR, for and in consideration of the sum of Ten Dollars and other good and valuable considerations, to said GRANTOR in hand paid by said GRANTEE, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said GRANTEE, and GRANTEE'S successors and assigns forever, the following described land situate, lying and being in Santa Rosa County, Florida, to-wit:

See Exhibit "A" attached hereto and by this reference made a part hereof.

This conveyance is subject to easements, restrictions, limitations and conditions of record if any now exist, but any such interests that may have been terminated are not hereby re-imposed, and to taxes for the current and subsequent years.

Grantee acknowledges that payment for the Property is made available in order to implement certain land acquisition and habitat protection Supplemental Environmental Projects required pursuant to that certain Consent Decree among the United States, MOEX Offshore 2007 LLC and MOEX USA Corporation in the form entered by the Court on June 18, 2012, in the matter of *United States v. BP et al., 10-4536* (E.D. La.), including the appendices thereto (the "Consent Decree"). Compliance with the Consent Decree's requirements for Supplemental Environmental Projects may be monitored by the United States Fish and Wildlife Service of the United States Department of the Interior or its successor (the "FWS"). As required by the Consent Decree, the Property shall be perpetually maintained as a protected area in its natural state consistent with the purpose of preserving and protecting natural habitat and resources

and/or water resources in the Gulf of Mexico region (the "Deed Restriction"). All uses, activities or conditions that are inconsistent with the Deed Restriction are hereby prohibited.

A. Remedies and Enforcement. Employees or agents of FWS shall have the right but not the obligation upon advance notice to Grantee to enter the Property at all reasonable times for the purpose of inspecting the Property to determine if Grantee is complying with the Deed Restriction. If Grantee fails to comply with the Deed Restriction, after having been given written notice of such alleged failure and a reasonable opportunity to cure the same, FWS shall have the right to enforce, by injunction and/or specific performance, the Deed Restriction, as well as the right to exercise any other rights or remedies provided by law or in equity, and these rights shall not be waived by one or more incidents of failure to enforce such rights. Provided, however, that Grantee shall not be considered to be in violation of the Deed Restriction if and to the extent that such noncompliance is caused by: condemnation or the imminent threat of condemnation; acts of God (such as hurricanes) or the public enemy; acts of third parties (such as oil spills) that are not subject to control by Grantee; or reservations and exceptions to conveyance of the Property existing on the date of conveyance of the Property from Grantor to Grantee. This deed does not obligate the FWS to provide appropriated funds to enforce the Deed Restriction or any other terms of the deed. Nothing herein contained shall be construed as binding FWS to expend in any one fiscal year any sum in excess of appropriations made by Congress for such fiscal year or other obligation for the expenditure of money in excess of such appropriations.

B. Modification. The Deed Restriction and any other terms set forth in this deed may be changed, modified or revoked only upon express written approval of FWS, with any such written approval to be recorded in the same manner as this deed.

C. Severability. Should all or any portion of this deed or the application thereof to any person or circumstance be found to be invalid or unenforceable, the rest and remainder of this deed and its application shall not be affected and shall remain valid and enforceable.

D. Parties Bound. The terms and conditions of this deed shall bind Grantee and, without restriction or limitation, its lessees, agents, and successors or assigns to the extent of their legal and/or equitable interest in the Property and these covenants and restrictions shall continue as a servitude running with the Property in perpetuity and be binding on the Property and its owners forever.

E. Transfer. The Property may only be transferred by Grantee subject to the Deed Restriction and the other terms set forth in this deed and only to a governmental entity or nonprofit organization whose purposes include the preservation and protection of natural habitat and resources and/or water resources in the Gulf of Mexico region.

TO HAVE AND TO HOLD the same unto the said GRANTEE in fee simple forever.

AND the said GRANTOR does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons claiming by, through or under the said GRANTOR, but against none other.

IN WITNESS WHEREOF the GRANTOR has executed these presents, as of the day and year first written.

Signed, sealed and delivered in the presence of:

(Signature of first witness)

J. ALEX GNO
(Printed name of first witness)

(Signature of second witness)

STACY S. GAYHART
(Printed Name of second witness)

THE TRUST FOR PUBLIC LAND, a nonprofit California corporation

BY:
Name: Peter Fodor
Title: Division Legal Director

(SEAL)

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 7 day of December, 2012, by Peter Fodor as Division Legal Director of The Trust for Public Land, a nonprofit California corporation on behalf of said corporation, who has produced N/A as identification or is personally known to me.

Notary Public

(NOTARY PUBLIC SEAL)

STACY S. GAYHART
MY COMMISSION # EE 005978
EXPIRES: October 31, 2014
Bonded Thru Notary Public Underwriters

3

EXHIBIT "A"

PARCEL 1:

All that part of Section 19, Township 1 South, Range 27 West, lying South of Fundy Bayou, Santa Rosa County, Florida.

AND

All of the Antonio Garcia Grant, Section 15, Township 1 South, Range 28 West; and that portion of the Louis Maestre Grant, Section 14, Township 1 South, Range 28 West, described as follows: Begin at a point on the Southeasterly line of said Section 14 where it intersects the range line between Range 27 West and Range 28 West; thence run Southwesterly along the Southeasterly line of said Section 14 for 750 feet; thence run Northwesterly deflecting at an angle of 66 degrees 14 minutes to the right, the subtending angle being 113 degrees 46 minutes for 5000 feet, more or less, to the shoreline of Blackwater Bay; thence run Northeasterly along said shoreline for 2650 feet, more or less, to the Southerly bank of Fundy Bayou; thence run Southeasterly, meandering along the Southerly bank of said Bayou to the intersection with the range line between Range 27 West and Range 28 West; thence run South along said range line for 1450 feet, more or less, to the Point of Beginning.

ALSO: The South half of Lot 2, all of Lots 3, 4, 5 and 6, in Section 23, and all of the fractional Section 32, Township 1 South, Range 27 West, Santa Rosa County, Florida.

PARCEL 2:

That portion of the Louis Maestre Grant, Section 14, Township 1 South, Range 28 West, described as follows: Commence at a point on the southeasterly line of said Section 14 where it intersects the range line between Range 27 West and Range 28 West, thence run southwesterly along the southeasterly line of said Section 14 for 750 feet to the point of beginning; thence run northwesterly deflecting at an angle of 66°14' to the right, the subtending angle being 113°46'; for 5000 feet, more or less, to the shoreline of Blackwater Bay; thence run southwesterly along said shoreline for 2800 feet, more or less, to the north shoreline of East Bay; thence run easterly along the north shoreline of East Bay for 5850 feet, more or less, to the intersection with the southeasterly line of said Section 14; thence run northeasterly along said line for 2100 feet, more or less, to the point of beginning, all lying and being in Section 14, Township 1 South, Range 28 West;

ALSO:

All that portion of Section 20, Township 1 South, Range 27 West, lying south of Fundy Bayou; and all of fractional Sections 22 and 33, Township 1 South, Range 27 West.

Escribano Point
American Bank of Texas
Santa Rosa County

BSM
BY SK
Date: 5.26.2011

This Instrument Prepared By and
Please Return To:
Mike D. Morelly, Attorney
Department of Environmental Protection
3900 Commonwealth Blvd. MS 115
Tallahassee, Florida 32399

File # 201257722
OR BK 3197 Pages 969 - 969
RECORDED 12/10/12 12:11:11
Mary M. Johnson, Clerk
Santa Rosa County, Florida

DEPUTY CLERK KLJ
#5
Trans # 548915

ACCEPTANCE OF TRANSFER OF TITLE TO DONATED LANDS

Board of Trustees of the Internal Improvement Trust Fund of the State of Florida, whose address is 3900 Commonwealth Boulevard, Mail 115, Tallahassee, Florida 32399-3000, hereby accepts the conveyance of a Special Warranty Deed from The Trust for Public Land, a nonprofit California corporation, as recorded on December 10th, 2012 at OR Book 3197, Page 965, Public Records of Santa Rosa County, Florida, as a transfer of title of the real property interest as described in said Special Warranty Deed in accordance with F. S. 259.041(10)(a).

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

Lynda L. Godfrey
(SIGNATURE OF FIRST WITNESS)

BY: Susan C. Grandin
Susan C. Grandin, Director
DIVISION OF STATE LANDS,
DEPARTMENT OF ENVIRONMENTAL
PROTECTION, as agent for and on behalf
of the Board of Trustees of the Internal
Improvement Trust Fund of the State of Florida

Lynda L. Godfrey
(PRINTED, TYPED OR STAMPED NAME OF FIRST WITNESS)

Keith E. Clay
(SIGNATURE OF SECOND WITNESS)

Keith E Clayton
(PRINTED, TYPED OR STAMPED NAME OF SECOND WITNESS)

December 7, 2012
Date Signed

STATE OF *FLORIDA*

COUNTY OF *LEON*

The foregoing instrument was acknowledged before me this 7th day of December 2012, by Susan C. Grandin, Director, Division of State Lands, Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

(NOTARY PUBLIC SEAL)

CLAYTO

Keith E Clay

ATL1

1,176.4 acres

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

AMENDMENT NUMBER FOUR TO LEASE NUMBER 4447
ESCRIBANO POINT

THIS LEASE AMENDMENT is entered into this 23RD day of MARCH, 2015, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR" and the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION, hereinafter referred to as "LESSEE";

W I T N E S S E T H

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

WHEREAS, on February 11th, 2004, LESSOR and LESSEE entered into Lease Number 4447 (the "lease"); and

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

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

1. The legal description of the leased premises set forth in Exhibit "A" of Lease Number 4447 is hereby amended to include the real property described in Exhibit "A" attached hereto and by reference made a part hereof.

2. It is understood and agreed by LESSOR and LESSEE that in each and every respect the terms of Lease Number 4447, except as amended, shall remain unchanged and in full force and effect and the same are hereby ratified, approved and confirmed by LESSOR and LESSEE as of the date of this amendment.

3. It is understood and agreed by LESSOR and LESSEE that this Amendment Number FOUR to Lease Number 4447 is hereby binding upon the parties hereto and their successors and assigns.

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

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

Witness

By: _____ (SEAL)
CHERYL C. McCALL, CHIEF,
BUREAU OF PUBLIC LAND
ADMINISTRATION, DIVISION OF
STATE LANDS, STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Print/Type Witness Name

Witness

Print/Type Witness Name

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 23rd day of MARCH, 2015, by Cheryl C. McCall, Chief, Bureau of Public Land Administration, Division of State Lands, State of Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

DAVID LEE FEWELL
MY COMMISSION # FF 039835
EXPIRES: July 24, 2017
Bonded Thru Notary Public Underwriters

Approved Subject to Proper Execution

By: _____
DEP Attorney

FLORIDA FISH AND WILDLIFE
CONSERVATION COMMISSION

Witness

By: _____ (SEAL)
Nick Wiley, Executive Director

Print/Type Witness Name

Witness

Print/Type Witness Name

"LESSEE"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 18 day of March, 2015, by Nick Wiley, as Executive Director, on behalf of Florida Fish and Wildlife Conservation Commission. He is personally known to me or has produced _____ as identification.

Notary Public, State of Florida

Print/Type Notary Name

Commission Number:

Commission Expires:

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
Commission Attorney

JAMIE C. SORIN
Commission # FF 182536
Expires January 30, 2019
Bonded Thru Troy Fain Insurance 800-385-7019

EXHIBIT "A"

File # 201430446, OR BK 3369 Page 417, Recorded 09/02/2014 at 03:52 PM, Donald C. Spencer, Clerk Santa Rosa County, Florida Deputy Clerk PN Trans # 613708

Prepared by and return to:
Brock Brannen, Esquire
Pennington P.A.
P.O. Box 10095
Tallahassee, Florida 32302

Deed of Conveyance Pursuant to
Section 373.056, Florida Statutes

THIS DEED, made this 10th day of July, 2014, by the NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT, a Florida water management district created pursuant to Section 373.069, whose mailing address is 81 Water Management Drive, Havana, Florida 32333, (the "DISTRICT"), and BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, whose address is 3900 Commonwealth Boulevard, Mail Station 115, Tallahassee, Florida 32399-3000, (the "GRANTEE").

WITNESSETH that the DISTRICT, for and in consideration of the sum of $10.00 to it in hand paid by the GRANTEE, receipt whereof is hereby acknowledged, has granted, bargained and sold to the GRANTEE, its successors and assigns forever, the following described land lying and being in Santa Rosa County, Florida:

SEE EXHIBIT "A" ATTACHED HERETO
AND BY REFERENCE MADE A PART HEREOF

(the "PROPERTY")

STATUTORY AUTHORITY FOR CONVEYANCE AND COMPLIANCE WITH CONDITIONS PRECEDENT. The DISTRICT is authorized to execute this deed and convey its interest in the PROPERTY to the GRANTEE pursuant to Section 373.056, Florida Statutes. The following statements are true and correct:

1. The governing board of the DISTRICT has determined that the PROPERTY is not required for the DISTRICT'S purposes and should be disposed of as provided in this deed. All such determinations were made by the governing board of the District by not less than a two-thirds vote.

NO WARRANTIES OF TITLE. Notice is given that Section 373. 099, Florida Statutes, prohibits the DISTRICT from giving any warranties of title to the PROPERTY. Further, the DISTRICT disclaims any responsibility for the accuracy of the above legal description.

INTEREST IN CERTAIN MINERALS. The DISTRICT has chosen and hereby chooses not to reserve the interest in the PROPERTY's phosphate, minerals, metals and petroleum which would otherwise be reserved to the DISTRICT by the operation of Section 271.11, Florida Statutes, if any.

EXECUTION OF THIS DEED. Pursuant to Section 373.099, Florida Statutes, this deed shall be executed in the name of the DISTRICT by its governing board acting by the chair or vice chair of said board and shall have the corporate seal of the board affixed thereto attested by its secretary and shall thereafter be effective to pass the title or interest of the DISTRICT in the PROPERTY.

IN WITNESS WHEREOF the DISTRICT has caused these presents to be executed in its name by its Governing Board acting by the Chair or Vice Chair of said board, the day and year aforesaid.

GOVERNING BOARD OF THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

By: _____
George Roberts, Chair

Witnessed:

_____
Print Name: Brooke Bannen

_____
Print Name: Carol L. Burt

STATE OF FLORIDA
COUNTY OF GADSDEN

The foregoing instrument was acknowledged before me this 10th day of July, 2014, by George Roberts, as Chair, Governing Board of the Northwest Florida Water Management District. He is personally known to me.

_____
Notary Public
Printed Name: _____
My Commission expi

APRIL MURRAY
Commission # EE 191240
Expires April 19, 2016

ATTEST: _____
Jonathan P. Steverson
Acting Secretary/Treasurer

EXHIBIT "A"

LEGAL DESCRIPTION:
Beginning at the Northeast corner of Section 18, Township 1 South, Range 27 West, Santa Rosa County, Florida, go thence South 02 degrees, 50'-00" West, along the East line of said Section 18, a distance of 5,286.60' to the Southeast corner of said Section 18 (said point also being Northeast corner of Section 21, Township 1 South, Range 27 West), thence South 02 degrees 50'-25" West, along East line of said Section 21, a distance of 3,270.30' to a point on the North line of the Antonio Garcia Grant (said point also being the Southeast corner of said Section 21); thence North 33 degrees 54'-33" West, along the southwesterly line of Section 21 and the northerly line of the Antonio Garcia Grant, a distance of 4081.45' to the Northwest corner of said Section 21; thence South 62 degrees 43'-20" West, a distance of 156.75' to a point on the Northerly mean high water line of Fundy Bayou (also known as Juniper Creek); then along the said Northerly mean high water line of Fundy Bayou the following bearings and distances; North 62 degrees 19'-56" West, 1,573.66'; North 58 degrees 55'-47" West, 781.36'; North 21 degrees 53'-30" West, 460.35'; North 34 degrees 42'-00" West, 291.58'; North 82 degrees 34'-50" West, 200.90'; North 45 degrees 40'-10" West, 242.91'; South 76 degrees 32'-00" West, 149.10'; North 11 degrees 17'-50" West, 226.43'; North 48 degrees 04'-00" West, 200.58'; North 13 degrees 09'-00" West, 112.00'; North 73 degrees 36'-00" West, 180 64'; North 16 degrees 31'-45" West, 78.32'; North 07 degrees 28'-25" East, 167,54'; North 32 degrees 00'-25" East, 66.00'; North 13 degrees 31'-20" West, 116.80'; North 59 degrees 28'-05" West, 187.25'; North 31 degrees 06'-10" East, 147.20'; North 35 degrees 50'-30" West, 168.90'; North 18 degrees 56'-30" West, 143.68'; North 28 degrees 07'-30" East, 406.06'; North 23 degrees 47'-30" West, 106.18'; South 56 degrees 57'-45" West, 279.58'; North 70 degrees 23'-55" West, 388.31'; North 83 degrees 36'-55" West, 152.04'; North 61 degrees 04'-45" West, 190.05'; South 68 degrees 52'-15" West, 138.04'; North 77 degrees 03'-30" West, 105.05'; North 66 degrees 47'-30" West, 149.04'; North 23 degrees 36'-30" West, 154.04'; North 20 degrees 46'-30" West, 211.07' to its point of intersection with the mean high water line of Blackwater Bay; thence along the said mean high water line of Blackwater Bay the following bearings and distances: North 06 degrees 03'-30" East, 205.09'; North 13 degrees 16'-40" East, 400.88'; North 01 degrees 04'-20" West, 421.07'; North 09 degrees 45'-20" West, 199.25'; North 11 degrees10'-20" West, 366.95'; North 21 degrees 57'-00" West, 242.80'; North 28 degrees 20'-20" West, 199.00'; North 37 degrees 12'-40" West, 294.00'; North 43 degrees 03'-20" West, 199.70'; North 43 degrees 37'-10" West, 198.97'; North 48 degrees 26'-40" West, 222.32'; North 68 degrees 12'-00" West, 164.30'; North 48 degrees 27'-00" West, 133.43'; North 52 degrees 59'-48" East, 308.68' to the mean high water line of Catfish Basin; thence along the mean high water line of Catfish Basin the following bearings and distances: South 87 degrees 10'-00" East, 868.46'; South 87 degrees 58'-02" East, 1273.65'; South 81 degrees 21'-52" East, 714.33'; South 89 degrees 29'-52" East 661.05'; South 88 degrees 49'-52" East, 978.28'; North 54 degrees 33'-48" East 1413.87'; to its point of intersection with the North line of the South ½ of Section 7, Township 1 South, Range 27 West; thence South 89 degrees59'-52" East along the said North line of the South ½ of Section 7, a distance of 2920.51' to the Northeast corner of said South ½ of Section 7; thence South 02 degrees 12'-57" West, along the East line of said Section 7, a distance of 2643.96' to the Northeast corner of aforesaid Section 18, Township 1 South, Range 27 West, and the Point of Beginning, together with all riparian and littoral rights appertaining thereto. Said lands lying in and being a part of Sections 7,18,19, 20 and 21, Township 1 South, Range 27 West, Section 12, 13 and 14, Township 1 South, Range 28 West, and part of the Antonio Garcia Grant and the Luis Maestro Grant, all lying in Santa Rosa County, Florida.

LESS AND EXCEPT the following described Lots 6, 8 and 16 in "Escribans Point Subdivision", an unrecorded subdivision prepared by W.E. Oversmeet, Consulting Engineer.

Lot 6, Block "A": Commencing at the Northeast corner of Section 18, Township 1 South, Range 27 West, Santa Rosa County, Florida, go thence South 02 degrees 50'-00" West, along the East line of said Section 18 a distance of 108.08' to its point of intersection with the centerline of a graded road; thence along the said centerline of a graded road the following bearings and

BSM APPROVED
BY SK
DATE 7-15-2014

Escribano Point/NWFWMD
Santa Rosa County
Page 1 of 4

distances: North 87 degrees 58'50" West, 1201.85'; South 76 degrees 24'-20" West, 947.25'; South 79 degrees 38'-20" West, 1156.70'; North 84 degrees 18'-30" West 414.70'; North 72 degrees 30'-30" West 1690.85'; North 87 degrees 32'-00" West, 1603.20'; North 43 degrees 40'-00" West 772.50' to a concrete monument marking the Northeast corner Lot 6, Block "A" of said "Escribana Point Subdivision" and the Point of Beginning:
Thence South 11 degrees 23'-00" East, a distance of 100.00'; thence South 78 degrees 36'-00" West, a distance of 200.00' to a point; continue thence South 78 degrees 36'-00" West, a distance of 59.00' more or less, to the mean high water line of Blackwater Bay; thence Northerly along the said mean high water line of Blackwater Bay a distance of 100.00' more or less to a point South 78 degrees 36'-00" West of the Point of Beginning; thence North 78 degrees 36'-00" East, a distance of 64.00'; more or less, to a point; thence North 78 degrees 36'-00" East, a distance of 200.00' to the Point of Beginning; together with all riparian and littoral rights appertaining thereto. Said lands lying in and being a part of Section 14, Township 1 South, Range 28 West, Santa Rosa County, Florida.

Lot 8, Block "A": Commencing at the Northeast corner of Section 18, Township 1 South, Range 27 West, Santa Rosa County, Florida, go thence South 02 degrees 50'-00" West, along the East line of said Section 18, a distance of 108.09' to its point of intersection with the center line of a graded road; thence along the said center line of a graded road the following bearings and distances: North 87 degrees 58'-50" West, 1201.85'; South 76 degrees 24'-20" West, 947.25'; South 79 degrees 38'-20" West, 1156.70'; North 84 degrees 18'-30" West, 414.70'; North 72 degrees 30'-30" West, 1690.85'; North 87 degrees 32'-00" West, 1603.20'; North 43 degrees 40'-00" West 772.50' to a concrete monument marking the Northeast corner of Lot 6, Block "A", of said "Escribana Point Subdivision"; thence South 11 degrees 23'-00" East, a distance of 200.00 to the Point of Beginning; continue thence South 11 degrees 23'-00" East a distance of 100.00'; thence South 78 degrees 36'-00" West, a distance of 200.00' to a point; continue thence South 78 degrees 36'-00" West, a distance of 70.00'; more or less to the mean high water line of Blackwater Bay; thence Northerly along the said mean high water line of Blackwater Bay a distance of 100.00' more or less to a point South 78 degrees 36'-00" West of the Point of Beginning; thence North 78 degrees 36'-00" East, a distance of 59.00', more or less to a point; thence North 78 degrees 36'-00" East, a distance of 200.00' to the Point of Beginning, together with all riparian and littoral rights appertaining thereto. Said lands lying in and being a part of Section14, Township 1 South, Range 28 West, Santa Rosa County, Florida.

Lot 16, Block "A": Commencing at the Northeast corner of Section 18, Township 1 South, Range 27 West, Santa Rosa County, Florida, go thence South 02 degrees 50'-00" West, along the East line of said Section 18, a distance of 108.08' to its point of intersection with the center line of graded road; thence along the said center line of a graded road the following bearings and distances: North 87 degrees 58'-50" West, 1201.85'; South 76 degrees 24'-20" West, 947.25'; South 79 degrees 38'-20" West, 1150.70'; North 84 degrees 18'-30" West, 414.70'; North 72 degrees 30'-30" West, 1690.85'; North 87 degrees 32'-00" West, 1603.20'; North 43 degrees 40'-00" West, 772.50' to a concrete monument marking the Northeast corner of Lot 6, Block "A" of said "Escribana Point Subdivision"; thence South 11 degrees 23'-00" East, a distance of 400.00'; thence South 02 degrees 10'-42" West a distance of 1182.95'; to the P.C. of a curve having a central angle of 39 degrees 00'-00", a radius of 185.23', a chord bearing and distance of South 17 degrees 19'-08" East, 123.66'; thence along the arc of said curve a distance of 126.08' to the Northeast corner of said Lot 16, Block "A", "Escribana Point Subdivision" and the Point of Beginning: said point begin the P.C. of a curve having a central angle of 19 degrees 30'-00", a radius of 185.23' a chord bearing and distance of South 40 degrees 34'-18" East, 62.73'; thence along the arc of said curve a distance of 63.04 feet; thence South 33 degrees 01'-00" West a distance of 200.00' to a point; thence continue South 33 degrees 01'-00" West, a distance of

140.00', more or less, to Juniper Creek; thence Northerly along said Juniper Creek, a distance of 170.00' more or less, to a point South 52 degrees 31'-00" West of the Point of Beginning; thence North 52 degrees 31'-00" East a distance of 100.00', more or less, to a point; continue thence North 52 degrees 31'-00" East, a distance of 200.00' to the Point of Beginning, together with all riparian and littoral rights appertaining thereto. Said lands lying in and being a part of Section 14, Township 1 South, Range 28 West, Santa Rosa County, Florida.

ALSO LESS AND EXCEPT the following described Lots 14 and 15:

Lot 14
Commence at a found capped iron rod stamped L.B. #0340 B.D.E., said point being on the common East line of Section 7, Township 1 South, Range 27 West, Santa Rosa County, and the East line of "Escribana Shores Subdivision", as recorded in Plat Book C, Page 88 of the Public Records of Santa Rosa County; thence South 02 degrees 12'57" West, on said common East line a distance of 966.85 feet to a found 4"X4" concrete monument (No I.D.) said monument being the Southeast corner of said Section 7; thence continue on the Southerly extension of the aforesaid common East line South 02 degrees 12'57" West a distance of 1322.06 feet; thence departing said Southerly extension proceed North 87 degrees 47'03" West, a distance of 7337.16 feet to the Point of beginning, said point lying on a curve concave Easterly having a radius of 185.23 feet; thence along said curve a distance of 63.04 feet, through a central angle of 19 degrees 29'55" (CB = North 08 degrees 53'48" West, CH = 62.73 feet); thence North 89 degrees 08'52" West a distance of 223 feet more or less to the water's edge of Juniper Creek; thence Southerly along said water's edge a distance of 160 feet more or less to a point which bears South 71 degrees 21'00" West from the Point of Beginning; thence North 71 degrees 21'00" East, a distance of 234 feet more or less to the Point of Beginning.

Lot 15
Commence at a found capped iron rod stamped L.B. #0340 B.D.E., said point being on the common East line of Section 7, Township 1 South, Range 27 West, Santa Rosa County, and the East line of "Escribana Shores Subdivision", as recorded in Plat Book C, Page 88 of the Public Records of Santa Rosa County; thence South 02 degrees 12'57" West on said common East line a distance of 966.85 feet to a found 4"X4" concrete monument (no I.D.) said monument being the Southeast corner of said Section 7; thence continue on the Southerly extension of the aforesaid common East line, South 02 degrees 12'57" West a distance of 1376.05 feet; thence departing said Southerly extension, proceed North 87 degrees 47'03" West, a distance of 7306.21 feet to a Point of Beginning, said point lying on a curve concave Easterly having a radius of 185.23 feet; thence along said curve a distance of 63.04 feet, through a central angle of 19 degrees 30'03" (CB = North 28 degrees 23'47" West, CH = 62.74 feet); thence South 71 degrees 21'00" West a distance of 234 feet more or less to the water's edge of Juniper Creek; thence Southerly along said water's edge a distance of 179 feet more or less to a point which bears South 51 degrees 51'08" West from the Point of Beginning; thence North 51 degrees 51'08" East, a distance of 312 feet more or less to the Point of Beginning.

ALSO LESS AND EXCEPT:

A public road right of way located in Section 18, Township 1 South, Range 27 West, and Sections 13 and 14, Township 1 South, Range 28 West, described in Official Records Book 427, Page 649, Public Records of Santa Rosa County, Florida, as follows:

33.00 feet on each side of the line described as follows:

Commencing at the NE corner of Section 18, Township 1 South, Range 27 West, Santa Rosa County, Florida, go thence S 02°50'00" W, along the east line of said Section 18, a distance of 108.08' to a point on the center line of a graded road and the POINT OF BEGINNING: Thence N 87°58'50" W, a distance of 1201.85' to an iron pin; thence S 76°24'20" W, a distance of 947.25' to an iron pin; thence S 79°38'20" W, a distance of 1156.70' to an iron pin; thence N 84°18'30" W, a distance of 414.70' to an iron pin; thence N 72°30'30" W, a distance of 1690.85' to an iron pin; thence N 87°32'00" W, a distance of 1603.20 feet to an iron pin; thence N 43°40'00" W, a distance of 736.24 feet to the terminus of this description.

EXHIBIT "B"

ACCEPTANCE OF TRANSFER OF TITLE TO DONATED LANDS

In accordance with Section 259.041(10)(a) of the Florida Statutes, **Board of Trustees of the Internal Improvement Trust Fund of the State of Florida** hereby accepts this conveyance as a transfer of title of the real property described in this Deed.

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

Lynda L. Godfrey
(Signature of First Witness)

Lynda I. Godfrey
(Printed, Typed, or Stamped Name of First Witness)

Keith Clayton
(Signature of Second Witness)

Keith Clayton
(Printed, Typed, or Stamped Name of Second Witness)

By: Kelley Boree
Kelley Boree
As Director
Division of State Lands
Florida Department of Environmental Protection,
As agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida

Date Signed: 8-27-2014

STATE OF FLORIDA

COUNTY OF LEON

The foregoing instrument was acknowledged before me this 27th day of August, 2014, by Kelley Boree, as Director of the Division of State Lands, Florida Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

(NOTARY PUBLIC SEAL)

Lynda L. Godfrey
Notary Public, State of Florida
Print Name:
Commission #:
My Commission Expires:

LYNDA L GODFREY
MY COMMISSION # EE 90648
EXPIRES: February 6, 2016
Bonded Thru Notary Public Underwriters

13.2 Public Involvement

Escribano Point Wildlife Management Area (EPWMA)
Management Advisory Group (MAG)
Consensus Meeting Results

October 8, 2014 in Gulf Breeze, Florida

The intent of convening a consensus meeting is to involve a diverse group of stakeholders in assisting the Florida Fish and Wildlife Conservation Commission (FWC) in development of a rational management concept for lands within the agency's managed area system. FWC does this by asking spokespersons for these stakeholders to participate in a half-day meeting to provide ideas about how FWC-managed lands should be protected and managed.

The MAG consensus meeting was held on the morning of October 8, 2014 at Tiger Point Community Center, in Gulf Breeze, Florida in Santa Rosa County. The ideas found below were provided by stakeholders for consideration in the 2015 - 2025 Management Plan (MP) with priority determined by vote. These ideas represent a valuable source of information to be used by biologists, planners, administrators, and others during the development of the MP. Upon approval by FWC, the Acquisition and Restoration Council (ARC), and the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), the MP will guide the activities of FWC personnel over the ten-year duration of the Management Plan and will help meet agency, state, and federal planning requirements.

Numbers to the left of **bold-faced ideas** listed below represent the total number of votes and the score of each idea. Rank is first determined by the number of votes (vote cards received for each idea) and then by score. Score is used to break ties when two or more ideas have the same number of votes. A lower score indicates higher importance because each voter's most important idea (recorded on card #1) received a score of 1, and their fifth most important idea (recorded on card #5) received a score of 5. Ideas not receiving any votes are listed, and were considered during the development of the MP, but carry no judgment with regard to priority.

Statements following the bold-faced ideas represent a synopsis of the clarifying discussion of ideas as transcribed and interpreted by the FWC recorder at the meeting. As indicated above, the ideas below are presented in priority order:

Rank	# of Votes	Score	Idea	
1.	[15]	[22]	15.	**Restore and maintain natural communities. Work on a prescribed fire management plan, and forest resource management plan.**

Rank	# of Votes	Score	Idea	
2.	[10]	[32]	18.	**Develop a sustainable Recreation Master Plan.** Recreation, interpretation, signage, law enforcement, etc.
3.	[9]	[22]	1.	**Manage fish and wildlife populations and habitat to sustain area and regional populations.** This concerns the restoration of natural species and the protection of existing habitats, with an emphasis on focal species such as black bear.
4.	[7]	[22]	30.	**Develop a road management plan for the area and associated hydrological restoration and protection.** Improved road access and parking for motorized and non-motorized use. Consider motor vehicle exclusion zones. Improve bridges/culverts.
5.	[4]	[12]	14.	**Increase and improve law enforcement patrols/control of the area.** Trained horse riders/Sherriff's Posse can be used as eyes and ears, and to report issues. Response time is too long.
				Two items of equal rank:
6.	[4]	[14]	2.	**Improve recreational facilities on the area** Add potable water and human waste infrastructure.
6.	[4]	[14]	29.	**Manage lands to protect water resources and associated hydro-periods.** Manage the uplands, bottomlands to protect water systems. Improve estruine systems. Use the Recreation Management Plan to avoid damaging resources. Acquire lands to protect watersheds.
8.	[4]	[17]	27.	**Leverage partner's strengths for management assistance.** Self-explanatory

Rank	# of Votes	Score	Idea	
9.	[3]	[12]	20.	**Provide education and outreach regarding management, recreation, and natural communities.** Includes land and aquatic communities.
10.	[3]	[13]	39.	**Survey and protect historical and archeological sites on the area.** Self-explanatory
11.	[2]	[7]	26.	**Protect/enhance/restore shoreline habitat to maintain the migratory greenway for migratory birds and butterflies.** Protecting the shoreline oak trees are of particular importance.
12.	[2]	[9]	51.	**Provide human waste disposal facilities for campers and other public users.** Self-explanatory
13.	[1]	[3]	7.	**Utilize BP monies to leverage matching funding from Non-Governmental partners.** A lot of new funding is available, and using the funds to earn a match from other organizations can make that money go a lot further.
14.	[1]	[4]	4.	**Explore the potential for expanding the Florida National Scenic Trail on the area.** The trail currently connects to Eglin AFB. Alternative or additional routes could be explored.
15.	[1]	[5]	21.	**Utilize surveys to evaluate expansion of hunting opportunities.** Self-explanatory
				The following items received no votes. All ideas represent valuable input, and are considered in development of the MP, but carry no rank with regard to the priority perceptions of the MAG.
16.	[]	[]	16.	**Consider/follow local county land development code.** Self-Explanatory

Rank	# of Votes	Score	Idea
17.	[]	[]	22. **Partner with DEP and others on creating oyster reefs and man-made wetlands.** self-explanatory
18.	[]	[]	37. **Designate sensitive and protected areas to prevent damage from public use.** Make the public aware of areas that visitors to the area should avoid in order to protect sensitive areas.
19.	[]	[]	45. **Develop a waste disposal plan for garbage, deer carcasses, etc.** Hunters are leaving dear carcasses laying around. Waste containers should be bear proof.
20.	[]	[]	46. **Minimize adverse impacts from plants and animals (exotics, etc.)** Exotic and invasive organisms can be detrimental to natural communities, and they need to be controlled.

Escribano Wildlife Management Area

MAG Meeting Participants

Name	Affiliation
Active Participants	
Barbara Almario	FWC Area Biologist
Mary Ann Vance	Santa Rosa County Planning Department
Mike Hudson	Florida Forest Service
Beth Fugate	DEP-Yellow River Marsh Aquatic Preserve
Tom Daniel	Florida Trail Association
Vernon Compton	The Longleaf Alliance
Derek Alkire	National Wild Turkey Federation
Dove Bogan	Equestrian Stakeholder
Bruce Hagedorn	Eglin Air Force Base
Ronnie Smith	Adjacent private landowner
Glen Butts	Florida Native Plants Society
Peggy Baker	Francis M. Weston Audubon Society
Ron Cherry	U.S. Navy-Whiting Field
Megan Eno	U.S. Forest Service
Supportive Participants	
Billy Sermons	FWC Habitat and Species Conservation (HSC), Regional Biologist
Fred Robinette	FWC HSC, District Biologist
Mark Winland	FWC HSC, Wildlife Biologist
Kevin McDonald	FWC HSC, Wildlife Technician
Rich Noyes	FWC Office of Public Access and Wildlife Viewing Services (OPAWVS)
Tom M. Matthews	FWC OPAWVS
Paul Scharine	FWC Division of Hunting and Game Management
Diana Pepe	FWC Conservation Biologist
Medora Mullins	Five Flags Arabian Horse Association
Kylie Stackis	U.S. Navy-Whiting Field

Carole Tebay	Florida Native Plants Society

Invited but Unable to Attend

Howard Jones	FWC Law Enforcement
Steve Brown	NWFWMD
Greg Chelius	The Trust for Public Land
Robert Cole	Santa Rosa County Commissioner
Mike Wisenbaker	Division of Historical Resources
Trent Matthews	NRCS
Dan Hipes	Florida Natural Areas Inventory
Chris Phillips	Angling Stakeholder-Hot Spots Bait and Tackle
Sandra Castille	Paddling Club Stakeholder
Mark Gibson	U.S. Navy-Naval Air Station Pensacola
Bicycling Stakeholder	Pensacola Off-Road Cyclists

FWC Planning Personnel

Gary Cochran	Land Conservation and Planning Administrator, Facilitator
Jennifer Tucker	Co-Facilitator
Julie Kilgore	Recorder
Lance Jacobson	Recorder

NOTICE

The Florida Fish and Wildlife Conservation Commission (FWC) Announces a

PUBLIC HEARING

for the

Escribano Point

Wildlife Management Area

Management Plan

Santa Rosa County, Florida

7:00 P.M. Thursday November 6th, 2014

Tiger Point Community Center
1370 Tiger Park Ln
Gulf Breeze, FL 32563

PURPOSE: To receive public comment regarding considerations for the FWC ten-year Land Management Plan for the Escribano Point Wildlife Management Area (EPWMA). This hearing is being held EXCLUSIVELY for discussion of the DRAFT Escribano Point WMA Management Plan. This meeting is not being held to discuss area hunting or fishing regulations. For more information on the process for FWC rule and regulation development go online to: myfwc.com/about/rules-regulations/rule-changes/ or call (850) 487-1764.

A Management Prospectus for the Escribano Point WMA is available upon request. For a copy, please contact Julie Kilgore, Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning, 620 South Meridian Street, Tallahassee, Florida 32399-1600. Telephone: (850) 487-7063.

NOTICE:

The Florida Fish and Wildlife Conservation Commission (FWC) announce a PUBLIC HEARING for the FWC Lead Managed Portions of Escribano Point Wildlife Management Area located in Santa Rosa County, Florida.

7:00 P.M. Thursday, November 6th, 2014

Tiger Point Community Center

1370 Tiger Park Ln

Gulf Breeze, FL 32563

PURPOSE: To receive public comment regarding considerations for FWC's ten-year Management Plan for the FWC Lead Managed Portions of Escribano Point Wildlife Management Area (EPWMA).

This hearing is being held EXCLUSIVELY for discussion of the DRAFT Escribano Point WMA Management Plan. This meeting is not being held to discuss area hunting or fishing regulations. For more information on the process for FWC rule and regulation development go online to: http://myfwc.com/conservation/terrestrial/management-plans/upcoming/or call (850) 487-1764.

A Management Prospectus for Escribano Point WMA and copy of the agenda is available upon request from the Florida Fish and Wildlife Conservation Commission, Land Conservation and Planning Group, 620 South Meridian Street, Tallahassee, Florida 32399-1600. Telephone: (850) 487-9982 or (850) 487-7063 or by e-mail at Julie.Kilgore@myfwc.com

For immediate release

Contact: Diane Hirth, (850) 410-5291

Public hearing to outline 10-year Management Plans for FWC Lead Managed Portions of Escribano Point Wildlife Management Area

The Florida Fish and Wildlife Conservation Commission (FWC) will hold a public hearing in Santa Rosa County to present the 10-year draft land Management Plan for the FWC Lead Managed Portions of Escribano Point Wildlife Management Area (EPWMA). The meeting will be held on Thursday November 6th, 2014 starting at 7 p.m. at the Tiger Point Community Center, 1370 Tiger Park Ln, Gulf Breeze, FL 32563.

After the presentation, the public is encouraged to comment and ask questions about the specifics in the draft plan.

All lands purchased with public funds must have a Management Plan that ensures the property will be managed in a manner that is consistent with the intended purposes of the purchase.

"Escribano Point WMA was purchased in order to ensure the preservation of fish and wildlife resources, other natural and cultural resources, and for fish and wildlife-based public outdoor recreation," said Rebecca Shelton, FWC land conservation biologist. "This draft plan will specify how we intend to do that."

She added that hunting and fishing regulations are not included in this plan or meeting; those are addressed through a separate public process.

To obtain a copy of the draft land management prospectus for Escribano Point WMA please call Julie Kilgore at 850-487-7063 or email Julie.Kilgore@MyFWC.com.

For background on Management Plans and their goals, visit MyFWC.com/Conservation and select "Terrestrial Programs" then "Management Plans" for more information.

RS/HSC

PUBLIC HEARING REPORT
FOR THE
ESCRIBANO POINT WILDLIFE MANAGEMENT AREA
MANAGEMENT PLAN
HELD BY THE
ESCRIBANO POINT WMA MANAGEMENT ADVISORY GROUP
AND THE
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
NOVEMBER 6, 2014 – SANTA ROSA COUNTY, FLORIDA

The following report documents the public input that was received at the Escribano Point Wildlife Management Area (EPWMA) Management Advisory Group's (MAG) Public Hearing for the update to the EPWMA Management Plan that was held from 7:00-9:00 PM, on November 6, 2014, at the Tiger Point Community Center in Gulf Breeze, Florida.

EPWMA Management Advisory Group Introduction:

The public hearing was introduced by Vernon Compton, an EPWMA MAG participant, who represented the Longleaf Alliance. Mr. Compton indicated that he was one of fourteen stakeholders that attended the Florida Fish and Wildlife Conservation Commission (FWC) facilitated MAG meeting held on October 8, 2014. Mr. Compton explained how the stakeholders developed management suggestions during the MAG meeting and how these ideas were condensed, ranked, and included in a MAG meeting report and considered in development of the draft Management Plan. Mr. Compton stated that the draft Management Plan was being presented tonight by FWC staff, and that hardcopies of the draft Plan and the MAG meeting report were available at the front door for the public's review. Mr. Compton thanked everyone for attending and then introduced FWC's Gary Cochran, Land Conservation and Planning Administrator, to facilitate and coordinate the presentation of an overview of EPWMA; the FWC's planning process, and the draft components of the Management Plan.

Presentation on an Overview of EPWMA and the FWC Planning Process:

Mr. Cochran welcomed and thanked the public for their attendance and reminded everyone to sign in. Mr. Cochran then described the materials that were available at the door for public review, including the draft Management Plan and the EPWMA MAG Meeting Report and Accomplishment Report. Mr. Cochran explained the process of providing public testimony and also said people could give comments and ask questions outside of the public testimony period and that all input would be considered equally in developing the EPWMA Management Plan. Mr. Cochran then presented the agenda for the public hearing and facilitated the introduction of all FWC staff in attendance to the audience. Mr. Cochran then went over an orientation of the material and explained that the purpose of the public hearing was to present the draft Management Plan for EPWMA and solicit public input

regarding the plan. He noted that hunting and fishing regulations are addressed by a separate public input process for FWC rule and regulation development.

Mr. Cochran began by explaining the FWC's planning process for developing the EPWMA Management Plan. He then presented an overview and orientation of the EPWMA, including a description of the surrounding conservation lands, the area's natural communities, the area's visitation rates, money generated for the state from visitation and use of the area, wildlife species on the area, recreational opportunities on the area, archaeological and cultural resources on the area, and the area's acquisition history and purpose for acquisition.

Questions, Answers and Discussion on the EPWMA Overview and FWC's Planning Process:

Mr. Cochran facilitated an informal question and answer session where members of the public in attendance, without necessarily identifying themselves, could ask questions of the FWC staff, and discuss the answers. Mr. Cochran again emphasized that the exclusive purpose for the public hearing was to collect public input regarding the draft Management Plan for EPWMA, and not to discuss area hunting, fishing and use regulations since, as was noted earlier, FWC has a separate process for input on hunting and fishing regulations.

Public Question: A member of the public asked if the EPWMA is accessible by road and what roads go into the area. She noted that the draft Plan mentions minimizing the impact of roads.

FWC Response: Mr. Mark Winland, FWC Biologist and EPWMA area manager, said the best road to access the area is Choctaw Field Road, which is maintained by Santa Rosa County. Other than Choctaw Field Road, road access to the area is limited. Ms. Barbara Almario, FWC Biologist, stated that the road that most people take out to the Escribano Point, which goes through Alabama Hollow, is not accessible by most vehicles. Ms. Almario stated that FWC will be completing a hydrological assessment for the area by the end of the fiscal year to determine where roads should be and shouldn't be; and how access to the Point can be established in the most ecologically sound way. Ms. Almario stated that roads on the area will be changing in the next couple of years but it will take a while for these changes to be implemented. Areas without vehicular access are still available for walking/hiking/horseback riding.

Public Question: A member of the public stated that several people get recreational permits to ride horses at Eglin Air Force Base (AFB) and ride out onto the EPWMA, but she didn't see horseback riding listed as a recreational opportunity in the plan and asked if could be added.

FWC Response: Ms. Almario replied that horseback riding is allowed on the EPWMA and will continue to be allowed on the area. It will be added as a recreational use to the plan. Mr. Rich Noyes, Section Leader for the Planning and Design section of FWC's Office of Public Access and Wildlife Viewing Services (OPAWVS), explained that once habitat assessments are completed for the area, the FWC will complete a recreation sensitivity analysis to ensure recreational uses are allowed where they are appropriate and won't degrade the habitat. He also explained that the FWC will begin a separate process for developing the area's Recreation Master Plan (RMP). The FWC will invite recreational groups, including equestrians, to discuss public access points and infrastructure as well as to provide input on recreational opportunities on the area.

Public Question: A member of the public asked if the EPWMA will be utilized by the Gulf Regional Airspace Initiative (GRASI) for military use.

FWC Response: Mr. Cochran replied that there is a component in the plan to continue to cooperate with the Department of Defense (DOD), specifically Eglin AFB, to consider allowing military training on the area. There will be a component of the plan that discusses first responder and military training where it is considered compatible with the area. For example, fire and rescue operations and search and rescue training occurs on many FWC areas. For military uses, they are allowed on a permit basis on many FWC properties and must be short term and intermittent and not impact public use and resources of the area. That is how they will be addressed in the EPWMA Management Plan. Mr. Cochran explained that GRASI is a little different than the military training that was just described. GRASI is a cooperative agreement which FWC has entered into with the DOD that would allow military training on some of the State's conservation lands in the Florida Panhandle. Because GRASI use of state lands would be longer term, the military would have to do a National Environmental Policy Act (NEPA) review process that would be presented to the managing agencies for consideration. If the agencies decide the proposed uses are compatible and wouldn't impact resources and public use, then the agencies would have to take the proposed uses to the Acquisition and Restoration Council (ARC) for approval. No requests have been made from Eglin AFB for training on the EPWMA thus far. The FWC has a Memorandum of Agreement with the DOD to include military training/GRASI as a component of the Management Plan. Additionally, any uses approved on the area have to be consistent with the purposes for acquisition of the property.

Public Question: A member of the public said that FWC's Management Plan states that the opportunity for mining of resources could occur on the area and wanted FWC to explain its stance on deadhead logging since a portion of the EPWMA at one time had a history of timber operations. She asked if FWC would ever be inclined to issue a permit to allow deadhead logging on the EPWMA.

FWC Response: Mr. Cochran clarified that the section of the plan that refers to mining refers to the fact that there is a 1/2 interest in outstanding oil, gas, and mineral rights for the original Escribano Point Parcels in the Yellow River Wildlife Management Area (EPYRWMA, 1,166 acres) so these mineral rights aren't owned by the State. There is a process the mineral rights' owners would have to go through to be able to extract minerals on state-owned lands, which includes getting approval by the Governor and Cabinet. Deadhead logging occurs in public waters, which are deemed sovereign submerged lands and regulated by the Florida Department of Environmental Protection (DEP). Permits for deadhead logging are issued by the DEP. The FWC's lease for EPMWA does not include the public waters/sovereign submerged lands.

Presentation of the EPWMA Draft Management Plan:

At this point Mr. Winland, the EPWMA area biologist, presented the EPWMA draft Management Plan, including FWC's management activities and intent as well as the goals and objectives developed for the area. Following Mr. Winland's presentation, Mr. Cochran clarified some of the concepts relating to the Land Conservation and Stewardship Partnerships component of the Plan that was introduced by Mr. Winland. Mr. Cochran noted that the FWC is required by law to consider if any part of the area is no longer needed for conservation and could be considered for surplus. However, he reiterated that this process was completed for the EPWMA and no portion of the area was considered for surplus nor does the FWC have any intent of recommending any part of the area as surplus in the future, particularly in light of the recent acquisitions that were added to the area. Mr. Cochran also further explained the partnerships that function on the area including those with non-governmental organizations such as the Trust for Public Land and the National Fish and Wildlife Foundation (NFWF). The NFWF received funding from the Deepwater Horizon settlement and under that program they took program applications from the affected states. The FWC was awarded $2.5 million in funding for the EPWMA. Much of the management dollars the FWC will be expending over the next 10 years will flow from this funding. Also, all Deepwater Horizon Gulf Restoration funding requires deed covenants and restrictions that run with the land stipulating that the lands will be preserved and protected in perpetuity for conservation and public outdoor resource based recreation. The NWFWMD also played a key role in conserving the area by donating the Grassy Point tract for inclusion in the EPWMA.

Questions and Comments on the EPWMA Draft Management Plan Presentation:

Mr. Cochran asked the public if anyone had questions or comments on the draft EPWMA Management Plan and encouraged everyone to fill out a speaker card if they wished to provide public testimony.

Public Question: A member of the public asked if FWC knows what the sensitive cultural areas are on the EPWMA. He also stated that there are some heritage homesteads on the area.

FWC Response: Mr. Cochran replied that the sensitive areas are archaeological and historical sites from Native Americans and later settlers using the area. There are ancient burial sites at EPWMA. Surveys have been conducted on the area since before it was acquired by the state and the FWC works with the Division of Historical Resources to survey and document cultural and historical resources that occur on FWC-managed properties. Mr. Winland replied that there is an old turpentine town located on EPWMA that may have homesteads. He also stated that the FWC protects the documented archaeological and historical resources on the area and monitors them annually. Mr. Cochran noted that the archaeological resources are an important component of why the area was acquired.

Public Question: A member of the public asked if law enforcement on the area is through FWC and if law enforcement will be housed on the area. She also noted that there have been problems with unauthorized uses and illegal activities on the area.

FWC Response: Mr. Winland replied that FWC law enforcement patrol the area but they are not housed on site. An FWC staff member will be housed on the area, but he is not a member of FWC's law enforcement. There are no plans to have law enforcement live on the area and FWC is confident that the patrols and staff presence will ensure the illegal activities and uses no longer occur.

Public Question: A member of the public asked if FWC had considered using geocaching as a way to get people acquainted with the area and the new additions.

FWC Response: Mr. Noyes explained that geocaching is a permitted use on all FWC areas and is permitted through the OPAWVS. People propose geocaches and fill out a free permit. It hasn't been used an interpretive tool but will be considered.

Public Question: A member of the public asked how the Natural Resources Damage Assessment (NRDA) Phase III project fit in with funding the area's enhancements.

FWC Response: Ms. Almario replied that the FWC received funding through the early restoration NRDA process for five years to do a lot of the public access and facility improvements. Mr. Cochran further defined the NRDA process under the Oil Spill Protection Act. He explained that when any oil spill event occurs in the US, there is a process to evaluate and assess the damages and determine what mitigation and restoration will be required to address those damages. Under the NRDA process, the Deepwater Horizon oil spill was evaluated and funding was allocated to the EPMWA for damage to the recreational uses and resources to Florida's Gulf coast. That is why funding has been allocated for public access and recreational facilities improvement and development at EPWMA.

Public Question: A member of the public asked if the FWC worked with the Florida Forest Service (FFS) for timber harvesting.

FWC Response: Mr. Cochran explained that FWC's model for forest resource management has the long term goal of managing areas for wildlife habitat and for old-growth uneven aged, stands, but these old growth conditions are not present at EPWMA. If an FWC-managed area is overstocked, FWC uses harvesting, through the FFS or a private timber company, for restoration purposes and to get the stand to a more naturally occurring condition. Timber companies often plant the trees that grow the fastest so FWC has to evaluate if off site species need to be replaced with trees that occurred naturally on the area.

Public Question: A member of the public asked if there is an area of longleaf pine at EPWMA and if so, would the FWC manage it as longleaf pine or allow it to go back to its natural state.

FWC Response: Mr. Cochran replied that the FWC's long term goal is to establish old growth forest habitat. If harvesting is needed to get to old growth conditions in overstocked areas it will be done. The FWC does not manage areas to sustain long term timber harvesting. Timber harvesting is used as a tool to benefit wildlife and establish old growth forest habitat.

Public Question: A member of the public noted that an article in the paper released November 6, 2014, stated there was a substantial stand of old growth forest at EPWMA. She asked what percentage of EPWMA is old growth.

FWC Response: Mr. Cochran said that that statement did not come from FWC staff and is not accurate. The area had been actively managed for timber and turpentine harvesting. No part of the area is considered an old growth forest. Establishing old growth forest conditions is a long-term goal for the area that that FWC will work toward in the future.

Public Question: A member of the public asked about oyster reef restoration plans in the area.

FWC Response: Ms. Almario said there is a project proposal with British Petroleum (BP) funding for oyster reef improvement. Oyster reef restoration has not been funded in this area of East bay and Blackwater Bay but has been in Pensacola Bay. If oyster reef restoration occurs in the area, it will not be on FWC's lands but FWC will participate as needed.

Public Testimony on the EPWMA Draft Management Plan:

Seven members of the public audience submitted speaker cards indicating their intention to provide formal public testimony. Mr. Cochran again emphasized that the public hearing

was for taking input regarding the EPWMA draft Management Plan and that all input would be considered equally. He then called the first speaker to the podium.

Public Testimony Comment: Mr. Doug Lasater, representing Bagdad Waterfronts Florida Partnership, stated that the group worked with Santa Rosa County, Blackwater Pirates, and University of West Florida (UWF) to develop a park on the old mill site in Bagdad that will open in the spring. In conjunction with the development of the park, a UWF grad student is working to develop a blueways trail/maritime heritage trail that will connect to the EPWMA. The trail will have environmental and historical interpretation elements. He stated that he would like to the groups to work with the FWC to connect projects and promote the projects together.

Public Testimony Comment: Mr. Gerald Gallup stated that he has visited the area several times and is favor of it being managed and conserved by the FWC. He said he is retired from the Army and wanted everyone to know that the Army knows how to take care of places and resources. He thinks the Eglin AFB staff will not damage the resources and are excellent at removing any materials they use during training.

Public Testimony Comment: Ms. Helen Wigersma stated that she is a member of the Florida Trail Associated (FTA) and they are very excited about the concept of EPWMA and the Management Plan. She wanted to go on the record to say that she would like the FTA to be involved in the development of the RMP because the FTA is responsible for maintaining the state-wide Florida National Scenic Trail (FNST). The FNST is overseen by the US Forest Service. She would like the FTA to work with the FWC to explore the possibility of relocating part of the trail to EPWMA.

Public Testimony Comment: Mr. Seth Dalton represented the Gulf Coast Kayak Fishing Association. He stated that the Association has campouts at Grassy Point twice a year. He would like to have kayak launches added to the area and would like to have the dock restored at Grassy Point. He noted that last year, prior to the camping permit reservation system being implemented, there were rougher groups using the area. He stated that implementing the reservation system has really improved the crowds this year and the area was cleaner. The campsite has a fence and he would like FWC to consider moving the fence closer to the water to expand the number of campsites on the area.

Public Testimony Comment: Mr. Richard Brown said that he is a property owner on Blackwater Bay and wanted to voice support for the enhanced use and public access to the area.

Public Testimony Comment: Ms. Patricia Williamson represented the equestrian group from Escambia County and Santa Rosa County. She would like equestrian use to be formally added to the Management Plan as an allowable recreational use on the area and would like to have an equestrian representative involved in the RMP development process.

Public Testimony Comment: Ms. Barbara Albrecht stated she is the president of the Bream Fishermen Association and is the director of the Panhandle Watershed Alliance. These groups have been working to protect water quality in the area for over 55 years. They conduct water sampling and were involved in the protection of Garcon Point 25 years ago. Ms. Albrecht stated that she is delighted Escribano Point has been set aside for conservation and not developed. She expressed concerns over deadhead logging courses that have been offered by the state and permits that have been issued. She stated that Blackwater River has been designated as an Outstanding Florida Water but permits were issued there for deadhead logging. She will be watching to see if these issues arise at EPWMA.

Adjournment:

Mr. Cochran asked if there were any other members of the public that wished to give public testimony. Having received no further requests to give public testimony, Mr. Cochran reminded the attendees that the meeting was recorded and all comments, questions, and public testimony would be included in the Public Hearing report that will be included in the Management Plan. He also reminded attendees that all input will be considered during development of the Management Plan. Mr. Cochran explained that much of the additional information that will be added to the Management Plan during the next phases of development will be background information. The goals, objectives, and management intent are the most important parts of the Plan and that is why they were presented today to be reviewed for public comment. The Management Plan is expected to be reviewed and considered by the ARC sometime in 2015. There will be additional time for the public to comment on the Plan prior to its consideration by the ARC. Mr. Cochran then declared the Public Hearing adjourned.

13.3 Land Management Review

Name of Site: Yellow River WMA **County:** Santa Rosa County

Managed by: Fish and Wildlife Conservation Commission **Acres:** 1,166 Acres

Review Date: 04/06/10

Review Team Determination

Managed in accordance with acquisition purpose? Yes =4, No = 0

Management practices, including public access, in compliance with the management plan? Yes =4, No = 0

Categories	Management Plan Review	Field Review
Natural Communities	1.00	3.22
Listed Species	1.00	3.47
Natural Resource Survey	1.00	3.80
Cultural Resources	1.00	4.00
Prescribed Fire	1.00	1.00
Restoration	1.00	2.25
Exotic Species	1.00	3.38
Hydrology	1.00	2.63
Groundwater Monitoring	1.00	3.00
Surface Water Monitoring	1.00	3.33
Resource Protection	1.00	4.35
Adjacent Property Concerns	1.00	4.42
Public Access & Education	1.00	3.39
Managed Area Uses	1.00	N/A
Buildings, Equipment, Staff & Funding	N/A	1.00

Consensus Commendations to the Managing Agency

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

1. The team commends the FWC for conducting the hydrological assessment and the natural resource surveys on the property. (VOTE: 4+, 0-)

2. The team commends the FWC for establishing communication and relationships with other agencies, including GCPEP, and their efforts to partner with others to accomplish the management plan goals. (VOTE: 4+, 0-)

3. The team commends the FWC for looking outside the boundaries of these parcels to find ways to protect and/or purchase the remainder of the Escribano Point Florida Forever Project. (VOTE: 4+, 0-)

Consensus Recommendations to the Managing Agency

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

1. The team recommends that FWC try to limit the impacts of unauthorized vehicle access on the property. (VOTE: 4+, 0-)

Managing Agency Response: FWC will continue to monitor for impacts of unauthorized vehicle access, and will also continue to work with Eglin Air Force Base and the Northwest Florida Water Management District to limit unauthorized vehicle access to the property. Furthermore, FWC will evaluate the need to increase agency Law Enforcement presence.

2. The team recommends that FWC implement cooperative prescribed burning following recommended protection procedures for protecting old growth longleaf pine. (VOTE: 4+, 0-)

Managing Agency Response:

FWC notes that the Land Management Review team indicated that management actions exceeded expectations for resource management, specifically area being burned, frequency, and quality. FWC will continue to cooperate and coordinate with Eglin Air Force Base, the Northwest Florida Water Management District, and other adjacent landowners to continue prescribed burning management activities with particular attention to protecting and maintaining old growth longleaf pine.

3. The team recommends that additional resources, including OPS and contract funding, be made available for management of these parcels. (VOTE: 4+, 0-)

Managing Agency Response:

FWC will continue to strive to achieve management goals for the Escribano Point Parcels of the Yellow River WMA. FWC will evaluate the need for additional resources and staffing and attempt to secure additional funding as necessary and feasible.

Checklist Findings

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

- Natural Communities, specifically basin swamp, baygall, dome swamp, estuarine tidal marsh, floodplain forest, maritime hammock, mesic Flatwoods, sandhill, wet Flatwoods, wet prairie and xeric hammock.
- Listed Species, specifically animal inventory, black bear, plant inventory, white top pitcher plant and spoon leaf sundew.
- Natural Resources Survey, specifically listed species or habitat monitoring, other non-game species or habitat monitoring, fire effects monitoring, other habitat management effects monitoring and invasive species survey/monitoring.
- Cultural Resources, specifically cultural resource survey, protection and preservation.
- Resource Management, specifically area being burned, frequency and quality.
- Restoration of Ruderal Areas, specifically hydrologic restoration.
- Non-Native, Invasive & Problem Species, specifically prevention and control of plants and animals.
- Hydrologic/Geologic Function, specifically roads/culverts, ditches, hydro-period alteration, and water level alteration.
- Ground/Surface Water Monitoring, specifically ground and surface water quality and quantity.
- Resource Protection, specifically boundary survey, gates/fencing, signage, and law enforcement presence.
- Adjacent Property Concerns, specifically expanding development, military restrictions, and inholdings/additions.
- Public Access & Education, specifically roads, parking, boat access, wildlife, invasive species, interpretive facilities and signs, recreational opportunities, and management of visitor impacts.
- Managed Area Uses, specifically hunting, fishing, hiking, bicycling, nature viewing, boating and canoeing.

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review (FR) were not considered sufficient (less than 2.5 score on average), or that the text noted in the Management Plan Review (PR) does not sufficiently address this issue (less than .5 score on average.). The management plan must include responses to the checklist items identified below:

1. Discussion in the management plan regarding Natural Communities, specifically baygall, dome swamp, mesic flatwoods, sandhill, wet flatwoods, and wet prairie. (FR)

Managing Agency Response: FWC notes that the Land Management Review team concluded that FWC's management actions for natural communities, specifically baygall, dome swamp, estuarine tidal marsh, floodplain forest, maritime hammock, mesic flatwoods, sandhill, wet flatwoods, wet prairie, and xeric hammock of Escribano Point Parcels exceeded expectations. Also, FWC notes that the existing Escribano Point Management Plan thoroughly describes the natural communities on pages 11-33.

2. Discussion in the management plan regarding Listed species, specifically plant inventory and white top pitcher plant. (FR)

Managing Agency Response: FWC notes that the Land Management Review team concluded that management actions exceeded expectations for listed species, specifically plant inventory, pitcher plant, and cutthroat grass. FWC notes that plant inventories are included in the current management plan on pages 11-33. Specifically, white top pitcher plant is discussed on pages 14, 27, 28, 47, 48, and 64.

3. Discussion in the management plan regarding Natural Resources Survey, specifically fire effects monitoring. (FR)

Managing Agency Response: FWC notes that the Land Management Review team concluded that management actions exceeded expectations for natural resources survey. FWC has completed natural communities mapping and has incorporated associated maps and natural community descriptions on pages 11-33 of the current management plan. FWC also notes that page 158 of the current Escribano Point management plan contains a comprehensive Prescribed Burn Plan. FWC will expand discussion of

Objective-Based Vegetative Management (OBVM) protocols as it relates to prescribed fire and monitoring of fire effects in the scheduled management plan update.

4. Discussion in the management plan regarding Resource Management, specifically area being burned, frequency and quality. (FR)

Managing Agency Response: FWC notes that the Land Management Review team concluded that management actions exceeded expectations for resource management, specifically area being burned, frequency, and quality. FWC also notes that on page 158 of the current Escribano Point management plan contains a comprehensive Prescribed Burn Plan. FWC will expand discussion of OBVM protocols as it relates to prescribed fire and monitoring of fire effects in the scheduled management plan update.

5. Discussion in the management plan regarding Restoration of Ruderal Areas, specifically hydrologic restoration. (FR)

Managing Agency Response: FWC notes that the Land Management Review team concluded that management actions exceeded expectations on restoration of ruderal areas. FWC further notes that the current management plan addresses hydrological restoration on pages 66, 68, 69, 72, and 73. FWC will expand the discussion of planned restoration of hydrological and ruderal areas in the scheduled management plan update.

6. Discussion in the management plan regarding Non-Native, Invasive and Problem Species, specifically prevention of plants. (FR)

Managing Agency Response: FWC notes that the Land Management Review team concluded that management actions exceeded expectations on non-native, invasive, and problem species, specifically prevention and control of plants. FWC notes that this issue is addressed on pages 64, 69, 70, 72, and 73 of the current Escribano Point management plan. Invasive exotic species will further be addressed in the scheduled management plan update. Natural communities that may have occurrences and densities of non-native plant species will be addressed through FWC's OBVM desired future conditions and associated management protocols. This information will be included in the scheduled management plan update.

7. Discussion in the management plan regarding Hydrologic/Geologic Function, specifically ditches and water level alteration. (FR)

Managing Agency Response: FWC notes that the Land Management Review team concluded that management actions exceeded expectations on hydrologic/geologic function. FWC further notes that the current management plan discusses hydrologic functions on pages 62 and 64. FWC will evaluate the need to expand this discussion in the scheduled management plan update.

8. Discussion in the management plan regarding Environmental Education and Outreach, specifically interpretive facilities and signs. (FR)

Managing Agency Response: FWC notes that the Land Management Review team concluded that management actions exceeded expectations on public access and education, specifically interpretive facilities and signs. FWC will expand the discussion of environmental education, interpretation, and outreach in the scheduled management plan update.

9. Discussion in the management plan regarding Infrastructure, specifically buildings, equipment, staff and funding. (FR)

Managing Agency Response: FWC notes that current staff, funding, building, and equipment is discussed on page 75. FWC will continue to evaluate the need and feasibility for additional infrastructure, equipment, staff and funding. These considerations will be discussed in the scheduled management plan update.

APPENDIX A:

PLAN REVIEW		1	2	3	4	AVERAGE
Natural Communities (I.A)						
Basin Swamp	I.A.1	1	1	1	1	1.00
Baygall	I.A.2	1	1	1	1	1.00
Dome Swamp	I.A.3	1	1	1	1	1.00
Estuarine Tidal Marsh	I.A.4	1	1	1	1	1.00
Floodplain Forest	I.A.5	1	1	1	1	1.00
Maritime Hammock	I.A.6	1	1	1	1	1.00
Mesic Flatwoods	I.A.7	1	1	1	1	1.00
Sandhill	I.A.8	1	1	1	1	1.00
Wet Flatwoods	I.A.9	1	1	1	1	1.00
Wet Prairie	I.A.10	1	1	1	1	1.00
Xeric Hammock	I.A.11	1	1	1	1	1.00
Listed species:Protection & Preservation (I.B)						
Animal Inventory	I.B.1	1	1	1	1	1.00
Black Bear	I.B.1.a	1	1		1	1.00
Plant Inventory	I.B.2	1	1	1	1	1.00
White Top Pitcher Plant	I.B.2.a	1	1	1	1	1.00
Spoon Leaf Sundew	I.B.2.b	1	1	1	1	1.00
Natural Resources Survey/Management Resources (I.C)						
Listed species or habitat monitoring	I.C.2	1	1	1	1	1.00
Other non-game species or habitat monitoring	I.C.3	1	1	1	1	1.00
Fire effects monitoring	I.C.4	1	1	1	1	1.00
Other habitat management effects monitoring	I.C.5	1	1	1	1	1.00
Invasive species survey / monitoring	I.C.6	1	1	1	1	1.00
Cultural Resources (Archeological & Historic sites) (II.A,II.B)						
Cultural Res. Survey	II.A	1	1	1	1	1.00
Protection and preservation	II.B	1	1	1	1	1.00
Resource Management, Prescribed Fire (III.A)						
Area Being Burned (no. acres)	III.A.1	1	1	1	1	1.00
Frequency	III.A.2	1	1	1	1	1.00
Quality	III.A.3	1	1	1	1	1.00
Restoration of Ruderal Areas (III.B)						
Hydrologic Restoration	III.B.1	1		1	1	1.00

Non-Native, Invasive & Problem Species (III.E)						
Prevention						
prevention - plants	III.E.1.a	1	1	1	1	1.00
prevention - animals	III.E.1.b	1	1	1	1	1.00
Control						
control - plants	III.E.2.a	1		1	1	1.00
control - animals	III.E.2.b	1		1	1	1.00
Hydrologic/Geologic function Hydro-Alteration (III.F.1)						
Roads/culverts	III.F.1.a	1	1	1	1	1.00
Ditches	III.F.1.b	1	1	1	1	1.00
Hydro-period Alteration	III.F.1.c	1	1	1	1	1.00
Water Level Alteration	III.F.1.d	1	1	1	1	1.00
Ground Water Monitoring (III.F.2)						
Ground water quality	III.F.2.a	1	1	1	1	1.00
Ground water quantity	III.F.2.b	1	1	1	1	1.00
Surface Water Monitoring (III.F.3)						
Surface water quality	III.F.3.a	1	1	1	1	1.00
Surface water quantity	III.F.3.b	1	1	1	1	1.00
Resource Protection (III.G)						
Boundary survey	III.G.1	1	1	1	1	1.00
Gates & fencing	III.G.2	1	1	1	1	1.00
Signage	III.G.3	1	1	1	1	1.00
Law enforcement presence	III.G.4	1	1	1	1	1.00
Adjacent Property Concerns (III.H)						
Land Use						
Expanding development	III.H.1.a	1	1	1	1	1.00
Military Restrictions	III.H.1.b	1	1	1	1	1.00
Inholdings/additions	III.H.2		1		1	1.00
Public Access & Education						
Public Access						
Roads	IV.1.a	1	1	1	1	1.00
Parking	IV.1.b	1	1		1	1.00
Boat Access	IV.1.c	1	1		1	1.00
Environmental Education & Outreach						
Wildlife	IV.2.a	1	1	1	1	1.00
Invasive Species	IV.2.b	1	1	1	1	1.00
Interpretive facilities and signs	IV.3	1	1	1	1	1.00
Recreational Opportunities	IV.4	1	1	1	1	1.00
Management of Visitor Impacts	IV.5	1	1	1	1	1.00
Managed Area Uses						
Existing Uses						

Hunting	VI.A.1	1	1	1	1	1.00
Fishing	VI.A.2	1	1	1	1	1.00
Hiking	VI.A.3	1	1	1	1	1.00
Bicycling	VI.A.4	1	1	1	1	1.00
Nature Viewing	VI.A.5	1	1	1	1	1.00
Boating & Canoeing	VI.A.6	1	1	1	1	1.00
FIELD REVIEW		**1**	**2**	**3**	**4**	**AVERAGE**
Natural Communities (I.A)						
Basin Swamp	I.A.1	5	5	5	5	5.00
Baygall	I.A.2	1	3	1	2	1.75
Dome Swamp	I.A.3	3	1	1	3	2.00
Estuarine Tidal Marsh	I.A.4	4	4	4	5	4.25
Floodplain Forest	I.A.5	5	5	4	5	4.75
Maritime Hammock	I.A.6	4	5	4	4	4.25
Mesic Flatwoods	I.A.7	1	3	3	3	2.50
Sandhill	I.A.8	1	3	3	3	2.50
Wet Flatwoods	I.A.9	1	3	1	3	2.00
Wet Prairie	I.A.10	1	1	2	3	1.75
Xeric Hammock	I.A.11	5	5	X	4	4.67
Listed species:Protection & Preservation (I.B)						
Animal Inventory	I.B.1	5	4	4	4	4.25
Black Bear	I.B.1.a	2	5	X	4	3.67
Plant Inventory	I.B.2	1	4	1	4	2.50
White Top Pitcher Plant	I.B.2.a	1	4	1	4	2.50
Spoon Leaf Sundew	I.B.2.b	2	5	X	4	3.67
Natural Resources Survey/Management Resources (I.C)						
Listed species or habitat monitoring	I.C.2	3	4	4	5	4.00
Other non-game species or habitat monitoring	I.C.3	3	4	4	5	4.00
Fire effects monitoring	I.C.4	3	2	2	3	2.50
Other habitat management effects monitoring	I.C.5	4	4	4	4	4.00
Invasive species survey / monitoring	I.C.6	5	4	5	4	4.50
Cultural Resources (Archeological & Historic sites) (II.A,II.B)						
Cultural Res. Survey	II.A	4	4	4	5	4.25
Protection and preservation	II.B	3	3	4	5	3.75
Resource Management, Prescribed Fire (III.A)						
Area Being Burned (no. acres)	III.A1	1	1	1	1	1.00
Frequency	III.A.2	1	1	1	1	1.00
Quality	III.A.3	1	1	1	1	1.00
Restoration of Ruderal Areas (III.B)						
Hydrologic Restoration	III.B.1	2	2	2	3	2.25

Non-Native, Invasive & Problem Species (III.E)						
Prevention						
prevention - plants	III.E.1.a	2	4	2	2	2.50
prevention - animals	III.E.1.b	3	4	5	5	4.25
Control						
control - plants	III.E.2.a	1	4	4	2	2.75
control - animals	III.E.2.b	3	3	5	5	4.00
Hydrologic/Geologic function Hydro-Alteration (III.E.1)						
Roads/culverts	III.F.1.a	3	4	1	3	2.75
Ditches	III.F.1.b	3	3	1	3	2.50
Hydro-period Alteration	III.F.1.c	3	4	1	3	2.75
Water Level Alteration	III.F.1.d	3	3	1	3	2.50
Ground Water Monitoring (III.F.2)						
Ground water quality	III.F.2.a	2	3	X	4	3.00
Ground water quantity	III.F.2.b	2	3	X	4	3.00
Surface Water Monitoring (III.E.3)						
Surface water quality	III.F.3.a	2	4	X	4	3.33
Surface water quantity	III.F.3.b	2	4	X	4	3.33
Resource Protection (III.F)						
Boundary survey	III.G.1	5	3	4	5	4.25
Gates & fencing	III.G.2	3	3	4	5	3.75
Signage	III.G.3	5	5	4	5	4.75
Law enforcement presence	III.G.4		4	5	5	4.67
Adjacent Property Concerns (III.G)						
Land Use						
Expanding development	III.H.1.a	5	4	2	5	4.00
Military Restrictions	III.H.1.b	4	5	5	5	4.75
Inholdings/additions	III.H.2		4		5	4.50
Public Access & Education						
Public Access						
Roads	IV.1.a	5	3	4	4	4.00
Parking	IV.1.b	5	3	4	4	4.00
Boat Access	IV.1.c	4	3	4	5	4.00
Environmental Education & Outreach						
Wildlife	IV.2.a	5	3	4	4	4.00
Invasive Species	IV.2.b	5	4	4	3	4.00
Interpretive facilities and signs	IV.3	1	3	2	3	2.25
Recreational Opportunities	IV.4	4	4	5	5	4.50
Management of Visitor Impacts	IV.5	3	3	5	4	3.75
Management Resources						
Maintenance						
Infrastructure						
Buildings	V.2.a					#DIV/0!

Equipment	V.2.b	1	1	1	1	1.00
Staff	V.3	1	1	1	1	1.00
Funding	V.4	1	1	1	1	1.00

APPENDIX B:

I.A. Natural Communities

- Fire needed for maintenance condition.
- Fire introduction is being constrained territory by fragmented acquisition parcels, juxtaposed uncooperative land owners (neighbors); limited funding and personnel.

I.B. Listed Species

- Fire needed for listed plants.
- FNAI plant inventory completed.

I.C. Natural Resources Survey

- Good surveys for invasives.

II.A.B. Cultural Resources

- Cultural survey completed.

III.A. Resource Management

- Excellent identification in plan of cooperative prescribed burning opportunities which will be needed to initiate prescribed burning.
- Burn plan available and up to date.
- Reiterate notes written in section one. Continuing problems of particularly lack of procurement and completion of Florida Forever- Escribano Point parcels.

III.E. Non-Native, Invasive & Problem Species

- Good first step in control by identifying species.

III.F. Hydrologic/Geologic Function

- Commend FWC on development of hydrologic restoration plan. Coordinate with DEP on the before and after of hydrologic restoration.
- Support objective is in work plan to restore nature hydrology on the property.
- Most of the recommendations from recent hydrological assessment that deal with private neighbors and military. DEP function/coordination with them is important.

III.G. Resource Protection

- With prescribed fire implementation will have increased resource needs associated with public access management including law enforcement and gating.

III.H. Adjacent Property Concerns

- Excellent oversight of additional opportunities with Escribano Point Florida recovery project. Pursuit of available land critical to completion of project allowing for better management of entire Escribano Point area.

IV. Public Access & Education

- Web page and involvement in GCPEP supports public access and education. Good public access information in yellow river wildlife management area.
- Website sufficient, links to good interpretive pages.

V. Infrastructure/Management Resources

- Need for management support equipment. Management actions in plan require sufficient staff and funding. Good plan, but need to emphasis on staff funding if hydrologic and prescribed fire restoration is to occur.
- No dedicated staff. Insufficient funding to accomplish goals. Restoration projects cannot be accomplished with the level of funding provided.

13.4 Soil Series Descriptions

Map Unit Description

Santa Rosa County, Florida

[Minor map unit components are excluded from this report]

Map unit: 3 - Bibb-Kinston association

Component: Bibb (50%)

The Bibb component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on marine terraces on coastal plains. The parent material consists of loamy and sandy alluvium. 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 is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, May, December. 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: Kinston (25%)

The Kinston component makes up 25 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on marine terraces on coastal plains. The parent material consists of loamy alluvium. 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 is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 4 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.

Map unit: 4 - Bohicket and Handsboro soils

Component: Bohicket (80%)

The Bohicket component makes up 80 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes 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 very low. Available water to a depth of 60 inches is very low. Shrink-swell potential is moderate. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 25 percent. Nonirrigated land capability classification is 8. This soil meets hydric criteria. The soil has a strongly saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 30 within 30 inches of the soil surface.

Component: Handsboro (20%)

The Handsboro component makes up 20 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes on marine terraces on coastal plains. The parent material consists of herbaceous organic material over 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 high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 36 percent. Nonirrigated land capability classification is 8. This soil meets hydric criteria. The soil has a strongly saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 30 within 30 inches of the soil surface.

Map unit: 7 - Dorovan-Pamlico association

Component: Dorovan (50%)

The Dorovan component makes up 50 percent of the map unit. Slopes are 0 to 1 percent. This component is on swamps on marine terraces on coastal plains. The parent material consists of 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 moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 50 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.

Map Unit Description

Santa Rosa County, Florida

Map unit: 7 - Dorovan-Pamlico association

Component: Pamlico (30%)

The Pamlico component makes up 30 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 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 moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, November, December. Organic matter content in the surface horizon is about 40 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.

Map unit: 21 - Lakeland sand, 0 to 5 percent slopes

Component: Lakeland (77%)

The Lakeland component makes up 77 percent of the map unit. Slopes are 0 to 5 percent. This component is on hills on marine terraces on coastal plains. The parent material consists of sandy eolian deposits and/or marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R133AY002FL Longleaf Pine-turkey Oak Hills ecological site. Nonirrigated land capability classification is 3s. Irrigated land capability classification is 3s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Map unit: 22 - Lakeland sand, 5 to 12 percent slopes

Component: Lakeland (83%)

The Lakeland component makes up 83 percent of the map unit. Slopes are 5 to 12 percent. This component is on hills on marine terraces on coastal plains. The parent material consists of eolian or sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Map unit: 24 - Leon sand, 0 to 2 percent slopes

Component: Leon (80%)

The Leon component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods, marine terraces, coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 5 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. This component is in the R152AY004FL North Florida Flatwoods ecological site. Nonirrigated land capability classification is 4w. Irrigated 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 slightly sodic horizon within 30 inches of the soil surface.

Map unit: 33 - Ortega sand, 0 to 5 percent slopes

Component: Ortega (88%)

The Ortega component makes up 88 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of eolian or sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is very high. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 51 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2

Map Unit Description

Santa Rosa County, Florida

Map unit: 33 - Ortega sand, 0 to 5 percent slopes

Component: Ortega (88%)

percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Map unit: 34 - Pactolus loamy sand, 0 to 5 percent slopes

Component: Pactolus (85%)

The Pactolus component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on rises on marine terraces on coastal plains. The parent material consists of sandy marine and fluvial deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 23 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Map unit: 40 - Rutlege loamy sand

Component: Rutlege (82%)

The Rutlege component makes up 82 percent of the map unit. Slopes are 0 to 2 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy marine deposits and/or fluviomarine 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 is low. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 3 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6w. 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.

Map unit: 100 - Waters of the Gulf of Mexico

Component: Waters of the Gulf of Mexico (100%)

Generated brief soil descriptions are created for major soil components. The Waters of the Gulf of Mexico is a miscellaneous area.

Map Unit Description

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, can be used to determine the composition and properties of a unit.

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.

13.5 FNAI Element Occurrence Data Usage Letter

FLORIDA
Natural Areas
INVENTORY

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

April 11, 2014

David Alden
Land Conservation & Planning
Florida Fish and Wildlife Conservation Commission
Tallahassee, FL

Dear David,

By virtue of this letter we are updating and continuing our agreement that it is unnecessary for your office to request FNAI element occurrence data for each land management plan you prepare, under the following conditions:

- FNAI will continue to provide our Florida Element Occurrence GIS database to FWC on a quarterly update basis;
- The FNAI GIS data will be available to FWC staff for reference and incorporation as required in management plan review and preparation.

Our database manager, Frank Price, currently provides this update via ftp to FWC staff on a quarterly basis. Current FWC contacts for the quarterly update are Beth Stys and Ted Hoehn. We are pleased to continue this beneficial collaboration with the Florida Fish and Wildlife Conservation Commission.

Sincerely,

Gary Knight
Director
Florida Natural Areas Inventory

Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

13.6 Eglin AFB Access Easement

CHOCTAW FIELD ROAD

DEPARTMENT OF THE AIR FORCE
EASEMENT FOR ROAD OR STREET

ON EGLIN AIR FORCE BASE, FLORIDA

No. DACA01-2-72-6

THE SECRETARY OF THE AIR FORCE, under and by virtue of the authority vested in him by Title 10, United States Code, Section 2668, having found that the granting of this easement will not be against the public interest, hereby grants to the STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

hereinafter designated as the grantee, an easement for a right-of-way for a road or street over, across, in, and upon lands of the United States at the location shown in red on Exhibit "B" *attached hereto and made a part hereof, and more particularly described as follows:*

See Exhibit "A" also attached hereto and made a part hereof.

The right-of-way is identified in the grantee's records as Parcel No. 100.1-A, Section 58004.2501, State Road 87-B, Santa Rosa County, Florida.

THIS EASEMENT is granted subject to the following conditions:

1. The construction, use, and maintenance of said road or street, including culverts and other drainage facilities, shall be performed without cost or expense to the United States, under the general supervision and subject to the approval of the officer of the Air Force having immediate jurisdiction over said premises, hereinafter designated as "said officer".

2. The grantee shall at all times maintain said road or street in good condition and shall promptly make all repairs thereto needed to preserve a smooth-surface highway.

3. Any property of the United States damaged or destroyed by the grantee incident to the use and occupation of the said premises shall be promptly repaired or replaced by the grantee to the satisfaction of the said officer, or in lieu of such repair or replacement the grantee shall, if so required by said officer, pay to the United States money in an amount sufficient to compensate for the loss sustained by the United States by reason of damages to or destruction of Government property.

4. The use and occupation of said lands of the United States for the purposes authorized by this instrument shall be subject to such rules and regulations as the said officer may prescribe from time to time in order to properly protect the interests of the United States.

5. The United States shall in no case be liable for any damages or injuries to the said road or street which may be caused by or result from any operations undertaken by the Government, and no claim or right to compensation shall accrue from such damages or injuries.

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F4B 3

6. The United States reserves the right to make such connections between the road or street herein authorized and roads and streets on said lands as the said officer may from time to time consider necessary, and also reserves to itself rights-of-way for all purposes across, over, and/or under the right-of-way hereby granted; provided, however, that such rights shall be used in a manner that will not create unnecessary interference with the use and enjoyment by the grantee of said right-of-way for highway purposes.

7. It is to be understood that this instrument is effective only insofar as the rights of the United States in the property over which the said road or street is to be extended are concerned; and that the grantee shall obtain such permission as may be necessary on account of any other existing rights.

8. All or any part of such right-of-way herein granted may be terminated by the Secretary of the Air Force for failure to comply with any or all of the terms or conditions of this grant, or for nonuse for a two-year period or abandonment of rights granted herein.

9. It is understood that the provisions of Conditions Nos. 1 and 5, supra, shall not abrogate or interfere with any agreement or commitments made or entered into between the grantee and any other agency of the United States with regard to financial aid to the grantee in connection with the construction, maintenance, or repair of the road or street described herein.

10. The United States shall not be responsible for damages to property or injuries to persons which may arise from or be incident to the use and occupation of the said premises, nor for damages to the property of the grantee, or for injuries to the person of the grantee (if an individual), nor for damages to the property or injuries to the person of the grantee's officers, agents, servants, or employees, or others who may be on said premises at their invitation or the invitation of any one of them, arising from or incident to the use and occupation of said premises; and the grantee shall hold the United States harmless from any and all such claims.

11. The United States shall not be responsible for damages to property or injuries to persons which may arise from or be incident to the construction, maintenance, and use of said road or street.

12. That the grantee and/or his representatives shall report to the Jackson Guard Station, Building No. 1523, Eglin Air Force Base to secure permission to enter the reservation prior to commencement of work.

13. That all merchantable timber, pulpwood, or sawlogs removed from the area of the right-of-way herein granted shall be trimmed and stockpiled by the grantee for removal or sale by the Department of the Air Force. All debris shall be disposed of by the grantee to the satisfaction of said officer.

14. The grantee does, by the acceptance of this easement covenant and agree for itself, its assigns, sublessees, and successors in interest to the property herein granted or any part thereof:

(1) That the premises granted herein will be operated as a public highway in full compliance with Title VI of the Civil Rights Act of 1964 and all requirements imposed by or pursuant to the regulations issued thereunder by the Department of the Air Force and in effect on the date of this easement to the end that no person in the United States shall, on the ground of race, color, religion, sex, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs or activities provided therein;

(2) That the United States shall have the right to judicial enforcement of these covenants not only as to the grantee, its successors and assigns, but also as to sublessees and licensees doing business or extending services under contractual or other arrangements on the land herein; and

(3) In the event of a breach of any of the conditions set forth above, the United States may terminate this easement as provided herein; provided, however, that the failure of the United States to insist in any one or more instances upon complete performance of any of the said conditions shall not be construed as a waiver or a relinquishment of the future performance of any such

This easement is not subject to Title 10, United States Code, Section 2662.

IN WITNESS WHEREOF, I have hereunto set my hand by authority of the Secretary of the Air Force this 23rd day of , 19

Original Copy Signed.

DAVIS
Chief, Real Estate Division

EGLIN AIR FORCE BASE

ROAD RIGHT-OF-WAY EASEMENT

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

All that tract or parcel of land lying and being in Sections 4, 8, 9, 10, 11, 13, 14, 15 and 16, Township 1 South, Range 27 West, Tallahassee Meridian, Santa Rosa County, Florida, being more particularly described as follows:

Commencing at a concrete monument which is at the Southwest corner of said Section 8 and on the boundary of a tract of land owned by the United States of America at Eglin Air Force Base;

Thence N 00° 15' E along the boundary of said United States tract, which is along the West line of said Section 8, a distance of 24.5 feet to the POINT OF BEGINNING;

Thence continue N 00° 15' E along the boundary of said United States tract, which is along the West line of said Section 8, a distance of 25.0 feet;

Thence S 88° 29' E, 4,190.9 feet;

Thence Northeasterly along a curve to the left with a radius of 487.50 feet, an arc distance of 638.6 feet, the long chord of which bears N 52° 48' E, 609.7 feet;

Thence N 14° 06' E, 4,645.9 feet;

Thence Northeasterly along a curve to the right with a radius of 512.50 feet, an arc distance of 639.3 feet, the long chord of which bears N 52° 38' E, 638.5 feet;

Thence S 88° 50' E, 1,941.3 feet;

Thence Southeasterly along a curve to the right with a radius of 512.50 feet, an arc distance of 607.6 feet, the long chord of which bears S 54° 52' E, 572.6 feet;

EXHIBIT A
PAGE 1 OF 4 PAGES

Thence S 20° 54' E, 5,306.6 feet;

Thence N 69° 06' E, 47.5 feet;

Thence S 20° 54' E, 85.6 feet;

Thence S 88° 41' E, 3,613.8 feet;

Thence N 01° 19' E, 645.0 feet;

Thence S 88° 41' E, 35.0 feet;

Thence S 01° 19' W, 645.0 feet;

Thence S 88° 41' E, 2,039.5 feet;

Thence Easterly along a curve to the right with a radius of 1,969.86 feet, an arc distance of 267.2 feet, the chord of which bears S 84° 48' E, 267.0 feet;

Thence N 04° 58' E, 32.7 feet

Thence S 85° 02' E, 30.0 feet;

Thence S 04° 58' W, 35.1 feet;

Thence Southeasterly along a curve to the right with a radius of 1,969.86 feet; an arc distance of 1,246.5 feet, the chord of which bears S 62° 12' E, 1,206.8 feet;

Thence S 44° 21' E, 1,720.3 feet;

Thence Southeasterly along a curve to the left with a radius of 1,849.86 feet, an arc distance of 919.7 feet, the long chord of which bears S 58° 28' E, 901.5 feet;

Thence S 72° 34' E, 1,327.9 feet;

Thence N 43° 32' E, 174.4 feet;

Thence S 46° 28' E, 30.0 feet;

Thence S 43° 32' W, 159.7 feet;

Thence S 72° 34' E, 360.2 feet;

Thence Easterly along a curve to the left with a radius of 2,231.83 feet, an arc distance of 872.2 feet, the long chord of which bears S 83° 46' E, 866.7 feet;

EXHIBIT A
PAGE 2 OF 4 PAGES

Thence Northwesterly along a curve to the left with a radius of 487.50 feet, an arc distance of 578.0 feet, the long chord of which bears N 54° 52' W, 544.7 feet;

Thence N 88° 50' W, 1,941.3 feet;

Thence Southwesterly along a curve to the left with a radius of 487.50 feet, an arc distance of 655.7 feet, the long chord of which bears S 52° 38' W, 607.4 feet;

Thence S 14° 06' W, 4,645.9 feet;

Thence Southwesterly along a curve to the right with a radius of 512.50 feet, an arc distance of 692.4 feet, the long chord of which bears S 52° 48' W, 640.9 feet;

Thence N 88° 29' W, 4,191.5 feet to the point of beginning.

Containing 52.11 acres, more or less, and being a part of Tracts B, B-1, 140-A, 153, 253, 342, 372, 455, 1215, 1243, 1245 and 1247 of Eglin Air Force Base.

EXHIBIT A
PAGE 4 OF 4 PAGES


EAST
BAY

13.7 EPWMA WCPR Strategy

PENDING COMPLETION

13.8 EPWMA Timber Assessment

Escribano Point Wildlife Management Area

Timber Management Assessment – 2014

Prepared By: Devon McFall – Florida Forest Service – Senior Forester – Other Public Lands

Purpose

This document is intended to fulfill the timber assessment requirement for the Escribano Point Wildlife Management Area (EPWMA) as required by Section 253.036, Florida Statutes. The goal of this Timber Assessment is to evaluate the potential and feasibility of utilizing silvicultural techniques in assisting managers in achieving objectives at EPWMA.

Introduction

Location

EPWMA is approximately 4,057 acres and is located in southern Santa Rosa County, Florida, approximately 6 miles northwest of Navarre, 6 miles southeast of Milton, 14 miles northeast of Pensacola and 29 miles southeast of Crestview. EPWMA is located in multiple sections in Township 01S, Ranges 27W-28W. Road access to the EPWMA is available through Eglin Air Force Base on Choctaw Field Road off of State Road 87. Access is also available by boat along Blackwater Bay.

Management & Natural Communities

The EPWMA is managed by the Florida Fish and Wildlife Conservation Commission (FWC) and protects over ten miles of natural coastline adjacent to Blackwater Bay, East Bay and Yellow River Estuary. The Northwest Florida Water Management District's (NWFWMD) Yellow River Water Management Area is located to the north**,** Eglin Air Force Base to the east, United States Forest Service (USFS) manages a parcel located along East Bay inside the southeastern portion of EPWMA, and EPWMA is adjacent to the Yellow River Marsh Aquatic Preserve.

The FWC manages the property for the conservation and protection of fish and wildlife resources, wildlife based public outdoor recreation, conservation and restoration of natural communities and protection of archaeological resources. Prescribed burning, wildlife habitat restoration and improvement, non-native invasive species management, road maintenance, imperiled species management, facilities and infrastructure maintenance, archeological and historic resources monitoring and protection and research related activities are some of the management tools and activities utilized by FWC. Outdoor recreation is permitted and includes hunting, fishing, wildlife viewing, camping, hiking, and horseback riding.

The FWC is the lead managing agency of EPWMA. However, in order to meet their management objectives, FWC cooperates with the NWFWMD and the United States Department of Defense (DOD). In 2014, NWFWMD donated the 1,177-acre Grassy Point tract to the Board of Trustees for inclusion in EPWMA. Upon acquisition of Grassy Point, the previously disjointed FWC managed parcels to the north and south of Grassy Point became one contiguous FWC managed property.

Major natural communities include shrub bog (2,874 acres), scrubby flatwoods (185 acres), dome swamp (145 acres), mesic flatwoods (140 acres), and sandhill (126 acres) among other upland and wetland

communities.

Past Ownership & Uses

Several archaeological sites located on EPWMA document the presence of Native Americans utilizing this area for thousands of years. It is suspected that Native Americans only made minor alterations to the natural landscape. The EPWMA was owned by private landowners from 1933 until State acquisition in 2003. Historical aerial photos show the area as mostly rural. A 2009 hydrological assessment and restoration plan determined road construction and drainage ditching have altered the natural hydrology.

Past uses prior to acquisition include timber harvests (clearcuts and thinnings), turpentine, agriculture and most likely hunting and fishing. Some of these past uses, including roads and ditches, have altered the native plant communities. The Grassy Point tract was owned and managed by the NWFWMD for the protection of natural communities, wetland and floodplain functions, groundwater recharge, surface and groundwater quality, fish and wildlife habitat management and passive outdoor recreation. The NWFWMD primarily utilized reforestation and associated silvicultural site preparation practices, prescribed burning and non-native invasive plant species removal in the management of Grassy Point.

Timber Management

The FWC's primary land management objectives on EPWMA were discussed earlier and are understood by FFS. Those objectives don't directly include timber management, however, various silvicultural practices can assist the FWC in meeting their primary objectives. Examples include clearcutting offsite species, reforesting appropriate species, thinning onsite species, natural and artificial regeneration, mechanical and herbicide site preparation and timber stand improvements such as roller-drum chopping, rough woods mowing, chemical release for pine regeneration and understory (i.e. Velpar L treatment to reduce oaks where prescribed fire alone cannot get the job done), prescribed fire (site preparation and otherwise), among many other silvicultural tools. Timber management may not be one of FWC's direct objectives but it can be a valuable tool for the FWC to meet their primary objectives.

Each of the upland natural communities on EPWMA could potentially be managed in a sustainable manner simultaneously for wildlife and timber. Particularly, those communities include mesic, wet and scrubby flatwoods and sandhill. See the attached Florida Natural Areas Inventory's (FNAI) Current Natural Communities Map. This map was produced by FFS utilizing FNAI's 2014 Current natural community mapping GIS data.

Carefully planned, timed, executed, and monitored timber harvests will not excessively disturb groundcover, soils, or wildlife habitat. Rather, timber management is widely used by many land management agencies as their primary restoration tool, along with prescribed fire. Each timber stand is unique. However, if the benefits (natural and artificial regeneration, releasing groundcover, enhancing wildlife habitat, improving forest health and aesthetics, restoring hydrology/hydroperiod, restoring overstory species, supporting local economies, generating revenue, etc.) of conducting timber management outweigh the minor costs (minor soil compaction and occasional rutting near logging decks and skid trails and short-term aesthetic impacts), then it should be considered a viable land management and restoration tool. These potential minor, short-term costs of conducting a timber harvest can be mitigated as previously stated through careful execution, timing and monitoring. The FFS is available to assist FWC with their timber management needs on EPWMA, including natural and

artificial reforestation, to help meet their primary land management objectives. There is always more than one way to meet a final land management objective and timber management provides many tools to get there.

Methods

The Florida Forest Service (FFS) was contacted by FWC in late October 2014 and requested to complete a timber assessment for the EPWMA. The field portion of this timber assessment was conducted November 25TH- 26TH, 2014 by FFS. The FFS will be available to complete additional field work and provide more detailed timber management data and timber harvest prescriptions at FWC's request.

The FWC provided FNAI 2014 current and historical natural community mapping GIS data and an ATV prior to and during assessment. Following FFS field work, FWC provided NWFWMD's Grassy Point Tract reforestation GIS data which was edited, expanded and utilized in the attached EPWMA timber stand map produced by FFS. The FWC also provided their draft management plan to aid in the development of this assessment.

The EPWMA timber stand map and table one on page nine display stands located during FFS field work and after receiving the NWFWMD reforestation data. These stands are not the only stands on the property that could potentially be managed for timber but are the priority stands that can either currently be harvested, show potential for near future harvests within 5-15 years and were safely accessible during the assessment. It is important to note that much of the south and north portions of the property were inaccessible during field work due to poor road conditions and lack of creek crossings. Attempts were made to cross Fundy Bayou and its associated creek at three locations and safe access was not possible. Southern access was also attempted through Eglin and was not feasible. Most of EPWMA's secondary roads are deeply rutted, blown-out, unimproved remnant logging trails and are underwater much of the year. If these roads and creek crossings are improved in the future, FFS is willing to assess these areas at FWC's request.

Prior to field work, FFS reviewed high quality 2013 aerial photos of the area and the FNAI data FWC provided. Upon arrival, the FFS assessed EPWMA for timber management potential mostly by foot and ATV. Accessible pine stands located during field work were cruised for basal area (BA) and trees per acre (TPA) among other stand characteristics and measurements. Basal area estimates were measured using the point sampling method and ten and twenty basal area factor cruise prisms. Trees per acre estimates were measured using the plot sampling method in which a 1/40th acre (18.6 foot radius) circular plot was used. Stand age and average age were measured using an increment borer. Average overstory pine heights were estimated. Understory, midstory and overstory species and characteristics were noted as was the dominant natural community within each timber stand. A full timber cruise, including timber volume and value estimates, statistics and tree diameter distributions, was not conducted. However, if FWC requests a full timber cruise in the future, FFS will be able to complete such work with advanced notice.

Basal area estimates include all pine species 3.5 inches and above. Trees per acre estimates include all pine species seedlings and saplings and all merchantable pine trees.

Stand Descriptions& Timber Management Recommendations

<u>Shrub bog</u>

This stand/natural community is found throughout the EPWMA and is an approximately 2,874-acre area comprised of mostly cutover wet flatwoods, wet prairie, basin swamp, bottomland forest and pine plantation (see attached current natural community map). According to FNAI's 2014 natural community mapping project, this area is best described as shrub bog due to it being mostly cutover by the prior landowner and subsequent titi encroachment. It is largely an impenetrable thicket of titi (*Cyrilla sp.*), fetterbush (*Lyonia lucida*), gallberry (*Ilex glabra*), and various hardwood regeneration, with little to no natural pine regeneration. According to FWC, it is suspected that most of the pine and hardwood overstory was harvested by prior landowners primarily in the late 1980's and early 1990's, without effectively naturally or artificially regenerating the hardwood or pine overstory components. Fortunately, there are pine seed trees, primarily slash pine (*Pinus elliottii*), scattered throughout most of this area that can be utilized to naturally regenerate this stand. The area was also altered using drainage ditches and logging roads. This has resulted in the transition of the historic natural communities into shrub bog, making it very difficult to access and to distinguish original natural community boundaries.

There was little to no evidence of prescribed fire history in this stand. This stand is currently an extreme wildfire risk and hazard due to excessive fuel loading and very difficult and wet access. Wildland firefighting operations in this stand would be difficult, dangerous and costly. The FWC stated that the entire EPWMA is scheduled to be aerially prescribed burned in the 2014-2015 fiscal year. This initial burn will likely eliminate most pine and hardwood regeneration within the areas of shrub bog that end up carrying fire. During a dry period, portions of this stand could be mechanically treated for fuel reduction prior to burning. This is another example of a project timber revenue generated on EPWMA could pay for.

Based on the discussion in the paragraphs above it was determined that more useful data could be collected and that this data could be more efficiently collected following one to two prescribed burns.

Despite efforts by prior landowners to drain these areas, they are still very wet. Since it is currently difficult to determine the original natural community boundaries, it is recommended that the shrub bog be prescribed burned. Due to heavy fuel loads and risk of killing the existing seed trees throughout this stand during prescribed burning activities, it is recommended that the initial burns be cool, dormant season burns. After 2-3 burns, possibly sooner, the original natural community boundaries within the shrub bog should be clearer, making management decisions within this stand easier. Another management option in wet, isolated areas where pine regeneration is desired is aerially seeding. This would be appropriate in shrub bog areas that were originally wet flatwoods, where historically there would be more pine trees per acre, but are currently lacking seed trees for natural regeneration. Aerial seeding may also be potentially useful where seed trees die following future prescribed burns. Multiple burns would be required to reduce the current fuel load and duff layer enough to allow aerial seeding to be effective. Southern pines, particularly slash pine, are shade intolerant and require scarified soil to germinate, thus aerially seeding with current fuel loads will not be effective.

Note, slash pine seed production and viability tend to significantly drop or cease around age 70. If FWC decides to pursue natural regeneration in the shrub bog, local managers should consider aging some of the seed trees or FFS can assist with this. Natural pine regeneration in the shrub bog can be utilized for natural community restoration by adding more appropriate number of trees per acre to historic wet flatwoods, future timber production options, and by adding needles to the fine fuel component, aiding the capacity of these areas to carry prescribed fire. It is important to remember that prescribed fire will need to be excluded from areas naturally or artificially regenerated until that particular pine species can

handle fire. It generally takes slash pine eight to ten years for the bark to thicken and terminal buds to grow high enough to handle initial, cool, dormant season burns.

Stand 1 – Planted Slash Pine, 1999, 10 Acres (PSL99)

Stand 1 is an approximately 10-acre planted slash pine plantation established in 1999 by NWFWMD. This stand is adjacent to Stand 1A which will be discussed next. The reforestation map received from FWC shows it established in 2004. However, FFS bored several trees in this stand and determined it was established in 1999. It was not bedded. However, a shallow, narrow north-south drainage ditch was installed, likely by prior landowners. Stand 1 is predominately wet flatwoods with areas of mesic and scrubby flatwoods. The average BA is 75 ft^2/ac and average the TPA is 800. Average overstory height is 40 feet and the crowns are fully closed. Understory conditions vary, with gallberry, saw palmetto (*Serenoa repens*), titi, wiregrass (*Aristida stricta*), *Andropogon* sp., various blueberry (*Vaccinium* sp.) and various hardwood regeneration dominating. Midstory consists mostly of water oak (*Quercus nigra*) and other oaks (*Quercus sp.*) averaging 15 feet tall. This stand appears to have been prescribed burned at least once.

This is a slash pine site so it is recommended to thin this stand within three to five years. It is currently merchantable but lacks desirable volume per acre due to lack of height. Stand 1 is only 10 acres which is too small to attract much interest from timber buyers (low marketability). This stand should be lumped together with other merchantable stands into one timber sale which would attract more interest and better prices from buyers, generating more revenue.

Within three to five years, this stand may potentially have a BA of 100-140 ft^2/ac. It is recommended to initially thin this stand to an average BA of 60-80 ft^2/ac, utilizing a row thin with single-tree operator selection between removed rows. For example, a good option for this stand would be to remove every fourth or fifth row for equipment access and operator-select thin the residual rows to an average BA of 60-80 ft^2/ac. Single-tree selection would target removing diseased, deformed and insect infested trees to improve forest health and aesthetics, while leaving the best quality trees. Tree spacing would also be considered during thinning for understory enhancements, logging operability, aesthetics and releasing residual trees to increase net growth. Whether natural or planted, stands of pine timber naturally thin themselves so thinning by timber harvest allows one to capture that mortality, increasing net growth, while generating revenue and meeting objectives. This is preferred over thermally thinning pines which results in high mortality, poor forest health and large deforested areas that are aesthetically displeasing.

Five to ten years post-thinning, this stand will have increased in BA and could be thinned to FWC's longer-term desired BA for that particular natural community.

Stand 1A – Planted Slash Pine, 2004, 50 Acres (PSL04)

This stand was not discovered until FWC provided the NWFWMD reforestation map after FFS conducted field work. The few portions of this stand that were accessible during the assessment appeared to be shrub bog on aerial maps and when observed during field work. It is dominated by titi, dense shrub and hardwood regeneration more so than planted slash pine. Following field work, very careful inspection of high quality 2013 aerial photos show pockets where slash pine survival may be such that it could be considered a merchantable stand of pine timber, but most of this stand is nearly identical to shrub bog and may have been a failed planting. It is likely to have pockets of pre-merchantable planted and natural slash pine. The FNAI typed most of this stand as shrub bog which can be seen when the attached timber

stand and natural community maps are compared.

Caution should be used in this stand during the upcoming planned 2014 aerial prescribed burn, particularly in the areas where remnant merchantable or pre-merchantable planted slash pine occurs. It is recommended that this stand be carefully prescribed burned using an initial cool, dormant season burn to improve access so it can be further evaluated. Following an initial burn, the historic natural communities should be clearer and a better management recommendation can then be made. Following an initial burn, the wet flatwoods portions could be reforested artificially with slash pine if adequate seed trees aren't present. Mechanical and/or herbicide site preparation would be required to avoid another failed planting. All of the following or a combination of roller-drum chopping, banded or broadcast herbicide treatment (targeting woody species only), prescribed fire, and a modified V-blade planting machine could be utilized to reforest this site. If it is determined there are enough seed trees present for natural regeneration and the initial 2014-2015 burn reduces most of the heavy fuel buildup, a near-future late summer/early fall site prep burn prior to peak slash pine seed catch in October could be utilized. If fuels and duff remain heavy following the initial burn, mechanical and/or chemical site prep would be required to effectively naturally regenerate this stand. This would be a similar scenario in the shrub bog if natural pine regeneration is sought by FWC.

Stand 2 – Natural Slash Pine, 1973, 69 Acres (NSL73)

Stand 2 is an approximately 69-acre natural pine stand and is dominated by merchantable slash pine. The southern portion contains two age classes averaging to an establishment of 1973. The average BA is 70 ft^2/ac and there is an average of 320 TPA. The average overstory height is 50 feet and the crowns are mostly partially closed, with areas nearing complete closure. It is mostly wet flatwoods but possibly a mosaic of this and wetland communities. This stand appears to have had been prescribed burned at least once in recent years. However fuel loading remains medium to heavy. The southern end experienced widespread pine mortality likely caused by a hot prescribed burn and subsequent bark beetle infestation. Another one to two burns will help determine historic natural community boundaries. The understory consists of gallberry, fetterbush and hardwood regeneration. The midstory contains various bay trees (*Persea borbonia and Magnolia virginiana*), titi and other hardwood regeneration.

It is recommended to keep fire in this stand on a three to five year fire return interval. It should be burned again soon as to not lose the progress made with initial burn(s). The areas of wet flatwoods averaging higher BA could be thinned down to FWC's desired overstory density for wet flatwoods. The FFS recommends thinning by marked single-tree selection down to a BA of 40-50 ft^2/ac. This would entail marking leave or cut trees with paint prior to bidding the timber sale out to buyers. Future hot prescribed burns (thermal thinning) may eliminate opportunities for timber harvests in this stand and are not suggested. As mentioned, if carefully planned, timed, executed and monitored, a timber sale in the wet flatwoods is feasible and sustainable.

Stand 3 – Planted Longleaf Pine, 2002, 94 Acres (PLL02)

Stand 3 is an approximately 94-acre pre-merchantable planted longleaf pine stand. This stand was not bedded. It also contains scattered merchantable, natural longleaf pine and Choctawhatchee sand pine (*Pinus clausa* var. *immuginata*). Natural longleaf pine was aged at 1931 and 1992 establishment years and other age classes may be present. Some portions of this stand have uneven-aged stand characteristics (at least three age classes, at least ten years apart) while other areas are two-aged. There

is also a substantial amount of natural longleaf pine regeneration in the seedling and sapling stages. The average BA is 17 ft^2/ac and the average number of TPA is 587. The average height of the planted pine is 25 feet and the natural pine averaged 50 feet tall. The overstory is wide open to partially closed. The understory consists of various grasses, including wiregrass, scrub oak regeneration (*Quercus* sp.), saw palmetto, various herbaceous species and abundant vine species including *Smilax* sp. and yellow jessamine (*Gelsemium sempervirens*). The midstory consists of turkey oak (), planted longleaf pine, live oak (*Quercus virginiana*) and sand live oak (*Quercus virginiana* var. *geminata*). This stand is mostly longleaf pine-dominated sandhill and oak dominated scrubby flatwoods with planted longleaf pine. This stand appears to have been prescribed burned at least once, not so recently.

It is recommended to keep fire in this stand on a one to three year fire return interval. It should be burned again soon as to not lose the progress made with initial burn(s). This stand is relatively well stocked with pre-merchantable longleaf pine. It should be ready for a thinning within approximately eight to ten years, give or take two to three years. When it becomes merchantable and marketable, it should be thinned. A single-tree marked selection thinning would be ideal. It should be thinned to a BA that will allow additional natural regeneration and release of the relatively intact groundcover, ensuring an uneven-aged stand structure which is likely desirable for FWC's sandhill objectives. The impacts of a timber harvest on sandhill groundcover and existing natural longleaf pine regeneration is minimal and short-term. Again, the long-term and long list of benefits, outweigh the minor, short-term cost. A shelterwood timber management approach is recommended for long-term, uneven-aged management in longleaf pine stands. This entails thinning mature, merchantable stands down to a basal area of 30-40 ft^2/ac. Group selection (carefully planned, one to two acre clearcuts) is an option for uneven-aged management of longleaf pine in sandhills but not ideal (needlecast does not reach the interior of these patch cuts, promoting hardwood encroachment, fuel buildup and unnecessarily complicating prescribed burning objectives). Thermal thinning is not suggested.

Stand 4 – Natural Longleaf Pine, 1975, 23 Acres (NLL75)

Stand 4 is an approximately 23-acre longleaf pine stand that appears to have been naturally established around 1975 and is dominated by merchantable longleaf pine. It also contains scattered merchantable and pre-merchantable Choctawhatchee sand pine (*Pinus clausa* var. *immuginata*). Most of this stand appears to be even-aged while some areas are two-aged. There is some natural longleaf pine regeneration in the seedling and sapling stages. The average BA is 67 ft^2/ac and the average number of TPA is 494. The average height of the overstory longleaf pine is 45 feet. The overstory is partially to fully closed. The understory consists of various grasses, including wiregrass. In some areas, the groundcover is suppressed by the dense natural longleaf pine overstory and overabundance of midstory oaks. Scrub oak regeneration (*Quercus* sp.) and oak leaves, saw palmetto, *Vaccinium* sp., various herbaceous species and vine species including *Smilax* sp. and yellow jessamine (*Gelsemium sempervirens*) are also present in abundance. The midstory consists of turkey oak (Quercus laevis) and other scrub oaks such as bluejack oak (*Quercus incana*), sand live oak (*Quercus virginiana* var. *geminata*), and live oak (*Quercus virginiana*). Longleaf pine saplings are also present in the midstory. This stand is mostly longleaf pine dominated sandhill and oak dominated scrubby flatwoods with scattered natural longleaf pine. Evidence of prescribed fire was not observed.

It is recommended to prescribe burn this stand on a one to three year fire return interval starting with an initial cool, dormant season burn, transitioning to growing season. It is currently merchantable and ready for a thinning. A single-tree marked selection thinning down to 30-40 ft^2/ac would be ideal. This

residual BA will allow additional natural regeneration/age classes to establish, working towards an uneven-aged stand structure, which is likely desirable for FWC's sandhill objectives. This thinning would also provide a release of the relatively intact, yet light suppressed groundcover. A shelterwood timber management approach is recommended for long-term, uneven-aged management in longleaf pine stands, thinning mature, merchantable stands down to a basal area of 30-40 ft^2/ac. Group selection is another option for uneven-aged management of longleaf pine in sandhills but not ideal. Thermal thinning is not suggested.

Stand 5 – Planted Longleaf Pine, 2003, 60 Acres (PLL03)

Stand 5 is an approximately 60-acre pre-merchantable planted longleaf pine stand typed by FNAI as mostly scrubby flatwoods, with some mesic flatwoods. This stand was most likely not bedded. This stand was identified as planted pine after receiving the NWFWMD reforestation map, post-field work, so data was not collected in this stand. It appeared as natural, low density longleaf pine scrubby flatwoods in the field and was only evaluated visually. However, after learning it was planted (2003), it is suspected to be similar to nearby stand 3 (2002) in structure and composition, possibly with a heavier saw palmetto component. Thus, timber management recommendations may be similar to stand 3.

Table 1. Timber Stand Summary

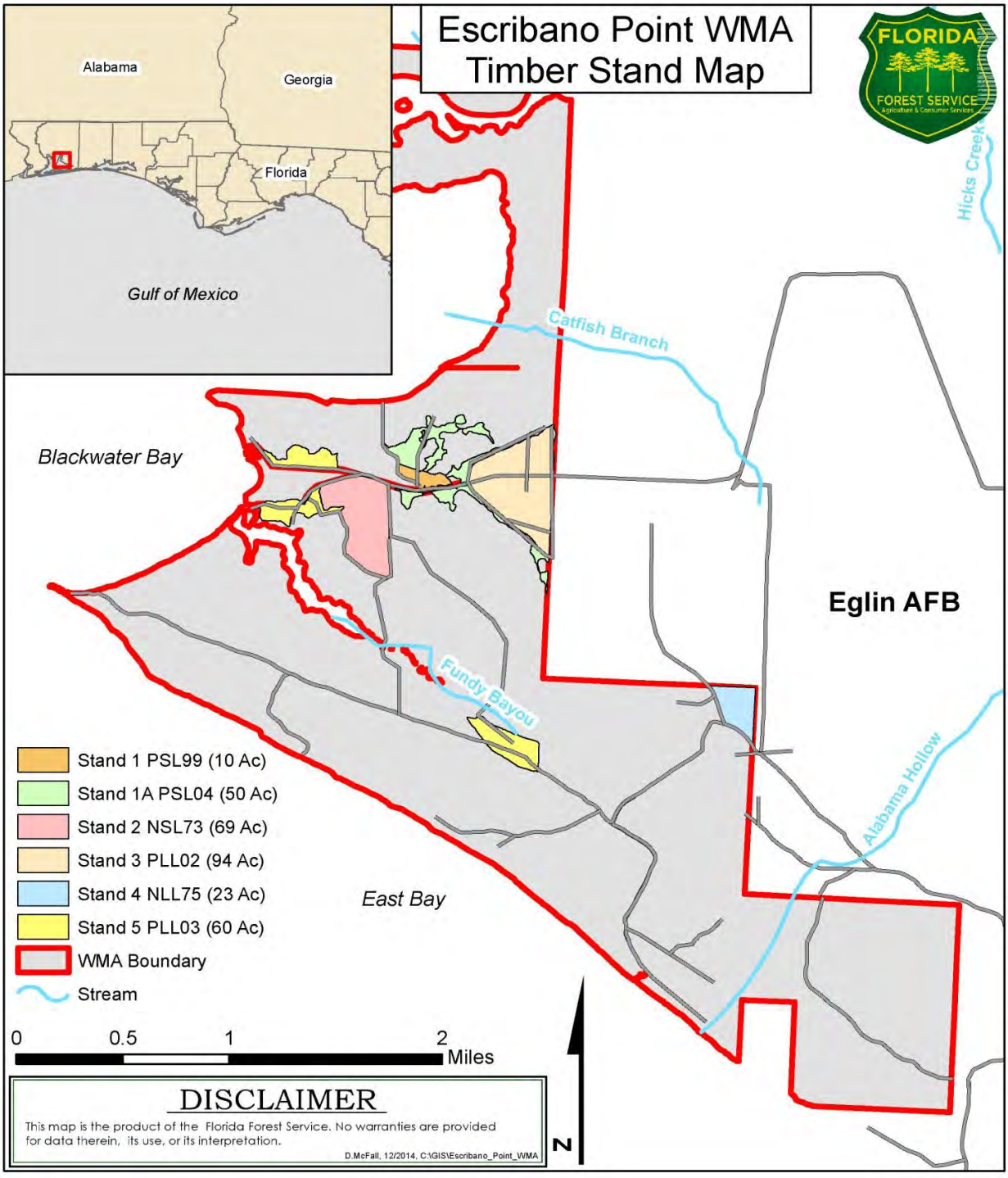
Stand	Basal Area (ft^2/ac)	Trees Per Acre	Avg. Overstory Height (ft)	Establishment Year	Merchantability (Yes/No)	Natural or Planted	Acres
1 PSL99	75	800	40	1999	Yes	Planted	10
1A PSL04	Unknown	Unknown	Unknown	2004	No	Planted	50
2 NSL73	70	320	50	1973	Yes	Natural	69
3 PLL02	17	587	38	2002	No	Planted	94
4 NLL75	67	494	45	1975	Yes	Natural	23
5 PLL03	Unknown	Unknown	Unknown	2003	No	Planted	60
						Total Acres	306
						Total Merch. Acres	**102**

Access

Choctaw Field Road is the main access road and is suitable for hauling timber, however the majority of the other secondary forest roads within the property are not suitable for this purpose and need extensive road work completed. Timber sales and revenue could potentially be utilized to get roads in a condition that can handle hauling timber and other land management work. Bridges, culverts and/or hard-surface low water crossings are needed at several locations on the south end of the property to potentially haul timber and complete the EPWMA timber assessment. An easement or agreement with Eglin would also be necessary to haul timber from some of the stands discussed in this assessment, particularly stand 4 and potential timber stands in the southeastern portion of EPWMA.

Summary

Timber management is feasible on EPWMA. There is potential and in some cases a need for timber management practices such as thinning, site preparation and reforestation on EPWMA if FWC seeks to pursue these rewarding opportunities. There is currently, at minimum, 102 acres of merchantable and marketable pine timber on EPWMA. This acreage could be bid out as a single or multiple timber sales. As current timber stands mature and others are potentially established, there will be future opportunities for additional timber harvests on EPWMA. The FFS would like to work with EPWMA in meeting FWC's timber and wildlife management objectives. There are alternatives to thermally thinning pine timber stands on EPWMA to meet these objectives. The timber management recommendations and ideas included in this assessment are just some of those many options.


Escribano Point WMA
Timber Stand Map
FLORIDA
FOREST SERVICE
Alabama
Georgia
Florida
Gulf of Mexico
Hicks Creek
Catfish Branch
Blackwater Bay
Eglin AFB
Fundy Bayou
Alabama Hollow
East Bay
Stand 1 PSL99 (10 Ac)
Stand 1A PSL04 (50 Ac)
Stand 2 NSL73 (69 Ac)
Stand 3 PLL02 (94 Ac)
Stand 4 NLL75 (23 Ac)
Stand 5 PLL03 (60 Ac)
WMA Boundary
Stream
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DISCLAIMER
This map is the product of the Florida Forest Service. No warranties are provided for data therein, its use, or its interpretation.
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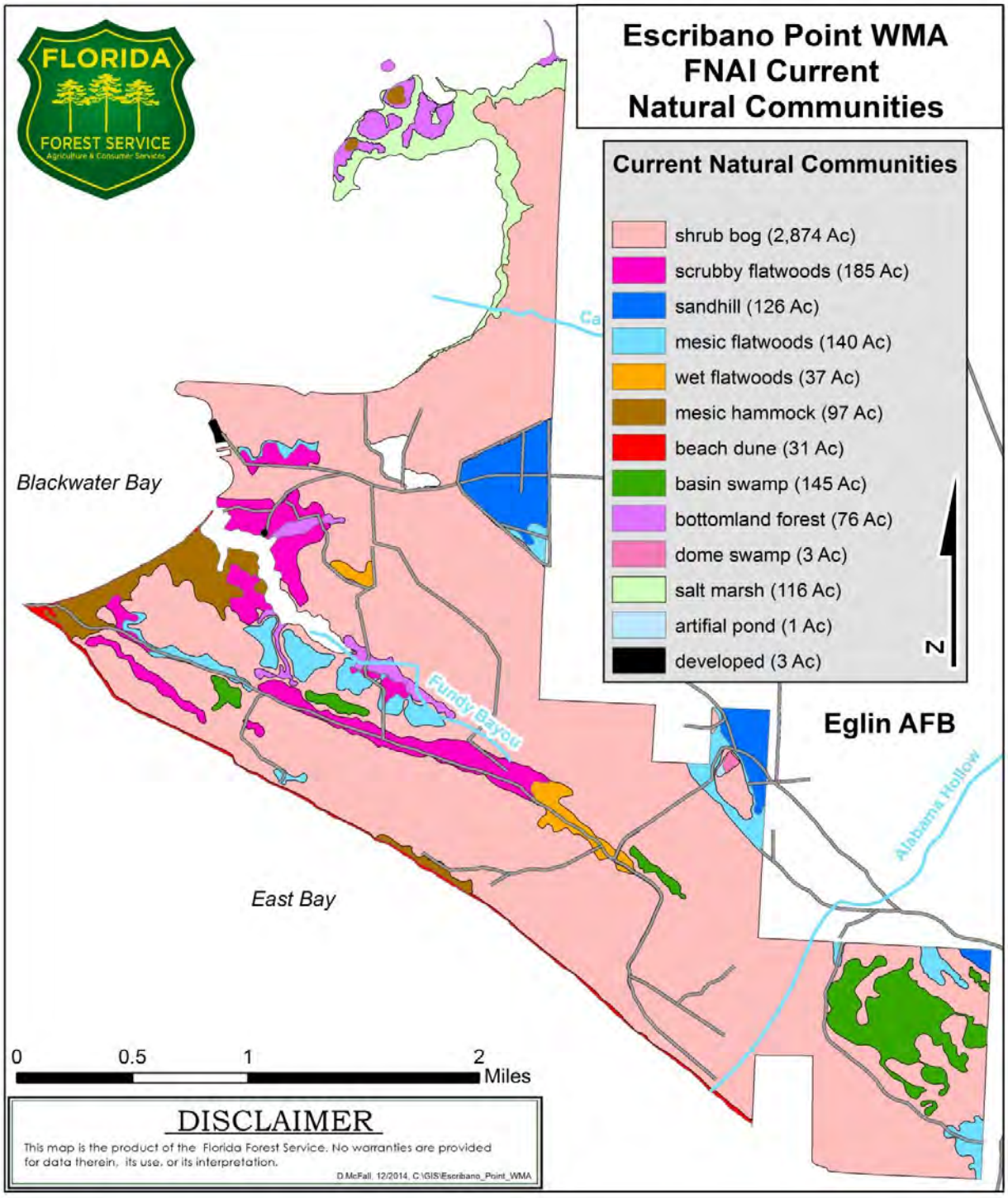
FLORIDA
FOREST SERVICE
Agriculture & Consumer Services
Escribano Point WMA
FNAI Current
Natural Communities
Current Natural Communities
shrub bog (2,874 Ac)
scrubby flatwoods (185 Ac)
sandhill (126 Ac)
mesic flatwoods (140 Ac)
wet flatwoods (37 Ac)
mesic hammock (97 Ac)
beach dune (31 Ac)
basin swamp (145 Ac)
bottomland forest (76 Ac)
dome swamp (3 Ac)
salt marsh (116 Ac)
artifial pond (1 Ac)
developed (3 Ac)
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Blackwater Bay
Fundy Bayou
Eglin AFB
Alabama Hollow
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DISCLAIMER
This map is the product of the Florida Forest Service. No warranties are provided
for data therein, its use, or its interpretation.
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13.9 EPWMA Prescribed Burn Plan

PENDING COMPLETION

13.10 EPWMA Recreation Master Plan

PENDING COMPLETION

13.11 FWC Agency Strategic Plan

Florida Fish and Wildlife Conservation Commission
Agency
Strategic Plan

2014 – 2019

FWC Agency Strategic Plan
2014 – 2019

Contents

FWC Agency Strategic Plan
2014 – 2019

Introduction

Commissioners and staff of the Florida Fish and Wildlife Conservation Commission (FWC) developed this strategic plan to focus the strength of the agency on the most essential conservation challenges while ensuring safe and enjoyable public access to Florida's fish and wildlife resources. Fundamental to the success of this plan are the principles that conservation is a public trust responsibility and that FWC will need and seek active involvement from the citizens of Florida more than ever. This plan contains Commission Policy Focal Areas, Strategic Initiatives, Themes, Goals and Strategies; and includes significant work already underway and new areas for development.

Commissioners identified Policy Focal Areas to serve as a framework for adapting to changing conditions in Florida over the next 20 years. In reviewing and discussing these areas, Commissioners and staff assessed current conditions, and Commissioners provided long-range policy guidance for high-priority needs and opportunities. Staff used the Policy Focal Area guidance along with elements from other planning efforts to develop Strategic Initiatives. These initiatives emphasize areas where FWC needs to make significant progress over the next five to 10 years. The Themes, Goals and Strategies define the work required to achieve our mission and provide the context in which the Strategic Initiatives will be achieved.

The collaborative journey to create this plan involved the Commissioners, stakeholders and staff from across the agency. To achieve our long-term vision, we will continue to work collaboratively within the agency and with our partners and stakeholders.

Commission Policy Focal Areas

- **Future of Fish and Wildlife Conservation** – Continued support of fish and wildlife conservation is crucial to the long-term well-being and availability of these resources for public enjoyment. Looking forward, two areas stand out for priority attention: managing adverse human/wildlife impacts; and keeping people connected to Florida's outdoor environment.
    - **Expanding Participation in Conservation** – Connecting people with positive fish and wildlife oriented outdoor experiences lays the foundation for a lifetime of enjoyment and support for conservation.
    - **Wildlife Conflict** – Successful wildlife species conservation and population growth can put humans and wildlife in situations of conflict. Addressing these situations and keeping the public's experiences with wildlife positive will help to maintain support for conservation.

- **Habitat Conservation and Management** – The future of fish and wildlife resources is dependent upon the quality and quantity of habitat available to maintain species populations and the public's accessibility to those resources.
    - **Priorities for habitat conservation** – Given limited resources, it is important to focus future conservation measures on habitat most critical to sustaining healthy and diverse fish and wildlife populations.
    - **Management – public/private** – To ensure the long-term sustainability of fish and wildlife resources, FWC will need to actively engage on public and private lands to help adapt habitat management practices to address the new and dynamic challenges facing Florida's fish and wildlife species.
    - **Sustainable access to fish and wildlife resources and public lands** – Providing public access to fish and wildlife resources is a crucial component of the public trust responsibilities of FWC. To accomplish this responsibility FWC will continue to work with other public land management partners to foster, support and facilitate safe and sustainable public access.

- **Innovative Management Tools** – Developing new and innovative ways to manage fish and wildlife resources is vital to effective conservation as pressures, threats and opportunities change in Florida. Given the pressures on marine fisheries and the importance of private lands to conservation, these two areas were chosen as initial priorities.
    - **Marine Fish Management** - Size limit, bag limits, and seasons are traditional tools used to manage marine species. Working with partners and stakeholders,

FWC will seek innovative ways to apply traditional tools and develop new tools and techniques that achieve conservation more efficiently and effectively with less complexity and less regulatory burden for those who utilize and enjoy these resources.

- **Incentives for Private Lands** – A significant portion of Florida's undeveloped landscape is in private ownership. Many of these private landowners have successfully managed their lands for generations in ways that support fish and wildlife and the habitat they depend upon. Development of effective conservation partnerships with and creative conservation incentives for private landowners will be essential to maintaining the state's fish and wildlife diversity.

Strategic Initiatives

- **Running the Business** – Establish an internal infrastructure (team and process) that identifies the areas of business operations and practices that represent high risk, prioritize them and modify them to address risks.

- **Imperiled Species Management Plan** – Complete the Imperiled Species Management Plan and begin implementing prioritized species actions and integrated conservation strategies by the end of 2015.

- **Expand Participation in Conservation** – Increase conservation participation among youth and families representing Florida's diverse population by expanding partnerships to implement FYCCN and other programs that promote fishing, hunting, boating, wildlife viewing, shooting sports, and conservation appreciation.

- **Conservation through Innovation** – Implement a comprehensive approach, using innovative conservation tools and strategies, focusing on incentives for private lands and marine fisheries management. Strategies may include enhancing partnerships, incentives, and streamlining regulations.

- **Conflict wildlife** – Ensure continued support and appreciation for fish and wildlife by implementing an integrated programmatic approach across FWC to minimize adverse impacts associated with native and non-native fish, wildlife and plants. Successful efforts should minimize human health and safety, environmental, social and economic impacts.

- **Boating as a Gateway to Conservation and the Outdoors** – Strengthen and promote the conservation connections of boating while protecting people and natural resources, and improving boating related opportunities.

Themes, Goals, Strategies and Objectives

Key for coding at end of Objectives

- **[#]** – current reference number for each unique objective. *(Note – one objective appears under more than one strategy)*
- [o-ref #] – *indicates the original unique reference number for each objective developed by objective planning teams. (Note – one objective appears under more than one strategy)*
- *[n-ref #] – indicates the unique reference number for a new objective added after the Objective Planning Teams completed their assignment.*
- [OPT top 10] – *indicates objective was chosen by an Objective Planning Team as one of their 'top 10' objectives.*
- [RLT rank] – *indicates the rank of the objective based on categorization, by five Regional Leadership Teams, of objective into high, medium and low. Rank ranges from 1 to 11, with 1 being the highest possible rank. 1 – all five RLTs ranked objective high. 2 – four RLT ranked the objective high and one RLT ranked it medium. 3 – three RLT ranked the objective high and two ranked it medium.... all the way down to 11 – all five RLTs ranked the objective low.*
- *[OPT #] – Objective Planning Team that originally drafted the objective.*

Theme One – Florida's Fish and Wildlife Populations and Their Habitats

Goal 1: Ensure the sustainability of Florida's fish and wildlife populations.

Strategies:

1. Manage listed species so they no longer meet Florida's endangered and threatened listing criteria.

    a. Complete the Imperiled Species Management Plan and initiate implementation of its prioritized species actions and integrated conservation strategies by the end of 2018. **[#1]** [o-ref #1] [OPT top 10] [RLT rank 1] [OPT #1]

    b. By the end of 2018, assess and prioritize FWC's participation in the recovery of federally listed species. **[#2]** [o-ref #2] [RLT rank 9] [OPT #1]

2. Manage species to keep them from meeting Florida's endangered and threatened listing criteria.

    a. By the end of 2018, all staff are aware of the State Wildlife Action Plan (SWAP), and as appropriate incorporate SWAP objectives into their work to support the integration of SWAP across FWC. **[#3]** [o-ref #4] [OPT top 10] [RLT rank 8] [OPT #1]

    b. By the end of 2019, increase resources of Florida Wildlife Legacy Initiative by 15% (e.g., funding and staff time) to support the implementation of the current 5 goals of the State Wildlife Action Plan, which includes actions to halt or reverse species declines. **[#4]** [o-ref #3] [RLT rank 10] [OPT #1]

3. Anticipate and address fish and wildlife species' conservation needs in light of adaptation to long-term environmental changes.

    a. By the end of 2019, identify and prioritize information gaps, and initiate development and implementation of fish, wildlife and habitat conservation plans to address changes to critical habitats from long-term environmental changes and short term changes that may result from natural or manmade catastrophic events. **[#5]** [o-ref #9] [OPT top 10] [RLT rank 9] [OPT #1]

4. Develop, acquire and apply the appropriate biological and sociological science to inform fish and wildlife conservation decisions.

    a. By the end of 2019, 100% of appropriate staff recognize when social science data are needed and know how to obtain assistance with identifying and collecting data, and use social science data appropriately to develop management actions. **[#6]** [o-ref #18] [OPT top 10] [RLT rank 8] [OPT #1]

    b. By the end of 2019, ensure all staff have access to all biological and sociological science relevant to their roles and responsibilities. **[#7]** [o-ref #16] [RLT rank 6] [OPT #1]

    c. By the end of 2019, have adaptive mechanisms in place that ensure 95% of research and monitoring activities effectively address priority management needs and information is provided to decision makers in a timely manner. **[#8]** [o-ref #8] [OPT top 10] [RLT rank 3] [OPT #1]

    d. By end of 2019, evaluate ongoing species and habitat monitoring efforts, identify threats to species and recommend enhancements to monitoring programs that improve our ability to accurately assess status of populations. **[#9]** [o-ref #5] [OPT top 10] [RLT rank 4] [OPT #1]

e. By the end of 2018, investigate, develop and implement techniques to foster innovation that will improve our ability to achieve species conservation. **[#10]** [o-ref #17] [RLT rank 11] [OPT #1]

f. By the end of 2019, develop and implement science-based risk assessments that consider stakeholder input, and have them embedded in management decision protocols to guide and prioritize management actions. **[#11]** [o-ref #19] [RLT rank 7] [OPT #1]

g. By the end of 2019, ensure that 100% of appropriate staff will understand the relevance of data standards and management, know when to involve the data standard and advisory implementation group in their projects and programs, and know of and how to access existing active databases that can inform conservation actions including monitoring, management decision making, stakeholder collaboration, and outreach. **[#12]** [n-ref #39] (Note – new objective, not ranked)

h. By the end of 2018 ensure that 100% of appropriate FWC employees are aware of biostatistical support services, recognize when those services are necessary, and know how to obtain assistance so that their research and monitoring informs conservation actions appropriately. **[#13]** [n-ref #40] (Note – new objective, not ranked)

i. By the end of 2019, 100% of appropriate staff will recognize when geographic information system (GIS) data and analyses are needed and how to obtain assistance with identifying and locating, collecting and entering, analyzing, and displaying GIS data appropriately to inform conservation actions including management decision making, stakeholder collaboration, and outreach. **[#14]** [n-ref #41] (Note – new objective, not ranked)

5. Inform and guide partners regarding how their regulations, policies, procedures and other actions affect fish and wildlife conservation.

   a. By the end of 2018, develop and implement an adaptive protocol to engage, assist and influence other regulatory agencies and other partners to ensure they consider how their regulations, rules, policies, procedures and other actions impact fish and wildlife conservation. **[#15]** [o-ref #26] [OPT top 10] [RLT rank 2] [OPT #2 & #3]

6. Protect fish and wildlife species through effective outreach and enforcement.

a. By the end of 2019, develop patrol expectations for FWC Law Enforcement staff that includes outreach and responsive enforcement to promote compliance of state and federal regulations for fish, wildlife and protected species. **[#16]** [n-ref #95] (Note – new objective, not ranked)

b. By the end of 2019, develop initiatives to enhance habitat and the protection of state lands through interagency cooperation and law enforcement activities. **[#17]** [n-ref #96] (Note – new objective, not ranked)

c. By the end of 2019, enhance intelligence and investigative capabilities to more effectively address resource protection needs and trends. **[#18]** [n-ref #97] (Note – new objective, not ranked)

d. By the end of 2019, work with landowners to develop and improve responsive resource and cultural protection for private lands. **[#19]** [n-ref #98] (Note – new objective, not ranked)

Goal 2: Ensure sufficient habitats exist to support healthy and diverse fish and wildlife populations.

Strategies:

1. Use science to determine quantity, quality and location of the habitats most critical to sustain healthy and diverse fish and wildlife populations.

    a. By the end of 2017, review and synthesize all available land-cover (aquatic and terrestrial) assessments (e.g., Conservation Blueprint); identify and prioritize for conservation and management, those areas that are most critical to sustaining healthy fish and wildlife populations in Florida. **[#20]** [o-ref #10] [OPT top 10] [RLT rank 4] [OPT #1]

    b. By the end of 2018, identify habitat conditions necessary to sustain healthy and diverse populations of fish and wildlife in areas most critical to sustaining those populations. **[#21]** [o-ref #11] [RLT rank 8] [OPT #1]

2. Protect lands and waters critical to sustaining healthy and diverse fish and wildlife populations through diverse incentive programs.

    a. By the end of 2019, develop and initiate adaptive plans to secure and maintain lands and waters critical (considering acreage, distribution and connectivity) to sustaining healthy fish and wildlife populations in Florida through fee-simple or less-than-fee-simple acquisition, incentive-based conservation or other measures. **[#22]** [o-ref #6] [OPT top 10] [RLT rank 1] [OPT #1]

b. Beginning in 2017, and each year thereafter, maintain and enhance existing and build new partnerships and agreements with government agencies and Non-Governmental Organizations that facilitate collaborative efforts in providing fish and wildlife habitats. **[#23]** [o-ref #15] [RLT rank 5] [OPT #1]

c. By January 2018, identify, develop and assess incentives, assurances and other methods for private landowners to enhance sustainable conservation through revenue generation and conservation value on their lands. **[#24]** [o-ref #14] [RLT rank 10] [OPT #1]

3. Manage habitats to sustain healthy and diverse fish and wildlife populations.

a. By the end of 2019, identify lands and waters in need of enhanced management that are necessary to sustain healthy and diverse populations of fish and wildlife, and develop and initiate adaptive plans to meet those needs. **[#25]** [o-ref #12] [OPT top 10] [RLT rank 1] [OPT #1]

b. By the end of 2019, through outreach, technical assistance and incentives increase by 10% the number of public and private landowners managing and enhancing their lands for fish and wildlife conservation. **[#26]** [o-ref #13] [OPT top 10] [RLT rank 6] [OPT #1]

Theme Two – Interactions with Fish and Wildlife, including Fishing, Hunting, Boating and Wildlife Viewing Opportunities

Goal 1: Provide residents and visitors with quality fishing, hunting, boating and wildlife viewing opportunities that meet their needs and expectations while providing for the sustainability of those natural resources.

Strategies:

1. Manage fish and wildlife populations to provide sustainable fishing, hunting and wildlife viewing opportunities.

    a. By the end of 2019, establish key metrics for focal species, critical habitats and user-related activities that will be used to evaluate, guide, and refine management efforts to sustain fishing, hunting and wildlife viewing opportunities. **[#27]** [o-ref #21] [OPT top 10] [RLT rank 7] [OPT #2]

2. Develop and maintain widely available, diverse and accessible fishing, hunting, boating and wildlife viewing opportunities that meet the needs and expectations of residents and visitors while providing for the sustainability of those resources and emphasizing partnerships with both public and private landowners.

    a. By the end of 2018, develop and implement an adaptive protocol to engage, assist and influence other regulatory agencies and other partners to ensure they consider how their regulations, rules, policies, procedures and other actions impact fishing, hunting, boating and wildlife viewing. **[#28]** [n-ref #99] (Note – new objective, not ranked)

    b. By the end of 2019, develop and implement an adaptive process to coordinate with partners on FWC management actions concerning fishing, hunting, boating and wildlife viewing. **[#29]** [o-ref #55] [RLT rank 10] [OPT #3

    c. By the end of 2019, based on understanding the attitudes and motivations of public and private landowners, establish, maintain or enhance incentives and other programs in collaboration with other agencies that result in manageable, sustainable and widely available fishing, hunting, boating and wildlife viewing opportunities that meet the expectations of user groups and eliminate duplicative or ineffective FWC programs. **[#30]** [o-ref #22] [OPT top 10] [RLT rank 3] [OPT #2]

    d. By the end of 2017, ensure user conflicts are minimized when designing fishing, hunting, boating and wildlife viewing opportunities. **[#31]** [o-ref #43] [RLT rank 10] [OPT #2]

3. Recruit and manage sustainable levels of resident and visitor participation in fishing, hunting, boating and wildlife viewing.

    a. By the end of 2019, develop, implement and evaluate a promotional and marketing strategy that highlights sustainable fishing, hunting, boating and wildlife viewing opportunities unique to Florida to increase the demographic diversity of users and to either maintain or increase participation of current and new users per category based on State and National Surveys (e.g., the U.S. Fish and Wildlife Service's 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation). **[#32]** [o-ref #42] [OPT top 10] [RLT rank 6] [OPT #2]

4. Provide targeted fishing, hunting, boating and wildlife viewing programs for youth, the disabled and veterans.

    a. By the end of 2018, develop and implement standardized youth conservation curricula designed to provide enjoyable experiences that create a conservation stewardship ethic while teaching safe fishing, hunting, boating and wildlife viewing skills. **[#33]** [o-ref #30] [OPT top 10] [RLT rank 2] [OPT #2 & #3]

    b. By the end of 2018, develop or maintain partnerships with state or nationally recognized youth organizations for the development of programs that foster youth interest in fishing, hunting, boating or wildlife viewing. **[#34]** [o-ref #44] [RLT rank 10] [OPT #2]

    c. By the end of 2019, provide and promote fishing, hunting, boating and wildlife viewing programs for veterans and the disabled. **[#35]** [n-ref #56] (Note – new objective, not ranked)

5. Develop, acquire and use the appropriate biological and sociological science necessary to provide sustainable fishing, hunting, boating and wildlife viewing opportunities that meet the needs and expectations of user groups while providing for the sustainability of those resources.

    a. By the end of 2019, use the social sciences to better understand attitudes, values and motivations that influence the types of experiences anglers, hunters, boaters and wildlife viewers prefer, and verify if we are meeting their expectations while safeguarding the resources. **[#36]** [o-ref #37] [OPT top 10] [RLT rank 3] [OPT #2]

    b. By the end of 2019, assess public and private landowners' attitudes and motivations for enrolling their lands in the Wildlife Management Area system, and refine and promote incentive programs that strengthen partnerships and contribute to either an increase in or no net loss of acreage open to residents

and visitors for fishing, hunting, boating and wildlife viewing. **[#37]** [o-ref #38] [RLT rank 11] [OPT #2]

c. By the end of 2019, develop and implement an adaptive process to incorporate biological and sociological information in management decisions involving fishing, hunting, boating and wildlife viewing activities. **[#38]** [o-ref #20] [OPT top 10] [RLT rank 4] [OPT #2]

Goal 2: Enhance the safety and outdoor experience of those who hunt, fish, boat and view wildlife.

1. Provide and promote opportunities for residents and visitors to learn safety practices for fishing, hunting, boating and wildlife viewing.

   a. By the end of 2019, create, enhance and maintain courses that incorporate how to effectively and safely participate in fishing, hunting, boating and wildlife viewing opportunities in Florida. **[#39]** [o-ref #29] [RLT rank 8] [OPT #2]

   b. By the end of 2018, develop and implement standardized youth conservation curricula designed to provide enjoyable experiences that create a conservation stewardship ethic while teaching safe fishing, hunting, boating and wildlife viewing skills. **[#33]** [o-ref #30] [OPT top 10] [RLT rank 2] [OPT #2 & #3]

   c. By the end of 2019, develop and implement an education and outreach campaign to communicate to residents and visitors how fishing, hunting, boating and wildlife viewing can be safe and compatible with each other. **[#40]** [o-ref #31] [RLT rank 11] [OPT #2]

2. Enhance the boating safety and waterway experience of residents and visitors through improved access, management, education and enforcement.

   a. By the end of 2016, and annually thereafter, update boating education programs and boating safety material with information learned from boating accident statistics and effectively provide this information to residents and visitors. **[#41]** [o-ref #34] [RLT rank 10] [OPT #2]

   b. By the end of 2016, and annually thereafter, create or enhance at least 10 boating access points and track public boating access improvements. **[#42]** [o-ref #32] [RLT rank 9] [OPT #2]

   c. By the end of 2019, and every year thereafter, review at least 10% of all state-established restricted access zones and associated markers to determine which are still needed and applicable for waterway management and recommend

removal for those that are no longer needed. **[#43]** [o-ref #33] [RLT rank 10] [OPT #2]

d. By the end of 2017, improve Florida's boating waterway experience and safety by creating and implementing a plan for prioritized removal of derelict vessels that are designated an immediate public safety or navigation hazard. **[#44]** [o-ref #35] [RLT rank 9] [OPT #2]

3. Promote Florida's outdoor environment as a safe and healthy recreational option for residents and visitors.

   a. By the end of 2019, develop and implement a promotional campaign to encourage residents and visitors to explore Florida's natural resources as a safe and healthy recreational option. **[#45]** [n-ref #60] (Note – new objective, not ranked)

   b. By the end of 2019, determine the types of outdoor opportunities that appeal to the wide variety of Florida's residents and visitors, and develop and promote outdoor programs that provide for those opportunities. **[#46]** [n-ref #65] (Note – new objective, not ranked)

4. Address the growing disconnect between people and nature by marketing and providing opportunities and education for diverse age, race, gender, ethnic and other demographic sectors.

   a. By the end of 2019, develop and promote education and outdoor opportunities designed to encourage a stronger connection between nature and people of diverse age, race, gender, ethnic and other demographic sectors. **[#47]** [n-ref #84] (Note – new objective, not ranked)

Goal 3: Use minimal regulations to manage sustainable fish and wildlife populations, manage access to fish and wildlife resources, and protect public safety.

Strategies:

1. Continually evaluate proposed and existing regulations, based on resource management benefits, public safety concerns, and economic and social impacts, to improve or eliminate regulations as warranted.

   a. By the end of 2019, develop and implement standards to collect, analyze and integrate economic and sociological information with the rule development process. **[#48]** [o-ref #28] [RLT rank 9] [OPT #2]

b. By the end of 2018, develop and implement an adaptive process to evaluate new and existing fish, wildlife and public safety regulations, that includes cross-Division and Office and stakeholder input, to determine whether they are still appropriate, effective and enforceable and by the end of 2019 improve or repeal regulations as warranted. **[#49]** [o-ref #7] [RLT rank 6] [OPT #1 & #2]

2. Coordinate with partners and stakeholders to ensure that appropriate authorities and regulations exist to maintain sustainable fish and wildlife populations.

    a. By the end of 2019, develop and implement performance measures for appropriate staff to ensure coordination with partners and stakeholders during the creation and/or revision of the authorities and regulations necessary to maintain sustainable fish and wildlife populations, and during the repeal of those regulations not needed. **[#50]** [o-ref #23] [RLT rank 11] [OPT #2]

3. Implement and enforce regulations in an informative, proactive and influential manner to enrich resident and visitors' outdoor experience while safeguarding the natural resources.

    a. By the end of 2019, develop and implement outreach programs and other methods to increase awareness and support of rules intended to help sustain fish and wildlife populations and their safe use. **[#51]** [o-ref #24] [RLT rank 10] [OPT #2]

    b. Identify and implement strategies to increase the number of proactive contacts between FWC law enforcement officers and those who hunt, fish, boat and view fish and wildlife by 2% annually. **[#52]** [o-ref #36] [OPT top 10] [RLT rank 8] [OPT #2]

    c. By the end of 2018, develop and implement programs for law enforcement agencies to discuss FWC regulations and enforcement approaches to ensure consistent enforcement of fish, wildlife and boating regulations. **[#53]** [o-ref #25] [RLT rank 9] [OPT #2]

Goal 4: Minimize adverse environmental, social, economic and health and safety impacts from fish, wildlife and plants that are known, or have a potential, to cause adverse impacts.

Strategies:

1. Manage species and their habitats as well as species and human interactions to eliminate or reduce the adverse environmental, social, economic and health and safety impacts from native and non-native fish, wildlife, and plants.

a. By the end of 2019, develop a risk assessment process and necessary research and monitoring programs that will be used to examine potential environmental, social, economic, human health and safety risks posed by fish, wildlife and plants. **[#54]** [o-ref #68] [RLT rank 11] [OPT #1]

b. Beginning in 2019, develop and implement adaptive plans designed to proactively address adverse environmental, social, economic and health and safety impacts from fish, wildlife and plant species. **[#55]** [o-ref #62] [OPT top 10] [RLT rank 5] [OPT #1]

2. Effectively communicate to residents, visitors and businesses how to be safe and act responsibly when interacting with or possessing fish, wildlife and plants.

a. By January 2019, evaluate residents and visitors' attitudes, beliefs, motivations and values regarding adverse environmental, social, economic and health and safety impacts of native and non-native fish, wildlife and plants and periodically monitor residents and visitors' understanding of these topics. **[#56]** [o-ref #61] [RLT rank 11] [OPT #3]

b. By the end of 2019, develop and implement FWC-coordinated and adaptive educational campaigns for targeted audiences to disseminate information about potential environmental, social, economic and health and safety risks and how to act responsbly when interacting with fish, wildlife and plants. **[#57]** [o-ref #63] [OPT top 10] [RLT rank 9] [OPT #3]

3. Manage captive and non-native wildlife movement and trade through proactive and responsive enforcement, regulation and education, with an emphasis on species that pose a high risk to our native fish and wildlife.

a. By end of 2017, evaluate FWC's Law Enforcement inspection programs and identify gaps and needs for those programs in order to minimize risks to human health and safety and the environment from fish, wildlife and plants. **[#58]** [o-ref #67] [RLT rank 10] [OPT #1]

b. By January 2018, develop, distribute and promote FWC guidance that effectively demonstrates how to properly handle and manage captive fish and wildlife. **[#59]** [o-ref #66] [RLT rank 10] [OPT #3]

c. By the end of 2019, develop and implement improvements to managing captive and non-native wildlife movement and trade through proactive and responsive enforcement, regulation and education, with an emphasis on species that pose a high risk to human health and safety or native fish and wildlife. **[#60]** [n-ref #100] (Note – new objective, not ranked)

4. Enhance partnerships to address adverse environmental, social, economic and health and safety impacts from fish, wildlife and plants and ensure a consistent and integrated approach with FWC.

    a. By January 2018, develop and implement an adaptive, integrated approach to strengthen participation and coordination with partners and volunteers to reduce adverse environmental, social, economic and health and safety impacts of fish, wildlife, and plants. **[#61]** [o-ref #64] [RLT rank 10] [OPT #3]

Theme Three – Sharing Responsibility for Fish and Wildlife Conservation and Management with an emphasis on developing conservation values in our youth

Goal 1: Ensure current and future generations support fish and wildlife conservation

Strategies:

1. Expand and promote the Florida Youth Conservation Centers Network through leveraging FWC programs and staff, and developing public and private partnerships and sponsorships.

    a. By January 2018, all staff will be aware of the Youth Conservation Initiative and all programs will provide support for youth conservation programs to the greatest extent feasible. **[#62]** [o-ref #46] [OPT top 10] [RLT rank 8] [OPT #3]

    b. By January 2019, develop and implement an adaptive engagement process to expand and strengthen partnerships, improve communications and provide more opportunities for partners to support the Youth Conservation Initiative and programs. **[#63]** [o-ref #48] [RLT rank 7] [OPT #3]

    c. By January 2019, expand the network of youth conservation centers to a combined minimum of 400 executed partnership agreements or sponsorships with public and private partners. **[#64]** [o-ref #45] [OPT top 10] [RLT rank 8] [OPT #3]

    d. By the end of 2019, develop and implement promotional campaigns that specifically target urban, suburban and rural communities to attract youth and families to youth conservation centers and programs to encourage them to participate in outdoor conservation-based activities. **[#65]** [o-ref #49] [RLT rank 7] [OPT #3]

2. Develop and deliver standardized youth conservation curricula and fishing, hunting, boating and wildlife viewing outdoor activity programs, and assist with adapting programs and curricula to meet the needs of diverse communities.

    a. By the end of 2018, develop and implement standardized youth conservation curricula designed to provide enjoyable experiences that create a conservation stewardship ethic while teaching safe fishing, hunting, boating and wildlife viewing skills. **[#33]** [o-ref #30] [OPT top 10] [RLT rank 2] [OPT #2 & #3]

b. By the end of 2019, develop and implement a plan to assist stakeholders to adapt components of the youth conservation curricula to address the socially and culturally diverse lifestyles of Florida's residents and visitors. **[#66]** [o-ref #47] [RLT rank 10] [OPT #3]

3. Foster stewardship and shared responsibility for fish and wildlife conservation through conservation education programs.

    a. By January 2018, develop and implement an adaptive plan to promote conservation education programs as a way to foster stewardship and shared responsibility for fish and wildlife conservation. **[#67]** [o-ref #50] [OPT top 10] [RLT rank 6] [OPT #3]

4. Expand marketing and outreach to reach diverse audiences, and engage all staff in priority outreach initiatives.

    a. By end of 2019, develop and implement an adaptive plan to expand marketing and outreach programs to reach diverse audiences, and engage all staff in priority outreach initiatives. **[#68]** [n-ref #101] (Note – new objective, not ranked)

Goal 2: Ensure residents, visitors, stakeholders, and partners are engaged in the processes of developing and implementing conservation programs.

Strategies:

1. Foster a common vision among partners and the FWC to maintain and enhance fish and wildlife populations and their habitats through interagency coordination, mutually beneficial goals and initiatives.

    a. By January 2018, work with partners to create a common vision to improve and maintain optimal species populations and their habitats through interagency coordination and mutually beneficial goals and initiatives. **[#69]** [o-ref #54] [RLT rank 7] [OPT #3]

2. Engage residents, visitors, stakeholders and partners to understand their perspectives, develop and implement conservation programs, and implement fishing, hunting, boating and wildlife viewing management activities.

    a. By the end of 2017, develop and implement a FWC-wide adaptive process to determine and understand resident, visitor, stakeholder and partner needs, attitudes, beliefs, motivations and values regarding fish and wildlife

conservation, fishing, hunting, boating and wildlife viewing, and monitor trends at appropriate intervals. **[#70]** [o-ref #51] [OPT top 10] [RLT rank 5] [OPT #3]

b. By the end of 2019, each Division and Office will assess, develop and implement coordinated and adaptive communication plan(s) to increase FWC's credibility and resident, visitor, stakeholder and partner's trust in FWC by providing education about; 1) FWC's role in protecting and conserving fish and wildlife and their habitats, 2) the value of fish and wildlife conservation, 3) how FWC programs benefit current and future generations and 4) the conservation needs of fish and wildlife. **[#71]** [o-ref #52] [OPT #5] [RLT rank 9]

c. By the end of 2019, each Division and Office will create and use coordinated and adaptive approaches to efficiently and effectively engage residents, visitors, stakeholders and partners in developing and implementing fishing, hunting, boating, wildlife viewing and conservation programs to ensure FWC is fulfilling its public trust responsibilities. **[#72]** [o-ref #53] [RLT rank 8] [OPT #3]

3. Use citizen science to enhance conservation programs.

a. By the end of 2019, fully implement an adaptive process to identify and implement fish and wildlife conservation activities that can be enhanced with citizen science and stewardship volunteers. **[#73]** [n-ref #102] (Note – new objective, not ranked)

b. By the end of 2019, working with partners, implement a volunteer support infrastructure to support citizen science and stewardship volunteers. **[#74]** [n-ref #103] (Note – new objective, not ranked)

Goal 3: Increase opportunities for residents and visitors, especially youth, to actively support and practice fish and wildlife conservation stewardship.

Strategies:

1. Inform residents and visitors about conservation stewardship and encourage their active involvement in achieving conservation of fish and wildlife.

a. By the end of 2019, develop and implement an adaptive campaign to inform residents and visitors about conservation stewardship, how they can be actively involved in achieving conservation of fish and wildlife, including how compliance with regulations benefits conservation. **[#75]** [o-ref #57] [OPT top 10] [RLT rank 5] [OPT #3]

2. Provide and promote opportunities for residents and visitors, especially youth, to participate in conservation stewardship activities, including FWC volunteer opportunities.

    a. By January 2019, all FWC public and youth programs will provide and promote at least one conservation stewardship activity. **[#76]** [o-ref #58] [RLT rank 11] [OPT #3]

    b. By January 2019, promote conservation stewardship and fishing, hunting, boating and wildlife viewing activities in all FWC youth education programs and provide those programs to all Florida Youth Conservation Centers Network partners and other stakeholders. **[#77]** [o-ref #59] [RLT rank 6] [OPT #3]

    c. By the end of 2019, increase by 15% the number of FWC volunteers. **[#78]** [n-ref #104] (Note – new objective, not ranked)

    d. By the end of 2019, increase by 15% the number of staff utilizing volunteers to assist with FWC programs. **[#79]** [n-ref #105] (Note – new objective, not ranked)

Goal 4: Encourage communities to conserve lands and waters critical to sustaining healthy and diverse fish and wildlife populations.

1. Provide communities with the necessary assistance to help them obtain the social and economic benefits of local conservation lands.

    a. By December 2018, develop and implement an adaptive plan to efficiently and effectively assist communities in realizing the social and economic benefits of nearby areas that are managed for fish and wildlife. **[#80]** [o-ref #75] [OPT top 10] [RLT rank 8] [OPT #4]

2. Provide residents and visitors with relevant information on the social and economic benefits of conservation, fishing, hunting, boating, and wildlife viewing.

    a. By the end of 2019, appropriate staff will recognize how residents and visitors receive information and use this knowledge to efficiently and effectively disseminate current and relevant information about the social and economic benefits of fishing, hunting, boating, wildlife viewing and wildlife conservation, to reach all demographics of the public. **[#81]** [o-ref #76] [OPT top 10] [RLT rank 2] [OPT #4]

    b. By January 2019, identify priority data needs regarding the social and economic benefits of wildlife conservation, fishing, hunting, boating and wildlife viewing and implement appropriate methods to fill data gaps with up-to-date information. **[#82]** [o-ref #79] [OPT top 10] [RLT rank 8] [OPT #4]

3. Support community events and programs that promote fish and wildlife conservation.

    a. By July 2018, each Division and Office will develop and implement adaptive plans to efficiently and effectively support external events and programs that enhance and/or support wildlife conservation and/or increase fishing, hunting, boating and wildlife viewing participation. **[#83]** [o-ref #71] [RLT rank 9] [OPT #3]

Theme Four – Responsive Organization and Quality Operations

Goal 1: Integrate our commitment to benefit the community and enhance the economy through our conservation efforts and public service.

Strategies:

1. Identify and implement ways to support Florida businesses and job growth while managing fish and wildlife.

    a. By the end of 2019, each Division and Office will develop and implement adaptive plans to support Florida businesses and job growth while effectively managing fish and wildlife. **[#84]** [o-ref #69] [RLT rank 10] [OPT #4]

2. Identify and promote opportunities for staff to benefit local communities through participation in approved activities where FWC resources can be used (for example, the Florida State Employees' Charitable Campaign, the Guardian ad Litem Program, mentoring programs, FWC Disaster Response Teams, and American Red Cross Disaster Services).

    a. By the end of 2019, develop and implement an adaptive plan for FWC to efficiently and effectively maintain current level of, identify new and promote opportunities for staff to benefit local communities through participation in approved activities where FWC resources can be used (for example, the Florida State Employees' Charitable Campaign, the Guardian ad Litem Program, mentoring programs, FWC Disaster Response Teams, and American Red Cross Disaster Services). **[#85]** [o-ref #70] [RLT rank 11] [OPT #4]

3. Provide residents and visitors with reliable and current information on Florida's fish and wildlife.

    a. By the end of 2019, appropriate staff will recognize how residents and visitors receive information and use this knowledge to efficiently and effectively disseminate current and relevant information about Florida's fish and wildlife to reach all demographics of residents and visitors. **[#86]** [n-ref #27] [OPT top 10] [RLT rank 2] [OPT #4]

4. Continue to attract visitors by providing top-quality fishing, hunting, boating and wildlife viewing opportunities.

    a. By the end of 2017 and annually thereafter, FWC, or in cooperation with other partners, will complete a minimum of 15 projects that increase access opportunities on public or private lands for fishing, hunting, boating or wildlife viewing participants. **[#87]** [o-ref #72] [RLT rank 11] [OPT #2]

    b. By the end of 2019, improve, promote and market quality fishing, hunting, boating and wildlife viewing opportunities to attract visitors and improve local and statewide economies. **[#88]** [o-ref #73] [OPT top 10] [RLT rank 4] [OPT #2]

    c. By the end of 2019, enhance coordination with state and local tourism entities to develop, support, promote, market, and encourage participation in fishing, hunting, boating and wildlife viewing community events that attract visitors and improve local economies. **[#89]** [o-ref #74] [RLT rank 10] [OPT #2]

Goal 2: Provide resources and support for the safety and protection of residents and visitors, our natural and cultural resources, and for emergency responses to critical incidents and environmental disasters.

Strategies:

1. Identify existing and emerging risks to the safety of residents and visitors and foster internal collaboration and external partnerships necessary to effectively manage, reduce or eliminate those risks.

    a. By January 2018, each Division and Office will implement adaptive processes that identify existing and emerging risks to the safety of residents and visitors, and will foster internal collaboration and external partnerships necessary to effectively manage, reduce or eliminate those risks. **[#90]** [o-ref #78] [OPT top 10] [RLT rank 9] [OPT #4]

2. Provide immediate and effective disaster response and recovery through mutual-aid efforts with local, state and federal partners.

    a. Continue to deliver efficient and effective, as determined by annual review, emergency response, through formal and informal mutual aid efforts with partner agencies. **[#91]** [o-ref #77] [RLT rank 8] [OPT #4]

3. Provide search, rescue, and recovery services in coordination with local, state and federal entities to ensure the safety of residents and visitors.

a. Continue to deliver efficient and effective, as determined by annual review, search, rescue, and recovery service with partner agencies. **[#92]** [n-ref #106] (Note – new objective, not ranked)

4. Protect natural and cultural resources through proactive and responsive enforcement efforts.

    a. By the end of 2019, enhance enforcement efforts to protect residents, visitors and natural resources through intelligence gathering, proactive law enforcement and patrols. **[#93]** [n-ref #107] (Note – new objective, not ranked)

    b. By the end of 2019, enhance training and improve our abilities to respond to and investigate calls for service, incidents, accidents and crimes. **[#94]** [n-ref #108] (Note – new objective, not ranked)

Goal 3: Ensure the FWC has highly effective and adaptive business practices.

Strategies:

1. Address emerging biological, social and economic trends, anticipate impacts and take advantage of opportunities to accomplish FWC's mission.

    a. By the end of 2019, develop and implement an adaptive plan to research, monitor, measure and evaluate emerging biological, social and economic trends; address anticipated impacts; and take advantage of opportunities to accomplish FWC's mission. **[#95]** [o-ref #94] [RLT rank 6] [OPT #5]

2. Expect each employee to be an ambassador for FWC and its mission to Florida's diverse residents and visitors.

    a. Develop and implement the resources and protocols necessary for employees to become successful ambassadors for FWC. **[#96]** [n-ref #109] (Note – new objective, not ranked)

3. Provide efficient and effective service to Florida's diverse residents, visitors, and FWC staff.

    a. By June 30, 2018, each Division and Office will develop and implement an adaptive plan to engage their internal and external customers to understand their changing needs. **[#97]** [o-ref #80] [OPT top 10] [RLT rank 10] [OPT #5]

    b. By June 2019, each Division and Office will develop and implement an adaptive improvement plan for efficient and effective internal and external customer service that takes into account customer needs, core customer service standards

and includes a process for gathering and responding to customer feedback. **[#98]** [o-ref #81] [OPT top 10] [RLT rank 4] [OPT #5]

4. Foster a diverse, accountable, responsive and skilled workforce who effectively serves Florida's residents and visitors.

    a. By the end of 2019, develop and implement an adaptive plan to enhance our ability to recruit, hire and retain highly effective applicants that better represent and serve the needs of Florida's diverse residents and visitors. **[#99]** [o-ref #82] [OPT top 10] [RLT rank 9] [OPT #5]

    b. By end of 2019, develop and implement an adaptive and comprehensive plan that requires multi-tiered training encompassing the concepts of the Public Trust Doctrine, the Agency Strategic Plan and the value of working collaboratively, which promotes an understanding of the individual's role in contributing to and achieving FWC's mission and enables them to enhance residents and visitors' understanding and support of FWC. **[#100]** [o-ref #86] [OPT top 10] [RLT rank 3] [OPT #5]

    c. By end of 2017, develop and implement quality training and professional-development opportunities, an effective leadership-development program, mentoring, and a succession plan. **[#101]** [o-ref #83] [RLT rank 7] [OPT #5]

    d. By the end of 2018, develop new FWC-wide methods of internal communications that promote, support and encourage face-to-face open dialog and creativity while fostering an environment of trust and accountability. **[#102]** [o-ref #85] [OPT top 10] [RLT rank 5] [OPT #5]

    e. By the end of 2018, develop and implement an FWC-wide program that ensures a healthy and safe work environment for all FWC employees. **[#103]** [o-ref #90] [OPT top 10] [RLT rank 7] [OPT #5]

5. Manage existing and secure additional resources necessary to achieve fish and wildlife conservation and meet residents, visitor and stakeholder needs.

    a. By the end of 2018, each Division and Office, in coordination with Finance & Budget, will develop and implement an adaptive plan to continually monitor and improve business and financial practices to ensure a high level of fiscal accountability, integrity, soundness, and risk-management principles. **[#104]** [o-ref #89] [RLT rank 10] [OPT #5]

    b. By the end of 2019, develop and implement an FWC-wide adaptive plan to identify, secure and use sustainable and diverse funding to support program

activities to achieve fish and wildlife conservation and meet customer needs. **[#105]** [o-ref #87] [RLT rank 7] [OPT #5]

c. By July 1, 2019, be fully engaged in aligning FWC resources to support FWC strategic priorities. **[#106]** [o-ref #88] [OPT top 10] [RLT rank 2] [OPT #5]

d. By January 1, 2019, develop and implement an adaptive plan to annually evaluate and address equipment, facilities and infrastructure needs to support fish and wildlife conservation and meet our customers' needs. **[#107]** [o-ref #91] [OPT top 10] [RLT rank 4] [OPT #5]

6. Create and maintain an effective business model that supports the FWC's mission by using continuous improvement approaches that foster a collaborative and professional culture.

   a. By the end of 2017, to ensure FWC's core value of continuous improvement is being achieved identify and implement processes to monitor, measure and evaluate the way FWC does business. **[#108]** [o-ref #92] [OPT top 10] [RLT rank 9] [OPT #5]

   b. By the end of 2019, develop and implement an adaptive plan to support continuous improvement by providing a work environment where innovation is encouraged and becomes part of the FWC culture. **[#109]** [o-ref #93] [RLT rank 8] [OPT #5]

13.12 FWC Apiary Policy

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

Apiary Policy

Division of Habitat and Species Conservation

Issued by:
Terrestrial Habitat Conservation and Restoration Section
9/1/2010

Enclosed is the HSC/THCR Apiary Policy for all Florida Fish and Wildlife Conservation Commission's Wildlife Management Areas and Wildlife and Environmental Areas.

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DIVISION OF HABITAT AND SPECIES CONSERVATION POLICY
Issued September 2010

SUBJECT: APIARY SITES ON FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION WILDLIFE MANAGEMENT AREAS AND WILDLIFE AND ENVIRONMENTAL AREAS

STATEMENT OF PURPOSE: It is the intent of this policy to determine which Florida Fish and Wildlife Conservation Commission (FWC) Wildlife Management Areas or Wildlife and Environmental Areas (WMA/WEA) may have apiary sites, and provides direction on site location, management and administration of said apiaries.

Definitions

Apiary – A place where bees and beehives are kept, especially a place where bees are raised for their honey.

Apiary Site – An area set aside on a WMA/WEA for the purpose of allowing a beekeeper to locate beehives in exchange for a fee as established by contract between the beekeeper and FWC.

Apiary Wait List – An apiary wait list will be maintained by the Terrestrial Habitat Conservation and Restoration (THCR) Section Leader's Office based on applications received from interested beekeepers. Only qualified apiarists will be added to the list. To become qualified the new apiarist must submit an application form and meet the criteria below under the section titled "Apiary Wait List and Apiary Application."

Beekeeper/Apiarist – A person who keeps honey bees for the purposes of securing commodities such as honey, beeswax, pollen; pollinating fruits and vegetables; raising queens and bees for sale to other farmers and/or for purposes satisfying natural scientific curiosity.

Best Management Practices – The Florida Department of Agriculture & Consumer Services (FDACS; Division of Plant Industry (DPI), Apiary Inspection Section, P.O. Box 147100, Gainesville, FL 332614-1416) provides Best Management Practices (BMP) for maintaining European Honey Bee colonies and FWC expects apiarists to follow the BMP.

Hive/Colony – Means any Langstroth-type structure with movable frames intended for the housing of a bee colony. A hive typically consists of a high body hive box with cover, honey frames, brood chambers and a bottom board and may have smaller super hive boxes stacked on top for the excess honey storage. A hive/colony includes one queen, bees, combs, honey, pollen and brood and may have additional supers stacked on top of a high body hive box.

Establishment of Apiary Sites on WMA/WEA

During the development of an individual WMA/WEA Management Plan, apiaries will be considered under the multiple-use concept as a possible use to be allowed on the area. "Approved" uses are deemed to be in concert with the purposes for state acquisition, with the Conceptual State Lands Management Plan, and with the FWC agency mission, goals, and objectives as expressed in the agency strategic plan and priorities documents. Items to consider when making this determination can also include:

- Were apiaries present on the area prior to acquisition?
- Are there suitable available sites on the WMA/WEA?
- Will the apiary assist in pollination of an onsite FWC or offsite (adjacent landowner) citrus grove or other agricultural operation?

For those WMA/WEAs that have not considered apiaries in their Management Plan, upon approval of this policy Regional Staff will work with the Conservation Acquisition and Planning (CAP) staff and THCR Section leadership to determine if apiaries are an approved use on the area. If apiaries are considered an approved use then a request will be made to the Division of State Lands to allow this use as part of an amended Management Plan. This request will be made through the THCR's Section Leader's office and coordinated by the CAP.

Determination of apiary site locations on WMA/WEAs should be done using the following guidelines:

- Apiary sites should be situated so as to be at least one-half mile from WMA/WEA property boundary lines, and at least one mile from any other known apiary site. Exceptions to this requirement must be reviewed by the Area Biologist and presented to the THCR Section Leader for approval.

- Site should be relatively level, fairly dry, and not be prone to flooding when bees would normally be present.

- Site should be accessible by roads which allow reasonable transfer of hives to the site by vehicle.

- If a site is to be located near human activity, such as, an agricultural field, food plot, wildlife opening, campsites, etc., or if the site may be manipulated by machinery at a time when bees would be present, then the apiary site should be located at a minimum of 150 to 200 yards from the edge of that activity. This will ensure minimal disturbance to the bees and minimize incidents with anyone working in the area.

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- It is preferable to have apiary sites located adjacent to or off roads whenever possible. If traditional apiary sites were located on roads and the Area Biologist determines that the site will not impact use of the road by visitors then it will be allowed.
- FWC Area Biologist shall select apiary site(s) and the site(s) selected should not require excessive vegetation clearing (numerous large trees, dense shrubs) or ground disturbance (including fill).

WMA/WEA Staff Responsibilities

Area Biologist on WMAs/WEAs with approved apiary sites will forward a GIS shapefile depicting all the apiary site polygon(s), including a name or number with coordinates for each apiary site, to the THCR Contract Manager.

Area Biologist will monitor each apiary site no less than once a year to determine if the beekeeper is abiding by the contract requirements. If violations are noted, staff should bring them to the attention of the beekeeper for correction. If violations continue staff should notify the THCR Contract Manager who will determine if or what additional action is warranted.

Area Biologist will establish and maintain firelines around the apiary site to ensure the apiary site is ready when a planned burn is scheduled.

Area Biologist will advise the beekeeper of burn plans, road work, gate closures, or other site conditions and management activities that may affect the beekeeper's ability to manage or access the apiary site.

Area Biologist is not responsible to ensure access roads are in condition suitable for beekeepers to access their hives with anything other than a four wheeled drive vehicle. (The site of the apiary may be high and dry, but the roads accessing them may be difficult to impossible to get a two wheeled drive vehicle into during extreme weather, e.g., heavy rainfall events.)

Apiary Wait List and Apiary Application

An electronic waiting list for apiary sites will be maintained by the THCR's Contract Manager for each WMA/WEA. To be placed on the waiting list an interested beekeeper must submit an apiary application form to the contract manager (See Enclosed Application Form). Each applicant will be considered based on the following criteria:

- Proof of a valid registration with the FDACS/DPI.
- Proof of payment of outstanding special inspection fees for existing sites.
- A validated history of being an apiary manager.
- Three references that can attest to the applicant's beekeeping experience.

If an apiary site is becomes available on a WMA/WEA and there are beekeepers on the waiting list interested in that particular area, those individuals meeting the criteria above will be given preference. If there is more than one beekeeper meeting the criteria with their name on the list then a random drawing will be held by the THCR Contract Manager to determine who will receive the site. Beekeepers on the waiting list will be notified in writing of the random drawing's date/location and will be invited to attend. The individual's name selected during this drawing will be awarded the contract.

Apiary agreements are non-transferable. Each agreement serves as a contract between a specific individual or company and FWC, and the rights and responsibilities covered by an individual agreement cannot be transferred.

Contracts

Apiary contracts are for five (5) years and renewals are contingent upon a satisfactory performance evaluation by Area Biologist and concurrence of the THCR Section Leader. Approval is based on apiarist performance, adherence to rules and regulations and general cooperation. If an Area Biologist decides an apiarist whose contract is expiring is unacceptable he may recommend not approving the new contract. If this transpires then the wait list process using random selection will be used. If there is no apiarist on a current wait list then the apiarists who are in good standing with existing contracts will be notified to see if any want to be put on the wait list for the drawing. If none are interested then the site will be put on hold pending a valid request.

Pricing of Apiary Site(s)

Cost of each apiary site will be $40 annually which will include up to 50 beehives. Additional beehives will be charged at the rate of $40 per 50 beehives.

Pricing examples:

- A beekeeper is leasing 2 apiary sites with up to 100 beehives - the fee per year is $80.
- A beekeeper is leasing 3 apiary sites with up to 200 beehives - the fee per year is $160.

Note: The maximum number of hives/colonies allowed on an apiary site will be at the discretion of the apiarist. However, the apiarist is strongly recommended to follow the BMP as recommended by the FDACS/DPI. In addition to providing the BMP, FDACS/DPI's management has recommended 50 hives per site in pineland communities and no more than 100 hives per site in areas with bountiful resources. However, FWC will not dictate the number of hives on a site unless they create land management issues.

Bear Depredation Control at Apiary Site(s)

Beekeepers are required to consult with the WMA/WEA Area Biologist to see if electric fencing is required for their apiary sites. If the Area Biologist requires electric fencing then the

Beekeeper shall construct and maintain electric fences for each apiary site. Numerous electric fence designs have been used to varying success and FWC as a courtesy provides an electric fence technical information bulletin with each Agreement. This bulletin is attached in order to assist the Beekeeper and/or provide a design that has been proven to be reasonable effective.

SUBJECT MATTER REFERENCES

Apiary Inspection Law - Chapter 586, Florida Statutes (see http://www.leg.state.fl.us/Statutes/), Rule Chapter 5B-54, Florida Administrative Code (see www.flrules.org).

The Board of Trustees of the Internal Improvement Trust Fund – Recommended Apiary Agreement Guidelines For Apiaries & Revisions to an Agreement for Apiary Activities on State Lands on September 23, 1986
S:\HSC\THCR\APIARY.BACKUP.POLICY\dlissupport@dos.state.fl.us_20100903_111446.pdf

Senate Resolution 580, September 21, 2006: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&docid=f:sr580ats.txt.pdf

Attachments

Sample Apiary Agreement W/Attachments (Map Placeholder & Electric Fence Bulletin)

Sample Apiary Site Application Form W/Mission Statement

Best Management Practices for Maintaining European Honey Bee Colonies

Sample of Random Selection Process Procedure

APPROVED:

_____

Division Director or Designee

DATE: _____

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APIARY AGREEMENT

AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as "the COMMISSION," and (Insert Name and Address of Apiarist Here), telephone number (Insert Phone Number of Apiarist Here), hereinafter known as "the USER."

WITNESSETH

In consideration of the mutual promises to be kept by each and the payments to be made by the USER, the parties agree as follows:

1. TERM: This Agreement will begin (Insert date here) or the date signed by both parties, whichever is later, and will end five (5) years from the date of execution. Issuance of a new five (5) year Agreement is contingent upon satisfactory performance evaluation by the Area Biologist and approval of the THCR Section Leader.

2. The COMMISSION Agrees:

    a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4)(f) below.

    b. To provide technical assistance for bear-proofing, if required by Area Biologist, of sites made available under this Agreement.

    c. To allow the USER to place a total number of (insert number of hive boxes here) hive boxes on the COMMISSION-managed property at the apiary site(s).

3. The USER Agrees:

    a. To pay (Insert Total Dollars Here) on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Terrestrial Habit Conservation and Restoration Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.

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b. To have no more than (Insert Number of Hive boxes here) hive boxes on the property at one time.

c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-54, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.

d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.

e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.

f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.

g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.

h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.

i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.

j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than $300,000 for bodily injury and $100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.

k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the COMMISSION, its officers, agents, employees and representatives from any and all claims, losses, damages, injuries and liabilities whatsoever, whether for personal injury or otherwise, resulting from, arising out of or in any way connected with activities under this Agreement or activities occurring from any other source not under this Agreement and the USER further agrees to assume all risks of loss and liabilities incidental to any natural or artificial condition occurring on state lands cover by this Agreement.

l. To construct and maintain electric fences, if required by the Area Biologist at the Area Biologist's discretion, to provide protection of apiaries from black bear depredation consistent with the technical information bulletin attached to this agreement, and, if so required, to maintain an open buffer around the fencing of five (5) feet or more. (See Attachment 1)

m. To remove all personal property from the site within thirty (30) days of termination or expiration of this Agreement. The USER understands that after this time, all the USER'S personal property remaining on the WMA/WEA shall be deemed abandoned and become the property of the COMMISSION, which will be utilized or disposed of at the sole discretion of the COMMISSION, and that reasonable storage and/or disposal fees and/or costs may be charged to the USER.

4. The parties mutually agree:

a. This Agreement is not transferable.

b. The USER's failure to submit payment by the due date established herein may result in cancellation of the Agreement by the COMMISSION.

c. The USER's failure to submit proof of general liability insurance or proof of annual renewal in compliance with (3) (j) above may result in cancellation of this Agreement by the COMMISSION.

d. This Agreement shall be in effect for a period of five (5) years and issuance of a new agreement will be contingent upon a satisfactory performance evaluation and approval of the Area Biologist and THCR Section Leader.

e. Each apiary site shall be situated so as to be at least one-half (1/2) mile inward from state property lines and there shall be at least one (1) mile separation between sites. Exceptions to this rule must be reviewed by Area Biologist

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presented to and approved by the Terrestrial Habitat Conservation and Restoration Section Leader.

f. The property covered by this Agreement is described as follows: That the property sites (Insert Area Name) Wildlife Management Area are represented by Attachment 2.

g. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.

h. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.

i. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuation of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.

This Area Intentionally Left Blank

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year last below written.

_____
USER SIGNATURE

Date: _____

_____
Witness

_____
Witness

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

_____
Mike Brooks, Section Leader
Terrestrial Habitat Conservation and Restoration

Date: _____

Approved as to form and legality

_____
Commission Attorney

Date: _____

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AGREEMENT
ATTACHMENT 1

Use of Electric Fencing to Exclude Bears And Prevent Property Damage

Florida Fish and Wildlife Conservation Commission
Technical Information Bulletin (2001)

Electric fencing has proven effective in deterring bears from entering landfills, apiaries (beehives), livestock pens, gardens, orchards, and other high-value properties. Numerous electrical fence designs have been used with varying degrees of success. Design, quality of construction, and proper maintenance determine the effectiveness of an electric fence. The purpose of this technical bulletin is to assist the property owner in understanding and implementing electrical fencing as a tool to exclude and prevent damage caused by black bears.

Understanding Electric Fencing

Electric fencing provides an electrical shock when an animal comes into contact with the electrically charged wires of the fence. People unfamiliar with electric fencing often are afraid that it will injure, permanently damage, or kill an individual or pet that contacts the fence. **This is not true!** A properly constructed electric fence is safe to people, pets, and bears.

Components of Electric Fencing

An electric fence is composed of four main elements: a charger, fence posts, wire, and the ground rod.

Fence Charger. On a small scale electric fence (like that typically needed for bear exclusion), the largest cost is normally the fence charger. A fence charger's job is to send an electrical pulse into the wire of the fence. Contrary to popular belief, there is not a continuous charge of electricity running through the fence. Instead the charger emits a short pulse or burst of electricity through the fence. The intensity and duration of the electrical pulse varies with the type of charger or controller unit. Chargers with a high-voltage, short duration burst capacity are the best because they are harder to ground out by tall grass and weeds. These types are also the safest, because, even though the voltage is high (5 kilovolts) the duration of the burst is very short (2/10,000 of a second) (FitzGerald, 1984).

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Two basic energy sources for chargers are batteries (12-volt automotive type) and household current (110 volt). Battery-type chargers are typically cheaper to purchase but require more maintenance because of the necessity of charging the battery. The advantage of a battery powered charger is that it can be used in a remote location where 110-volt current is not available. Most units that are powered by a fully charged 12-volt deep-cycle batteries can last three weeks before needing a charge. Addition of a solar trickle charger will help prolong the duration of effective charge in 12-volt batteries.

Fence Posts. On small scale fences, the posts are normally the second largest expense involved in construction. Therefore, when planning an electric fence it is a good idea to utilize existing fencing in order to save money. If no existing fence is available, posts will need to be placed around the area needing protection. Posts may be wood, metal, plastic, or fiberglass. Wood and metal posts will need to have plastic insulators attached to them which prevent the electric wire from touching the post causing it to ground out. Plastic and fiberglass posts do not need insulators, the wire may be affixed directly to these posts. Wood and metal posts are typically more expensive and require the added expense of insulators, however, they are more durable and generally require less maintenance.

Wire. Fourteen to seventeen gauge wire is the most common size range used in electric fencing. Heavier wire (a lower gauge number) is more expensive but carries current with less resistance and is more durable (FitzGerald, 1984).

The two most common types of wire are galvanized and aluminum. Galvanized wire is simply a steel wire with a zinc coating to prevent rust, which makes the wire last longer. Some wire is more galvanized than others. The degree or amount of zinc coating that is around the core steel wire is measured in three classes. A class I galvanization means the wire has a thinner coating of zinc than a class II galvanization. Class III galvanized wire has the heaviest zinc coating and will last longer than the class I and class II wire (FitzGerald, 1984). In general, the cost of galvanized wire increases as the class or amount of galvanization increases.

Aluminum wire is typically more expensive than the galvanized wire. Some advantages of aluminum wire are: it will not rust, it conducts electricity four times better, and it weighs one-third less than steel wire.

The Ground Rod. The ground is an often overlooked, but critical part of an electric fence. Without a good ground, electricity will not flow through the wire. When an animal touches a charged wire, the body of the animal completes the electrical circuit and the animal feels the "shock". The current must travel from the charger through the wire to the animal and then back through the ground to the charger if the animal is to feel the shock. The soil acts as the return "wire" (ground) in the circuit. However, if a

bird was to land on a charged wire without touching the soil the bird would not complete the circuit and would be unaffected (FitzGerald, 1984). Some fence configurations use actual grounded wires within the fence to enhance the grounding system.
The ground may be a commercial ground rod or a copper tube or pipe driven six to eight feet in moist soil. Copper is expensive, so a copper coated steel pipe or any other good conducting metal pipe will work also. Very dry soil can effect the ability to create a good ground and has sometimes been a problem during drought conditions. Pipe may be a better choice than a solid rod during drought conditions, because water may be poured down the ground pipe to improve the ground. Some fence configurations use wires as the grounding system, rather than relying solely on the soil as a ground.

Recommended Electric Fence to Deter Black Bears

Conditions at fence sites will vary and will determine what the most effective fence configuration will be. Commission biologists welcome the opportunity to visit sites and provide custom tailored advice on constructing an effective electric fence. The following recommendation will cover most situations with low to moderate pressure from black bears. Use a five strand aluminum wire fence that is 40 inches high with wire spacing every eight inches apart using the previously mentioned wired grounding system (see Figure 1). The wire closest to the ground level (the lowest wire) should be a charged or "hot" wire. The second wire should be grounded. The third wire should be hot. The fourth wire should be grounded and the fifth wire should be hot. If using metal or wood posts, insulators must be used to keep the hot wires from grounding out. The cost of this type of electric fence utilizing fiberglass posts and a 110 volt fence charger is approximately $200 for a 40' x 40' area (160 linear feet of fence).

Materials:
1 - 1, 312 foot roll (1/4 mile) 14 gauge aluminum electric fence wire
1 - 50 foot roll 12 gauge insulated wire
20 - 5 foot 5/8 inch dia fiberglass fence posts
5 - plastic gate handles
1 - 110 volt fence charger
1 - 10 foot ground pipe
4 - plastic electric fence signs

Installation. These instructions are for a square shape fence exclusion, but the process would be very similar for other applications. Drive 4 corner posts 1-foot deep into ground and stake with guy wires. Clip, rake, and keep clear any vegetation in a 15-inch wide strip under the fence and apply herbicide. Attach and stretch the aluminum wire at 8-inch increments starting 8 inches from ground level. A loop of wire should be left on each wire at the first corner post. Once the wire has been stretched around the outside of all the corner posts back to the first post a plastic gate handle should be attached to each wire and the gate handles should be attached to each

corresponding loop on the first corner post. Drive in the remaining 16 posts to the same depth at 8-foot intervals between corner posts. Secure each of the five wires to each of the posts with additional wire. Attach four plastic electric fence signs (one on each side) to the top wire of the fence. Attach a 12-gauge strand of insulated wire to the positive terminal of the fence charger and attach it to the first, third, and fifth wires of the fence. Attach another 12 gauge insulated wire to the negative terminal of the charger and attach this wire to the ground pipe which has been driven into the ground 6 to 8-feet deep. Attach another 12 gauge insulated wire from the negative terminal of the charger to the second and fourth wires on the fence. Plug the charger into a 110 volt power supply and the fence is in operation.

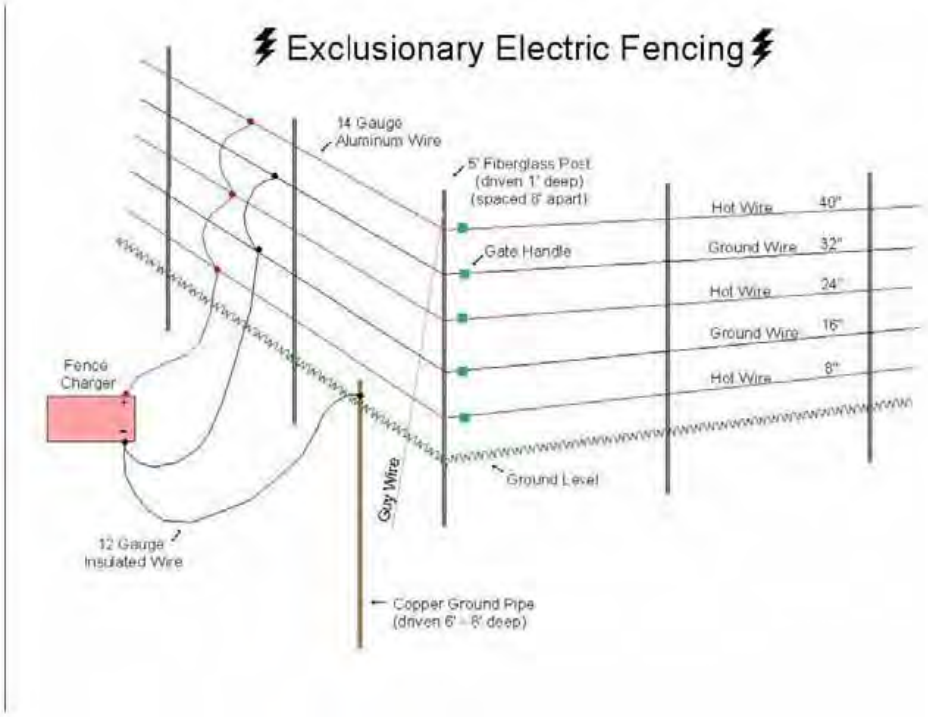
Tips to improve the effectiveness of your electric fence to deter black bears:

1. If using a 12-volt fence charger, ensure that the battery is charged; check every two weeks.
2. Make sure terminals on the charger and battery are free of corrosion.
3. Make sure hot wires are not being grounded out by tall weeds, fallen tree branches, broken insulators, etc.
4. If fence wires have been broken and repaired, make sure wires are corrosion free where they have been spliced together. Also, tighten the fence at each corner post as wires that have been spliced and are loose make poor connections.
5. Be sure to rake vegetation from under and around the outside of the fence as this may act as an insulator.
6. To improve the ground around the perimeter of the fence add a piece of 24 inch chicken wire laying on the ground around the outside of the fence. This should be connected to ground.
7. During periods of drought pour water down the ground pipe and around the ground pipe to improve the ground. Digging a 6 inch deep 6 inch diameter hole around the ground pipe and back filling with rock salt will also improve the ground. Additional ground pipes may also be added to portions of the fence farthest from the charger.
8. To ensure that the bear solidly contacts the charged portion of the fence, a bait like bacon strips, a can of sardines, or tin foil with peanut butter may be attached to one of the top hot wires. Make sure these do not contact the ground, thus shorting out the fence.
9. When protecting a specific structure (like a shed or rabbit hutch), the fence should be placed 3 to 5 feet away from the structure (rather than on it) so that the bear encounters the fence before reaching the attractant.
10. Protect the fence charger from the elements by covering it with a plastic bucket or a wooden box.
11. Place plastic electric fence signs around the perimeter of your fence to improve visibility and to warn other people.

15

LITERATURE CITED

FitzGerald, James (1984), *The Best Fences*. Storey Publishing Bulletin A-92, Pownal, Vermont. p. 14-16.



16

AGREEMENT
ATTACHMENT 2

Place Holder for Map

Of

Apiary Locations

At

WMA/WEA

17

APIARY SITE APPLICATION FORM

Florida Fish and Wildlife
Conservation Commission

RETURN TO: The Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600. Please print or type all information. Attach additional sheets if necessary.

Name _____ Telephone Number _____

Mailing Address _____

City or Town_____ County _____ Zip Code _____

Physical Address (If Different from Mailing Address) _____

Company Name: _____

Email Address _____

Requested Wildlife Management or Wildlife and Environmental Area(s)(see attached list of WMA/WEAs with apiary sites):

WMA/WEA _____ County_____ # of Sites_____

WMA/WEA _____ County_____ # of Sites_____

WMA /WEA_____ County_____ # of Sites_____

WMA /WEA_____ County_____ # of Sites_____

Planned Number of Hives Per Site: _____ Permanent: ____ Seasonal: ____

Member of Beekeepers Association: Yes____ No____

Number of Years a Member_____

Name of Beekeepers Association:_____

Are you registered with Florida Department of Agriculture and Consumer Services/Division of Plant Industry (FDACS/DPI):_____Yes _____No _____N/A If yes, please provide proof.

Are you current with any and all special inspection fees:_____Yes _____No _____N/A. If yes, please provide proof.

Do you follow all recommended Best Management Practices from FDACS/DPI?:_____Yes _____No

If no, then please explain on a separate piece of paper.

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Please provide below a chronological history of your beekeeping experience. If you need more space, please provide additional sheets:

References: If a new apiary contractor, please provide on a separate piece of paper at least 3 references who can verify your apiary experience. Provide each reference's name, address, phone number and email address (if applicable). Please attach reference sheet to this document and submit.

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MISSION STATEMENT

Management

Of

Florida Fish and Wildlife Conservation Commission's

Wildlife Management Areas

And

Wildlife and Environmental Areas

The mission of the Florida Fish and Wildlife Conservation Commission (FWC) is to manage fish and wildlife resources for their long-term well-being and the benefit of the people. To aid in accomplishing this mission, one of FWC's management goals is to manage fire-adapted natural communities on our Wildlife Management and Environmental Areas (WMA/WEA) to support healthy populations of the plants and animal's characteristic of each natural community. In order to achieve this goal various habitat management techniques are used. These include prescribed burning, applications of herbicides and mechanical treatment of vegetation. These management efforts will take place at various times and locations on each of the FWC's WMA/WEAs. Staff on each WMA/WEA will work with and make users aware of these activities when necessary. Users must be aware and accept that these activities are necessary for the proper management of the area.

Note: This document is included as an attachment with each Application and executed Contract.

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FDACS/DPI's BMP

Florida Department of Agriculture & Consumer Services

BEST MANAGEMENT PRACTICES FOR

MAINTAINING EUROPEAN HONEY BEE COLONIES

1. Beekeepers will maintain a valid registration with the Florida Department of Agriculture and Consumer Services/Division of Plant Industry (FDACS/DPI), and be current with any and all special inspection fees.

2. A Florida apiary may be deemed as European Honey Bee with a minimum 10% random survey of colonies using the FABIS (Fast African Bee Identification System) and/or the computer-assisted morphometric procedure (i.e., Universal system for the detection of Africanized Honey Bees (AHB) (USDA-ID) or other approved methods by FDACS on a yearly basis or as requested.

3. Honey bee colony divisions or splits should be queened with production queens or queen cells from EHB breeder queens following Florida's Best Management Practices.

4. Florida beekeepers are discouraged from collecting swarms that cannot be immediately re-queened from EHB queen producers.

5. Florida Beekeepers should practice good swarm-prevention techniques to prevent an abundance of virgin queens and their ready mating with available AHB drones that carry the defensive trait.

6. Maintain all EHB colonies in a strong, healthy, populous condition to discourage usurpation (take over) swarms of AHB.

7. Do not allow any weak or empty colonies to exist in an Apiary, as they may be attractive to AHB swarms.

8. Recommend re-queening with European stock every six months unless using marked or clipped queens and having in possession a bill of sale from an EHB Queen Producer.

9. Immediately re-queen with a European Queen if previously installed clipped or marked queen is found missing.

10. Maintain one European drone source colony (250 square inches of drone comb) for every 10 colonies in order to reduce supercedure queens mating with AHB drones.

11. To protect public safety and reduce beekeeping liability, do not site apiaries in proximity of tethered or confined animals, students, the elderly, general public, drivers on public roadways, or visitors where this may have a higher likelihood of occurring.

12. Treat all honey bees with respect.

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RANDOM

SELECTION PROCESS

FOR VACANT APIARY SITE

When an apiary site becomes available the following procedure is used to randomly select the next apiarist (beekeeper) for an available apiary site on a WMA or WEA. Only those who have been evaluated and deemed qualified to be an apiarist on a WMA/WEA through the Apiary Application process will be eligible for this selection process. The steps below will be followed by the THCR Contract Manager when a site becomes available to be filled by a qualified apiarist:

1. The THCR Contract Manager will maintain an "Apiary Wait List Folder" on the THCR SharePoint for each WMA/WEA with apiary sites.
2. A wait list is either created or updated when an Apiary Application(s) is received by the THCR Contract Manager from a qualified apiarist.
3. Upon receipt of an apiary site application, the THCR Contract Manager will review the WMA/WEA folder to see if there is an "Apiary Wait List".
4. If a list exists then the qualified applicant will be added to the list.
5. When an apiary site becomes available if there are more than one qualified apiarist then these apiarists will be contacted by certified letter to determine their interest.
6. The letter will request a response within 10 working days to make them eligible for the random drawing.
7. If there is no response or is negative then that apiarist will not be included in the random drawing and the name will be removed from the waiting list*.
8. If only one apiarist responds positively to the certified letter then the available site will be awarded to that interested apiarist.
9. If there are no apiarists on a wait list or all responses are negative then apiarists who currently have site(s) under Agreement and where not on the waiting list will be contacted to see if any have interest in the available site. If more than one responds then the random drawing process will be used to determine who will be awarded the site.

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10. Steps to be performed by the THCR Contract Manager to execute the random selection for an available apiary site are listed below:

    a. The names of each interested apiarist will be noted on a 1" X 2" piece of paper and folded in half.

    b. The pieces of paper will be inserted into a "black film canister" which has a snap top and placed into a container and stirred up prior to the selection.

    c. A non-biased person will be selected to reach into the bowl (which will be held above the selection person's eyesight) and randomly select one of the canisters.

    d. The canister will be opened by the person performing the selection and the name is read aloud for those in attendance. Everyone in attendance will sign a witness sheet.

    e. The apiarist whose name is selected will be awarded the available site.

    f. A new Agreement will be developed by the THCR Contract Manager.

*A new apiary application must be submitted once requestor's name is removed from a waiting list.

13.13 Management Procedures Guidelines - Management of Archaeological and Historical Resources and Master Site File Historical and Cultural Resources Table

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

(revised March 2013)

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

A. General Discussion

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

B. Agency Responsibilities

Per State Policy relative to historic properties, state agencies of the executive branch must allow the Division of Historical Resources (Division) the opportunity to comment on any undertakings, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the project, permit, grant, etc.

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

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

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

C. Statutory Authority

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

D. Management Implementation

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

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

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

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

E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at:
http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf .

* * *

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

Deena S. Woodward
Division of Historical Resources
Bureau of Historic Preservation
Compliance and Review Section
R. A. Gray Building
500 South Bronough Street

Tallahassee, FL 32399-0250
Phone: (850) 245-6425
Toll Free: (800) 847-7278
Fax: (850) 245-6435

Environmental Resource Analysis

Cultural Resources

Analysis Shape Type: Polygon
Analysis Timestamp: 12222014 03:12:06
Shape Name: EPWMA
Boundary Area: 4033.67 acres
Buffer Area: 0 acres
Total Area: 4033.67 acres

Cultural Resources

Florida Sites

SITE NAME	SITEID	SITETYPE1	SITETYPE2	SITETYPE3	SITETYPE4	SITETYPE5	SITETYPE6	HUMANREMNS	Total Area (acres)	Percent of Area
EAST BAY 3	SR00773	Historic refuse / Dump	Artifact scatter-low density (< 2 per sq meter)						5.62	0.14 %
EAST BAY 4, QUICKSAND	SR00774	Historic refuse / Dump	Ceramic scatter						2.55	0.06 %
EAST BAY 5	SR00775	Historic refuse / Dump	Ceramic scatter						1.84	0.05 %
EAST BAY 6	SR00776	Historic refuse / Dump	Ceramic scatter						2.62	0.06 %
EAST BAY 7	SR00777	Ceramic scatter							1.39	0.03 %
ESCRIBANO POINT	SR00002	Historic burial(s)	Habitation (prehistoric)	Inundated land site	Prehistoric shell midden	Prehistoric midden(s)	Prehistoric mound(s)	YES	46.35	1.15 %
FUNDY BAYOU	SR00779	Prehistoric burial(s)	Historic refuse / Dump	Artifact scatter-low density (< 2 per sq meter)	Ceramic scatter	Variable density scatter of artifacts		YES	7.92	0.2 %
LITTLE CAT BASIN	SR00781	Prehistoric burial(s)						YES	3.10	0.08 %
MOORE'S MAESTER CREEK MOUND	SR00780	Habitation (prehistoric)	Inundated land site	Prehistoric burial mound(s)	Prehistoric shell midden	Prehistoric midden(s)	Historic refuse / Dump	YES	1.98	0.05 %
NN	SR01898	Historic refuse / Dump							0.49	0.01 %

NN	SR01899	Historic refuse / Dump	Variable density scatter of artifacts						0.69	0.02 %
NN	SR01900	Historic refuse / Dump	Variable density scatter of artifacts						30.11	0.75 %
NN	SR01903	Artifact scatter-low density (< 2 per sq meter)	Ceramic scatter	Lithic scatter/quarry (prehistoric: no ceramics)					0.35	0.01 %
NN	SR01902	Artifact scatter-low density (< 2 per sq meter)	Ceramic scatter	Lithic scatter/quarry (prehistoric: no ceramics)					0.43	0.01 %
NN	SR01901	Lithic scatter/quarry (prehistoric: no ceramics)	Prehistoric lithics only, but not quarry	Variable density scatter of artifacts					1.31	0.03 %
SHELL HAMMOCK	SR00760	Prehistoric shell midden	Prehistoric mound(s)	Artifact scatter-low density (< 2 per sq meter)					0.39	0.01 %
X-388-A	SR01435	Subsurface features are present	Homestead	Industrial	Land-terrestrial	Other	Historic refuse / Dump		1.77	0.04 %
								TOTAL:	108.92	2.7 %

Florida Structures

No Records Found

Historical Cemeteries

No Records Found

Historic Bridges

No Records Found

National Register of Historic Places

No Records Found

Resource Groups

No Records Found

Field Survey

TITLE	Total Area (acres)	Percent of Area
Cultural resources survey of selected portions of seven parcels of land, Eglin Air Force Base, Florida.	17.42	0.43 %
Management summary, Phase I cultural resources survey, Eglin Air Force Base, Florida.	53.11	1.32 %
Cultural resources investigations at Eglin Air Force Base, Santa Rosa, Okaloosa and Walton Counties, Florida.	53.11	1.32 %
Archaeological Assessment of the Yellow River Marsh Aquatic Preserve	611.12	15.15 %
Eglin Air Force Base, Historic Preservation Plan, Technical Synthesis of Cultural Resources Investigations at Eglin Santa Rosa, Okaloosa, and Walton Counties, Florida, Vol. 1: Text; Vol. 2, Technical Synthesis and Appendices; Vol. 3; Folios.	53.11	1.32 %
Survey of X-365, Cultural Resources Investigations, Eglin Air Force Base, Okaloosa, Santa Rosa and Walton Counties, Florida	19.34	0.48 %
Survey of X-388, Cultural Resources Investigations, Eglin Air Force Base, Okaloosa, Santa Rosa and Walton Counties, Florida	49.74	1.23 %
Pensacola Underwater Archaeological Survey for 2000	13.00	0.32 %
Submerged Historical Resources of Pensacola Bay, Florida, Florida Archaeological Reports 25, The Pensacola Shipwreck Survey Phase One, 1991	17.02	0.42 %
Cultural Resources Survey of X-784 (Task Order CR-05-0020) Contract DAHA-92-01-D-0008/0010 Cultural Resources Management Support, Eglin Air Force Base, Okaloosa, Santa Rosa, and Walton Counties, Florida	5.86	0.15 %
Cultural Resources Survey of X-786 (Task Order CR-05-0022) Contract DAHA-92-01-D-0008/0010 Cultural Resources Management Support, Okaloosa, Santa Rosa, and Walton Counties, Florida	16.36	0.41 %
Cultural Resources Survey of X-785 (Task Order CR-05-0021) Contract DAHA-92-01-D-0008/0010 Cultural Resources Management Support, Eglin Air Force Base, Okaloosa, Santa Rosa, and Walton Counties, Florida	11.08	0.27 %
Phase I Reconnaissance Survey of the Northwest Florida Water Management District Perdido River, Grassy Point, and Lafayette Creek Tracts, Escambia, Santa Rosa, and Walton Counties, Florida (DHR Grant No. SO825 and Chapter 1a-32 permit No. 0708.27)	1,143.19	28.34 %
Cultural Resources Survey of X-1147 (Task Order CR-11-0052) Contract #W9128F-07-02-0001 Cultural Resources Management Support, Eglin Air Force Base, Santa Rosa County, Florida	1.33	0.03 %
TOTAL:	2,072.00	51.37 %

13.14 Operation Plan Fiscal Year 2014-2015 and Land Management Uniform Cost Accounting Council Terms

Escribano Point WMA Operational Plan Cost Estimate Fiscal Year 2014-2015

Activity	Title	Staff Days	Salary	Fuel Cost	Other	Total
100	Administration	1.00	$211.59	$18.25	$2,000.00	$2,229.84
101	Project inspection	10.00	$2,115.90	$182.50	$50,357.00	$52,655.40
103	Meetings	12.00	$2,539.08	$219.00	$3,350.00	$6,108.08
104	Budget/purchasing/accounting	4.00	$846.36	$73.00	$1,000.00	$1,919.36
128	New Vehicle and Equipment Purchases	2.00	$423.18	$36.50	$161,000.00	$161,459.68
140	Report writing/editing/manuscript preparation	4.00	$846.36	$73.00	$2,175.00	$3,094.36
150	Personnel management	5.00	$1,057.95	$91.25	$2,500.00	$3,649.20
182	Data management	12.00	$2,539.08	$219.00	$4,175.00	$6,933.08
185	GIS	5.00	$1,057.95	$91.25	$3,000.00	$4,149.20
200	Resource Management	4.00	$846.36	$73.00	$15,000.00	$15,919.36
201	Cultural resource management	6.00	$1,269.54	$109.50	$1,500.00	$2,879.04
202	Timber management	1.00	$211.59	$18.25	$7,000.00	$7,229.84
204	Resource planning	15.00	$3,173.85	$273.75	$8,900.00	$12,347.60
206	Prescribed burning - growing season	2.00	$423.18	$36.50	$4,000.00	$4,459.68
207	Prescribed burning - dormant season	4.00	$846.36	$73.00	$11,800.00	$12,719.36
209	Land Management reviews	3.00	$634.77	$54.75	$1,643.00	$2,332.52
210	Exotic species control	0.00	$0.00	$0.00	$0.00	$0.00
212	Exotic plant control (chemical)	3.00	$634.77	$54.75	$7,500.00	$8,189.52
215	Hydrology Management	5.00	$1,057.95	$91.25	$85,000.00	$86,149.20
221	Animal surveys	12.00	$2,539.08	$219.00	$44,580.00	$47,338.08
235	Vegetation and plant surveys	1.00	$211.59	$18.25	$20,000.00	$20,229.84
250	Monitoring and assessments	3.00	$634.77	$54.75	$5,000.00	$5,689.52
256	Habitat monitoring and analysis	2.00	$423.18	$36.50	$1,000.00	$1,459.68
276	Commission rule development and review	0.00	$0.00	$0.00	$0.00	$0.00
281	Other resource management	0.00	$0.00	$0.00	$0.00	$0.00
282	Herbaceous seeding	0.00	$0.00	$0.00	$0.00	$0.00
289	Native vegetation management (mechanical)	5.00	$1,057.95	$91.25	$6,100.00	$7,249.20
291	Technical assistance	0.00	$0.00	$0.00	$0.00	$0.00
294	Program coordination and implementation	4.00	$846.36	$73.00	$1,000.00	$1,919.36
295	Biological data collection, analysis, and reporting	5.00	$1,057.95	$91.25	$1,000.00	$2,149.20
312	Informational signs	4.00	$846.36	$73.00	$1,000.00	$1,919.36

Escribano Point WMA Operational Plan Cost Estimate Fiscal Year 2014-2015

Activity	Title	Staff Days	Salary	Fuel Cost	Other	Total
320	Outreach and education	3.00	$634.77	$54.75	$1,000.00	$1,689.52
341	Public use administration (hunting)	3.00	$634.77	$54.75	$3,000.00	$3,689.52
920	FEM -- buildings/structures	5.00	$1,057.95	$91.25	$2,000.00	$3,149.20
922	FEM -- custodial functions	2.00	$423.18	$36.50	$10,000.00	$10,459.68
923	FEM -- vehicles/equipment	5.00	$1,057.95	$91.25	$20,500.00	$21,649.20
926	FEM -- roads/bridges	7.00	$1,481.13	$127.75	$10,000.00	$11,608.88
928	FEM -- fences	1.00	$211.59	$18.25	$1,000.00	$1,229.84
All totals		160.00	$33,854.40	$2,920.00	$499,080.00	$535,854.40

Land Management Uniform Accounting Council Categories and Subcategories

1. Resource Management

a. Exotic Species Control. -- Invasive exotic plant and animal removal activities and costs for inventorying, planning, preparing, executing, evaluating, monitoring and reporting. Also includes equipment, chemicals, protective clothing and supplies. Includes nuisance native feral animal and plant control.

b. Prescribed Burning. -- Prescribed burning activities and costs for assessing, planning, preparing, executing, evaluating and reporting. Also includes equipment, protective clothing and supplies.

c. Cultural Resource Management. -- Management activities and costs for assessing, planning, executing, evaluating and reporting, and for all maintenance, restoration or monitoring activities for prehistoric and historic sites, features and collection objects.

d. Timber Management. -- Activities and costs related to the establishment of a stand of potentially merchantable timber, harvest of merchantable timber, and cultural treatments intended primarily to improve the growth and overall health of a stand of merchantable timber. Also includes activities and costs related to the cutting of merchantable timber in natural community and habitat restoration projects.

e. Hydrological Management. -- Hydrological management and restoration activities and costs for assessing, monitoring, planning, preparing, executing, evaluating and reporting. Includes water level management, repair, removal or back-filling of ditches, canals, berms and dams. Also includes water quality and water quantity monitoring.

f. Other. -- All other resource management activities and costs not captured in other specific subcategories. Examples include natural community and habitat restoration through other techniques; plant, animal or biological community survey, monitoring and research; listed species management; technical assistance; and evaluating and commenting on resource impacts to parks.

2. Administration

a. Central Office/Headquarters. -- Headquarters units conducting general administration of land under management by the agency. Includes upper management direction, administration and fiscal, budget, personnel, purchasing and record keeping required for operations oversight and specific programs. Includes all duties unless they specifically relate to other categories or subcategories.

b. Districts/Regions. -- Sub-state administrative districts or regions conducting general administration of the properties under their management. Includes all duties, unless they specifically relate to other categories or subcategories. General operating costs of district or region administrative facilities are included.

c. Units/Projects. -- Conducting general administration duties at a specific management unit (state park, state forest, state wildlife management area, etc.). Includes supervisory duties, fiscal and record keeping duties, and any other duties that do not specifically relate to other categories or subcategories. General operating costs for the property, such as utilities, telephones and garbage collection, are included.

3. Support

a. Land Management Planning. -- Developing land management plans required by Sec. 253.034, F.S. Includes researching and compiling plan information, materials and maps, coordinating planning activities, conducting review activities (internal reviews, public meetings, advisory group meetings, ARC, etc.), and promulgating draft plans and final plans.

b. Land Management Reviews. -- Planning, organizing and conducting land management reviews by teams created under Sec. 259.036, F.S. Includes preparing and responding to land management review reports. Also includes similar work conducted as part of internal agency land management reviews.

c. Training/Staff Development. -- Staff training and development costs incurred in any facet of the agency's land management activities.

d. Vehicle Purchase. -- Acquisition of any vehicle purchased primarily for land management purposes or to support any category of land management activity by the agency.

e. Vehicle Operation and Maintenance. -- Costs of operating and upkeep of any vehicle used by the agency to support any category of land management activity.

f. Other. -- Any other support activity or cost not captured by other categories or subcategories.

4. Capital Improvements

a. New Facility Construction. -- Use of Fixed Capital Outlay (FCO) or other budget authority for all new facility design and construction activities. Includes new roads, parking and all other infrastructure.

b. Facility Maintenance. -- Use of Fixed Capital Outlay (FCO) or other budget authority for all repairs or renovations to existing facilities, roads or other infrastructure. Also includes ADA accessibility improvements and renovations.

5. Visitor Services/Recreation

a. Information/Education Programs. -- Interpretive, environmental education and marketing programs that explain or promote the agency's mission or instill in visitors an understanding and appreciation for Florida's natural and cultural resources and their proper use and care. Includes signs, brochures, maps and other public information materials that are produced or disseminated.

b. Operations. -- Includes the non-administrative and non-support costs involved in providing public access to lands. Includes all actions required to manage visitor activities in a way to ensure safe and enjoyable use by the public. Includes routine maintenance, cleaning and other work required to provide safe and efficient utilization of facilities and resources that support visitor use and recreation. Includes protection activities required by staff to safeguard natural and cultural resources, facilities, material, staff and visitors.

6. Law Enforcement

The provision of all activities for enforcing criminal, conservation and boating laws on land, freshwater and marine environments and all costs associated with these services. Includes the provision of uniform patrol. Includes overt and covert criminal investigations. Includes regulation of commercial wildlife trade. Also includes the direction and administration of all law enforcement programs and activities, and all associated costs.

Land Management Uniform Accounting Council Categories and FWC Activity Codes

Resource Management
Exotic Species Control

210 Exotic species control
211 Exotic plant control (mechanical)
212 Exotic plant control (chemical)

Prescribed Burning

205 Prescribed burning
206 Prescribed burning C growing season (April 1 to September 30)
207 Prescribed burning C dormant season (October 1 to March 31)
208 Firebreaks

Cultural Resource Management

201 Cultural resource management

Timber Management

202 Timber management

Hydrological Management

215 Hydrology management
216 Dams, dikes, levees
217 Canals
218 Water level management
194 Lake restoration

Other

185 GIS
186 Biometrics
200 RESOURCE MANAGEMENT
203 Tree and shrub planting
213 Wildlife management
214 Listed Species management
219 Upland restoration
282 Herbaceous seeding
283 Clearings
289 Native vegetation management (mechanical)
290 Native vegetation management (chemical)
221 Animal surveys
228 Inland aerial surveys
235 Vegetation and plant surveys
250 MONITORING AND ASSESSMENTS
252 Biomedical monitoring
253 Ecological monitoring
256 Habitat monitoring analysis
263 Nest box monitoring
264 Population demographics
295 Biological data collection, analysis, and reporting
275 Permits and authorizations
276 Commission rule development and review
277 Relocation
278 CITES tags
281 Other resource management
284 Feeding/watering
285 Nest structures

286 Population control
287 Stocking enhancements/population augmentation
288 Nuisance animal complaints
293 Mortality investigations
294 Program coordination and implementation C inter- and intra-agency coordination and program implementation at the section, bureau, or division level
296 Habitat protection technical assistance
750 URTD assessment
789 Site Preparation – GCR
790 Irrigation – GCR
791 Seed Collection – Hand
792 Seed Collection – Mechanical
793 Herbicide Maintenance Treatment

Administration

Central Office/Headquarters

100 ADMINISTRATION C administrative tasks, including preparation of forms, word processing, photocopying, filing, and other clerical/secretarial duties.
104 Budget/purchasing/accounting

Support

Land Management Planning

103 Meetings C includes workshops, conferences, staff, and other meetings.
204 Resource planning

Land Management Reviews

209 Land Management Reviews
101 Project inspection C field inspections of projects.

Training/Staff Development

150 PERSONNEL MANAGEMENT C recruitment, hiring, training, counseling, and supervising.

Vehicle Purchase

128 New Vehicle and Equipment Purchase

Vehicle Operation and Maintenance

923 FEM C vehicles/equipment

Other

140 REPORT WRITING/EDITING/MANUSCRIPT PREPARATION
141 Grant applications
180 SYSTEMS ADMINISTRATION AND MANAGEMENT
182 Data management
184 Metadata development and management
187 IT
188 Web development
721 Geospatial analysis techniques
191 Stamp design coordination
226 Human dimensions surveys

Capital Improvements

New Facility Construction

910 New facility construction C buildings/structures
912 New construction C roads/bridges
913 New construction C trails
914 New construction C fences

Facility Maintenance

920 Facility and equipment maintenance (FEM) C buildings/structures
921 FEM C utilities
922 FEM C custodial functions
925 FEM C boating access
926 FEM C roads/bridges
927 FEM C trails
928 FEM C fences

Visitor Services/Recreation

Information/Education Programs

145 Technical bulletin

Operations

311 Boundary signs
312 Informational signs
320 Outreach and education C attending or developing educational or informational materials or events for the public
327 Becoming an Outdoor Woman C enhancement
331 Wings Over Florida
339 Range safety operations
341 Public use administration (hunting)
342 Public use administration (non-hunting)
350 Customer service support C disseminating written or verbal information or assistance to the public
700 STUDIES
740 EVALUATIONS AND ASSESSMENTS

Law Enforcement

FWC Activity Code Numeric Listing

100 ADMINISTRATION C administrative tasks, including preparation of forms, word processing, photocopying, filing, and other clerical/secretarial duties.
101 Project inspection C field inspections of projects.
103 Meetings C includes workshops, conferences, staff, and other meetings.
104 Budget/purchasing/accounting
128 New Vehicle and Equipment Purchase
140 REPORT WRITING/EDITING/MANUSCRIPT PREPARATION
141 Grant applications
145 Technical bulletin

150 PERSONNEL MANAGEMENT C recruitment, hiring, training, counseling, and supervising.
180 SYSTEMS ADMINISTRATION AND MANAGEMENT
182 Data management
184 Metadata development and management
185 GIS
186 Biometrics
187 IT
188 Web development
191 Stamp design coordination
194 Lake restoration
200 RESOURCE MANAGEMENT
201 Cultural resource management
202 Timber management
203 Tree and shrub planting
204 Resource planning
205 Prescribed burning
206 Prescribed burning C growing season (April 1 to September 30)
207 Prescribed burning C dormant season (October 1 to March 31)
208 Firebreaks
209 Land Management Reviews
210 Exotic species control
211 Exotic plant control (mechanical)
212 Exotic plant control (chemical)
213 Wildlife management
214 Listed Species management
215 Hydrology management
216 Dams, dikes, levees
217 Canals
218 Water level management
219 Upland restoration
221 Animal surveys
226 Human dimensions surveys
228 Inland aerial surveys
235 Vegetation and plant surveys
250 MONITORING AND ASSESSMENTS
252 Biomedical monitoring
253 Ecological monitoring
256 Habitat monitoring analysis
263 Nest box monitoring
264 Population demographics
275 Permits and authorizations
276 Commission rule development and review
277 Relocation
278 CITES tags
281 Other resource management
282 Herbaceous seeding

283 Clearings
284 Feeding/watering
285 Nest structures
286 Population control
287 Stocking enhancements/population augmentation
288 Nuisance animal complaints
289 Native vegetation management (mechanical)
290 Native vegetation management (chemical)
293 Mortality investigations
294 Program coordination and implementation C inter- and intra-agency coordination and program implementation at the section, bureau, or division level
295 Biological data collection, analysis, and reporting
296 Habitat protection technical assistance
311 Boundary signs
312 Informational signs
320 Outreach and education C attending or developing educational or informational materials or events for the public
327 Becoming an Outdoor Woman C enhancement
331 Wings Over Florida
339 Range safety operations
341 Public use administration (hunting)
342 Public use administration (non-hunting)
350 Customer service support C disseminating written or verbal information or assistance to the public
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922 FEM C custodial functions
923 FEM C vehicles/equipment
925 FEM C boating access
926 FEM C roads/bridges
927 FEM C trails
928 FEM C fences

13.15 GRASI MOU

MEMORANDUM OF AGREEMENT BETWEEN
THE DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE FOR INSTALLATIONS
PENTAGON, WASHINGTON, D.C. 20330
AND
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
TALLAHASSEE, FL 32399
FOR THE PROVISION OF MILITARY TRAINING ON STATE LANDS

THIS MEMORANDUM OF AGREEMENT (hereafter, the "Agreement") is made and entered into by and between Office of the Deputy Assistant Secretary of the Air Force for Installations (hereinafter, "Air Force") and Florida Fish and Wildlife Conservation Commission (hereinafter, "Commission").

WITNESSETH:

WHEREAS, the Air Force, in order to successfully accomplish mission requirements has a need for expanded training opportunities in Northwest Florida beyond the current Department of Defense lands and training areas, and

WHEREAS, the Commission is responsible for managing, protecting, maintaining, and developing over 1.4 million acres of state conservation land ("Commission Lead-Managed Lands")

WHEREAS, the Parties have mutually concluded that it is desirable, practicable, and beneficial for the Parties to enter this Agreement to the mutual benefit of both and the goal is to work together in an effort to enhance both Parties.

NOW, THEREFORE, BE IT AGREED THAT:

1. Military training operations on the Commission Lead-Managed Lands in Northwest Florida can be compatible for both Parties without unreasonable impacts to resources if conducted with the proper planning and coordination.
2. Within 60 days of enactment of this Agreement, Commission staff and Air Force personnel will work together to develop a detailed "Annual Operations Plan" that:

    a. Establishes a-framework through which military training exercises may be conducted on State owned Commission Lead-Managed Lands. This framework may include other appropriate instruments within the jurisdiction of both Parties.
    b. Identifies number and locations of compatible available sites in the Northwest Florida region, to be defined as "training sites".
    c. Provides detailed maps showing boundaries delineating training areas.
    d. Details limitations of liability between the parties.
    e. Estimates the frequency of use of the sites.
    f. Indicates the types of compatible training allowed and the training activities that are expected to be prohibited.
    g. Establishes procedures for requesting, cancelling, coordinating and notification of the use of training sites.
    h. Identifies options for compensation or reimbursement for the Commission providing lands for training through cash payment or in-kind services.

h. Identifies options for compensation or reimbursement for the Commission providing lands for training through cash payment or in-kind services.
i. Establishes a feedback mechanism to assess the usefulness of the training site for the Air Force and the impact, if any, upon the mission of the Commission.
j. Identifies and clarifies the Air Force's responsibility with regard to the National Environmental Policy Act (NEPA).

EXECUTION OF THIS AGREEMENT:

3. This Agreement shall become effective upon the date last signed below, and shall remain in full force and effect until cancelled by mutual agreement of the Parties, or upon the provision of at least sixty (60) days advance written notice from the Party desiring to terminate this Agreement to the other Party. Upon becoming effective, this Agreement shall supersede all previous agreements between the Parties on the same subject.
4. Unless a notice of change of address is given, any and all notices shall be delivered to the parties at the following addresses:

Commission

Mike Brooks
Section Leader
Wildlife and Habitat Management Section
620 South Meridian Street
Tallahassee, Florida 32399-1600
(850) 488-3831

Air Force

Kathleen I. Ferguson, P.E.
Principal Deputy Assistant Secretary
(Installations, Environment & Logistics)
Pentagon, Washington, D.C.
(703) 697-6300

IN WITNESS WHEREOF, authorized representatives of the Parties have affixed their signatures hereto, in recognition and acceptance of the terms, conditions and obligations set forth and or assumed under this Agreement.

Florida Fish and Wildlife Conservation Commission:

Nick Wiley, Executive Director

DATE: 3-25-13

APPROVED AS TO FORM AND LEGAL SUFFICIENCY
Commission Attorney

Department of the Air Force:

Kathleen I. Ferguson, P.E.
Principal Deputy Assistant Secretary
(Installations, Environment & Logistics)
Pentagon, Washington, D.C.

DATE:

h. Identifies options for compensation or reimbursement for the Commission providing lands for training through cash payment or in-kind services.
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Florida Fish and Wildlife Conservation Commission:

_____
Nick Wiley, Executive Director

DATE:_____

Department of the Air Force:

Kathleen I. Ferguson
Kathleen I. Ferguson, P.E.
Acting Assistant Secretary
(Installations, Environment & Logistics)
Pentagon, Washington, D.C.

MAR 22 2013

DATE:_____

13.16 Escribano Point Preliminary Site Assessment

Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation
Conservation Acquisition and Planning

Preliminary Environmental Site Assessment
Escribano Point Tract
January 18 and 25, 2012

On January 18 and 25, of 2012, staff with the Florida Fish and Wildlife Conservation Commission (FWC) conducted a preliminary environmental site assessment inspection on approximately 1,716 +/- acres of real property located within the Escribano Point Florida Forever project that is owned by American Bank of Texas. The property is adjacent to the FWC Escribano Point Unit of the Yellow River Wildlife Management Area (EPU-YRWMA), Eglin Air Force Base, and the Choctawhatchee National Forest in Santa Rosa County, Florida. The Santa Rosa County Tax Collector's Property Identification Numbers (ID) for the property are: 14-1S-28-0000-00700-0000; 14-1S-28-0000-00800-0000; 15-1S-28-0000-00100-0000; 19-1S-27-0000-00200-0000; 20-1S-27-000-00100-0000; 22-1S-27-0000-00100-0000; 23-1S-27-0000-00200-0000; 32-1S-27-0000-00100-0000 and 33-1S-27-0000-00100-0000.

The parcels are located in Sections 14 and 15 in Township 1 South, Range 28 West and in Sections 19, 20, 22, 23, and 32 in Township 1 South, Range 27 West. The property is located approximately three miles west of Holley on the north side of East Bay between Blackwater Bay and the confluence of the Blackwater, Yellow and East Bay Rivers. Based on an FWC analysis of 2003 Landsat imagery, the natural communities found on the property are composed primarily of bay swamp (approximately 29% of the area), hardwood hammock (approximately 27%), freshwater marsh (approximately 26%), and mixed wetland forest (approximately 11%). Other identified plant communities include sandhill, hardwood swamp, mixed pine-hardwood forest, pinelands, sand/beach, and shrub and brushland.

On the dates noted above, FWC staff conducted a ground inspection of the shoreline and selected interior parcels associated with roads and old timber trails to document the occurrence of unusual site disturbance, stained or cleared areas, containers with potential contaminants, trash and debris. No buildings or improvements are known to exist on the property. The majority of the interior roads and trails and the entire beach were traversed on foot. Photographs and maps with corresponding GPS data points are displayed on the maps accompanying this report.

Field inspection of the property revealed that the majority of the shore line, as shown in the attached photos is littered with storm surge debris from storms that have struck the area. Most of this shoreline debris is thought to have resulted from debris associated with Hurricane Ivan which struck the area and this property on September 16, 2004 and other minor storms. The shoreline debris consists mainly of lumber, presumably from decks and

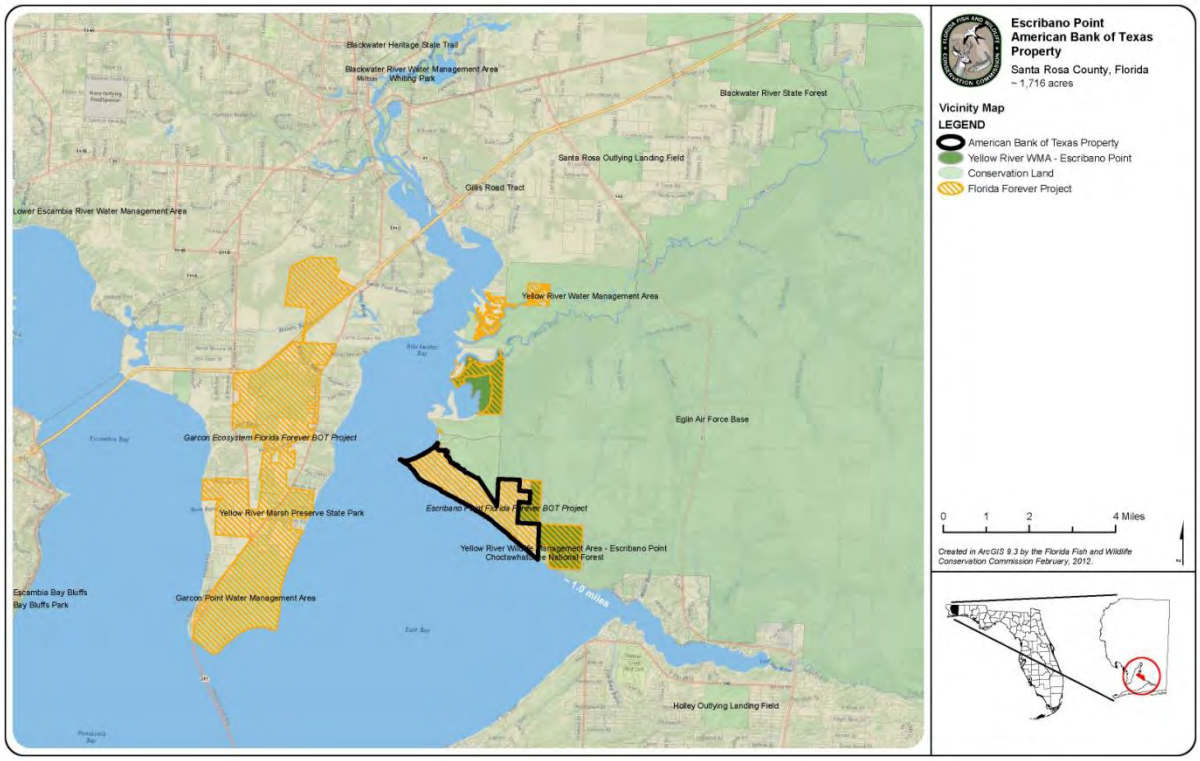
boat docks, which were destroyed in the aforementioned storms. However, two boats, or parts thereof, and several appliances were also observed.

Areas of possible environmental concerns (photos attached) consisted of two abandoned boats with inboard motors and abandoned Liquefied Petroleum (LP) gas tanks. No other environmental concerns were observed during the site reconnaissance. Overall, aside from the documented storm debris, the site appeared to be in good condition with no other visible signs of environmental contamination or disturbance.

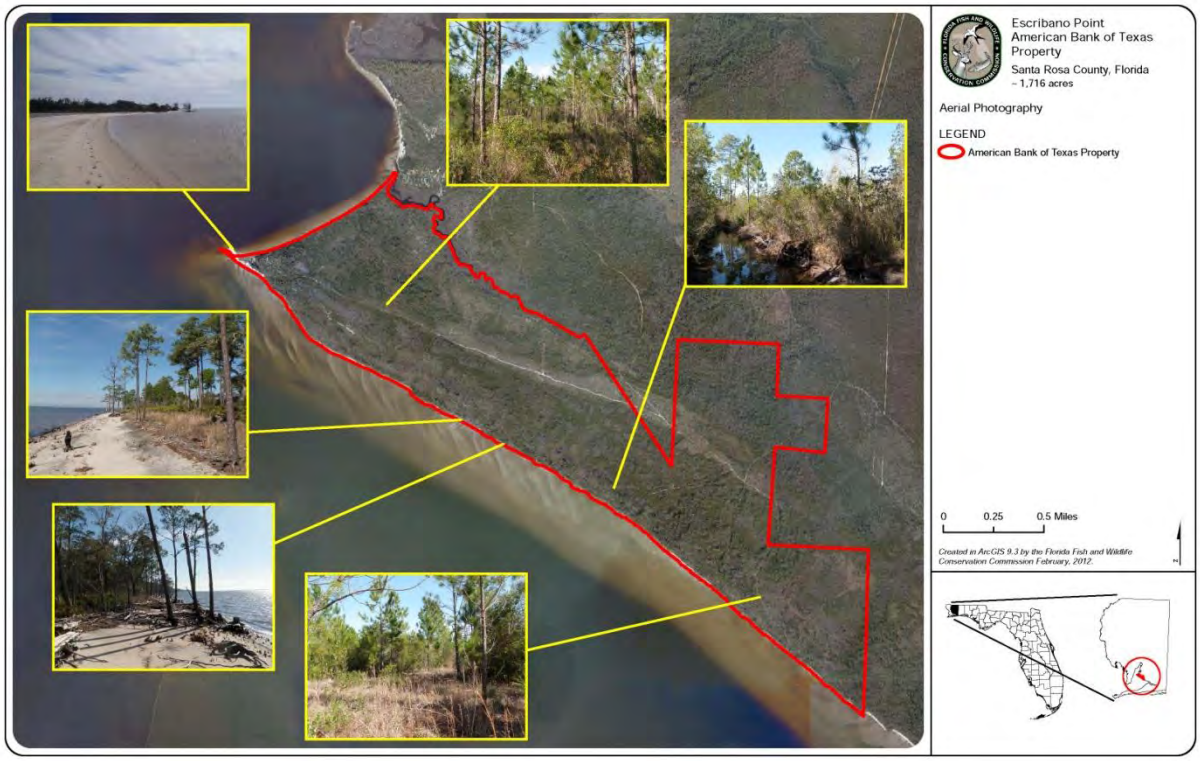
Photos taken on American Bank of Texas Property on January 18 and 25, 2012

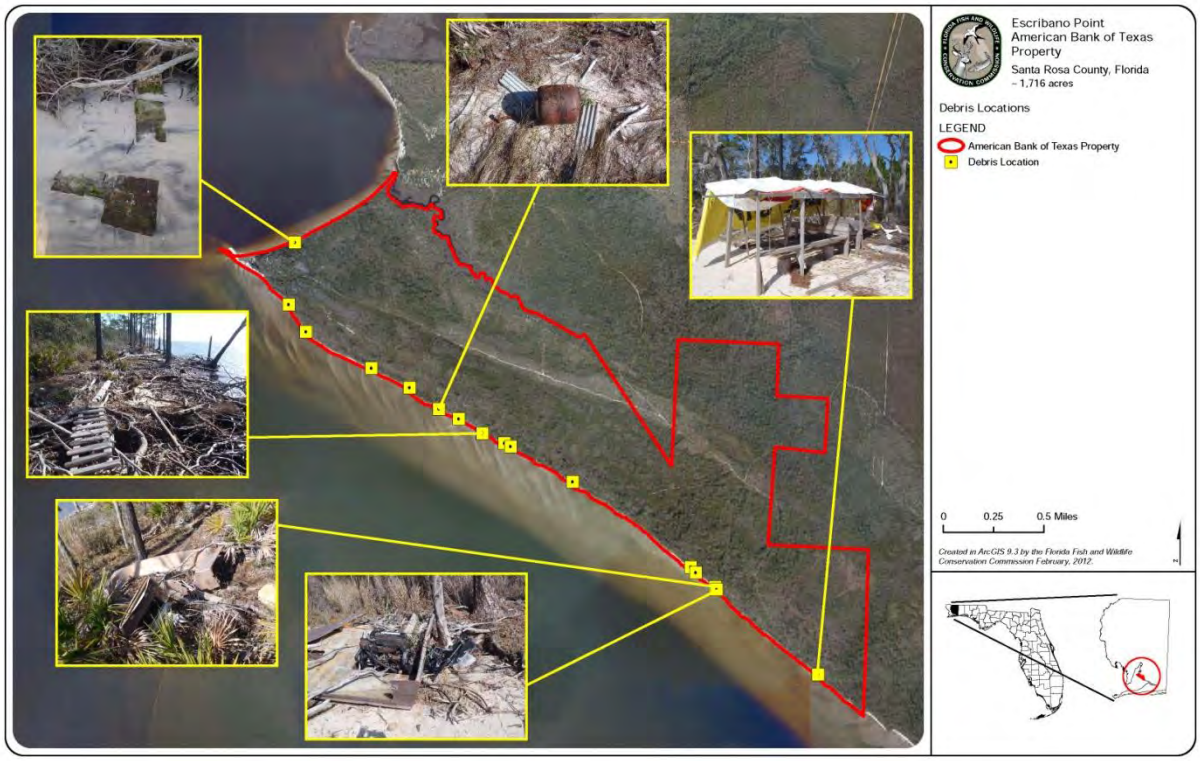
Photos taken on American Bank of Texas Property on January 18 and 25, 2012

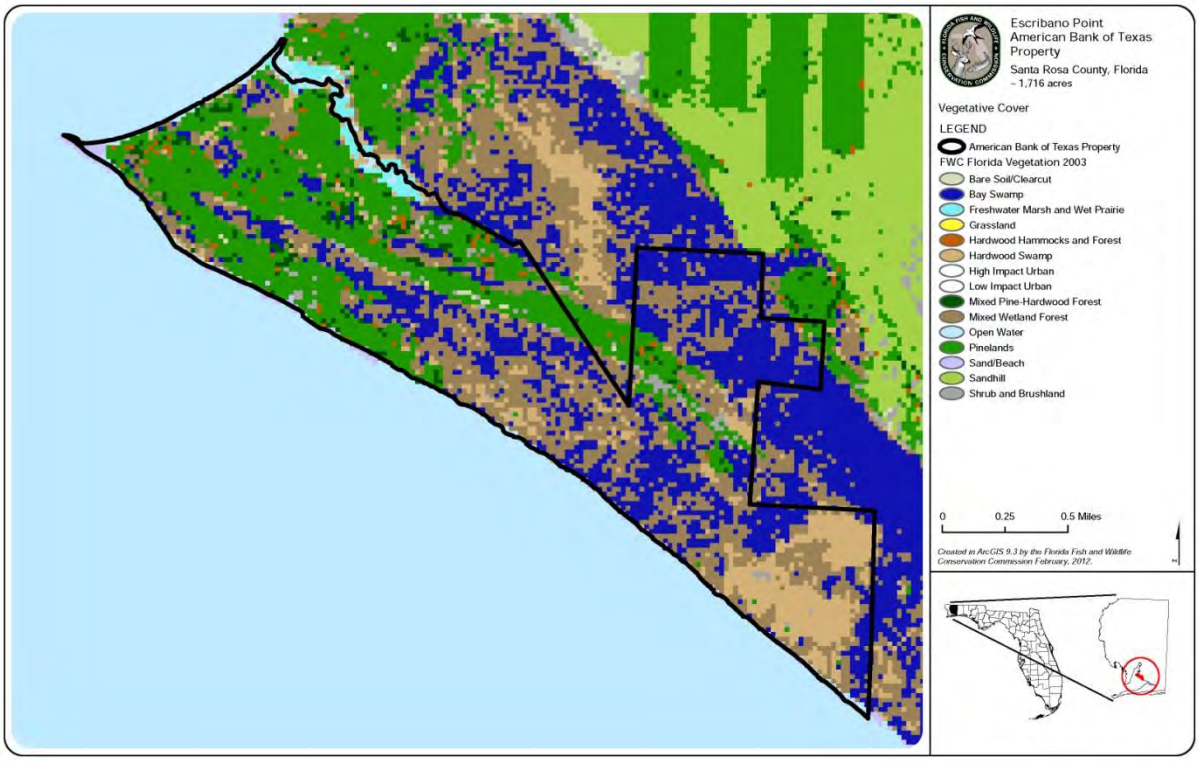
Photos taken on American Bank of Texas Property on January 18 and 25, 2012


Escribano Point
American Bank of Texas Property
Santa Rosa County, Florida
~1,716 acres
Vicinity Map
LEGEND
American Bank of Texas Property
Yellow River WMA - Escribano Point
Conservation Land
Florida Forever Project
Blackwater Heritage State Trail
Blackwater River Water Management Area
Whiting Park
Blackwater River State Forest
Santa Rosa Outlying Landing Field
Gins Road Tract
Lower Escambia River Water Management Area
Yellow River Water Management Area
Eglin Air Force Base
Garcon Ecosystem Florida Forever BOT Project
Escribano Point Florida Forever BOT Project
Yellow River Marsh Preserve State Park
Yellow River Wildlife Management Area - Escribano Point
Choctawhatchee National Forest
Escambia Bay Bluffs
Bay Bluffs Park
Garcon Point Water Management Area
~1.0 miles
Holley Outlying Landing Field
0 1 2 4 Miles
Created in ArcGIS 9.3 by the Florida Fish and Wildlife Conservation Commission February, 2012.


Escribano Point
American Bank of Texas Property
Santa Rosa County, Florida
~1,716 acres
Parcel Map
LEGEND
American Bank of Texas Property
Santa Rosa County Parcels (with Parcel ID)
Yellow River WMA - Escribano Point Unit
Conservation Land
Yellow River Water Management Area
Eglin Air Force Base
14-1S-28-0000-00800-0000
19-1S-27-0000-00200-0000
14-1S-28-0000-00700-0000
20-1S-27-0000-00100-0000
15-1S-28-0000-00100-0000
23-1S-27-0000-00200-0000
Yellow River Wildlife Management Area - Escribano Point
22-1S-27-0000-00100-0000
33-1S-27-0000-00100-0000
32-1S-27-0000-00100-0000
Choctawhatchee National Forest
0 0.25 0.5 Miles
Created in ArcGIS 9.3 by the Florida Fish and Wildlife Conservation Commission February, 2012.


Escribano Point
American Bank of Texas Property
Santa Rosa County, Florida
~1,716 acres
Aerial Photography
LEGEND
American Bank of Texas Property
0 0.25 0.5 Miles
Created in ArcGIS 9.3 by the Florida Fish and Wildlife Conservation Commission February, 2012.


Escribano Point
American Bank of Texas Property
Santa Rosa County, Florida
~1,716 acres
Debris Locations
LEGEND
American Bank of Texas Property
Debris Location
0 0.25 0.5 Miles
Created in ArcGIS 9.3 by the Florida Fish and Wildlife Conservation Commission February, 2012.


Escribano Point
American Bank of Texas Property
Santa Rosa County, Florida
~1,716 acres
Vegetative Cover
LEGEND
American Bank of Texas Property
FWC Florida Vegetation 2003
Bare Soil/Clearcut
Bay Swamp
Freshwater Marsh and Wet Prairie
Grassland
Hardwood Hammocks and Forest
Hardwood Swamp
High Impact Urban
Low Impact Urban
Mixed Pine-Hardwood Forest
Mixed Wetland Forest
Open Water
Pinelands
Sand/Beach
Sandhill
Shrub and Brushland
0
0.25
0.5 Miles
Created in ArcGIS 9.3 by the Florida Fish and Wildlife Conservation Commission February, 2012.

13.17 Arthropod Control Plan

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

ADAM H. PUTNAM
COMMISSIONER

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

Section 388.4111, F.S.
Telephone: (850) 617-7997

For use in documenting an Arthropod Control Pan 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:

Escribano Point Wildlife Management Area

Is Control Work Necessary: ☐ Yes ☒ No

Location:

The area of Escribano Point WMA in and around this point: 86°58'59" W 30°31'51"N

Land Management Agency:

Florida Fish and Wildlife Conservation Commission

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

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:

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Arthropod Species for Which Control is Proposed:

N/A

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:) N/A

☐ 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:

Method of application

Proposed Adult Mosquito Control:

Aerial adulticiding	☐ Yes	☒ No
Ground adulticiding	☐ Yes	☒ No

Please specify the following for each adulticide:

Chemical or common name:

Rate of application:

Method of application

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:

Records:

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

☐ Yes ☐ No

Records Location:

How long are records maintained.

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Page 3 of 4

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed:

Include proposed operational schedules for water fluctuations:

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

Proposed Modification of Aquatic Vegetation:

Land Manager Comments:

Arthropod Control Agency Comments:

Signature of Lands Manager or Representative — Date 1-22-15

Signature of Mosquito Control Director / Manager — Date 1-22-15

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Page 4 of 4

13.18 Santa Rosa County Letter of Compliance with Local Government Comprehensive Plan

Santa Rosa County
Development Services

Beckie Cato, AICP
Planning and Zoning Director

Tony Gomillion
Public Service Director

Rhonda C. Royals
Building Official

January 21, 2015

Jennifer Tucker
Florida Fish and Wildlife Conservation Commission
Farris Bryant Building
620 South Meridian Street
Tallahassee, FL 32399-1600

Dear Ms. Tucker:

I have reviewed the Management Plan for the Escribano Point Wildlife Management Area (EPWMA) and find it in compliance with the Santa Rosa County Comprehensive Plan.

Please feel free to contact me if you have any additional questions.

Sincerely,

Mary Ann Vance
Planner II
Community Planning, Zoning
and Development Division

Santa Rosa County Public Service Complex
6051 Old Bagdad Highway, Suite 202 Milton, Florida 32583
www.santarosa.fl.gov
Office: (850) 981-7000
Inspections/Compliance Division Fax: (850) 623-1208 • Planning/Zoning Division Fax: (850) 983-9874 • Commercial Review Fax: (850) 623-1381