



Rocky Bayou Aquatic Preserve

Management Plan



Florida Department of Environmental Protection
Florida Coastal Office
3900 Commonwealth Blvd., MS #235, Tallahassee, FL 32399
www.aquaticpreserves.org



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September 2018



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A natural window through the tree line surrounding Rocky Bayou.

Mission Statement

The Florida Coastal Office's mission statement is: Conserving and restoring Florida's coastal and aquatic resources for the benefit of people and the environment.

The four long-term goals of the Florida Coastal Office's Aquatic Preserve Program are to:

1. protect and enhance the ecological integrity of the aquatic preserves;
2. restore areas to their natural condition;
3. encourage sustainable use and foster active stewardship by engaging local communities in the protection of aquatic preserves; and
4. improve management effectiveness through a process based on sound science, consistent evaluation, and continual reassessment.

Executive Summary

Rocky Bayou Aquatic Preserve Management Plan

Lead Agency Florida Department of Environmental Protection's (DEP)
Florida Coastal Office (FCO)

Common Name of Property Rocky Bayou Aquatic Preserve (RBAP)

Location Okaloosa County, Florida

Acreage Total 366

Acreage Breakdown According to Florida Natural Areas Inventory (FNAI) Natural Community Type

FNAI Natural Communities Acreage according to GIS

Unconsolidated Substrate Unknown

Seagrass Bed Unknown

Floodplain Marsh / Salt Marsh One acre

Management Agency: DEP's FCO

Designation: Aquatic Preserve

Unique Features: Rocky Bayou receives freshwater from two streams, Rocky Creek and Turkey Creek. There is also an abundance of small steephead streams that flow into the aquatic preserve. Steepheads are seasonally influenced small freshwater streams that feed into the preserve through underground deposits.

Archaeological/ Historical Sites: Signs of early human occupancy can be seen from shell mounds found along the shoreline. Shell mounds can help archaeologists better understand archaic people's social structure, technology, food ways, and other cultural aspects.

Management Needs (See Management Issues and Goals)

Ecosystem Science Rocky Bayou Aquatic Preserve's coastlines and waters provide habitat and foraging grounds for fish and other aquatic life.

Resource Management Maintain current, detailed resource inventories. Assess human impact on resources through recreational use and establish habitat restoration programs. Work with other agencies to establish water quality improvements.

Education and Outreach Environmental education, educate and advance wise resource use, produce educational literature, participate in public conferences and seminars, construct environmental displays in areas of popular recreational use.

Public Use Rocky Bayou Aquatic Preserve is open to the public for recreational boating, swimming and fishing.

Public Involvement: Public support is vital to the success of government conservation programs. The goal is to foster understanding of the problems facing our ecosystems and the steps needed to adequately manage our aquatic habitats. Rocky Bayou Aquatic Preserve staff held public and advisory committee meetings on February 27 and 28, 2018 at Northwest Florida State College in Niceville, Florida to receive input on the draft management plan. An additional public meeting was held in Lakeland, Florida on August 24, 2018 when the Acquisition and Restoration Council reviewed the management plan.

Coastal Zone Management Issues

Rocky Bayou State Park Aquatic Preserve, hereafter referred to as Rocky Bayou Aquatic Preserve (RBAP), is protected by approximately 50 percent public lands. Fred Gannon Rocky Bayou State Park is adjacent to the southern boundary, and the east is Eglin Air Force Base. The only developed residential areas are the northern boundary. Because new residents may not be familiar with the intrinsic value of the aquatic preserve's resources, and the need for low-impact use, education and awareness will be especially important. Coordination with local, state and federal managing agencies will provide the largest impact to RBAP to protect the existing resources that make this bayou such a favorable place to reside.

As tourism in Florida continues to increase along with the residential population, the demands on natural resources in Florida are increasing. RBAP is affected by activities from the entire Choctawhatchee Bay Watershed System, in both Alabama and Florida, as stream and tributaries feed this estuary. The diverse land use, increased development and agriculture throughout both states affect this watershed. Coastal and watershed activities have the ability to affect water quality and submerged resources in both positive and negative ways. Aquatic preserve staff work to encourage positive change and limit any activities that would be detrimental to the aquatic preserve. Long-term monitoring of water quality, species, and habitat provides the data necessary for staff to evaluate the status and trends in the system. Public involvement in aquatic preserve management is encouraged through the Citizen Support Organization, Ecosystem Restoration Support Organization, and public presentations and events, and volunteer programs. The public are encouraged to enjoy the natural resources that the aquatic preserve has to offer, while maintaining its condition for the benefit of future generations.

Goals

Better resource inventories and spatial data management/analysis techniques will increase efficiency and effectiveness of management activities in the aquatic preserve. Active removal of non-native invasive species and stabilization of eroding shorelines are land-based activities that will also affect the aquatic habitats. Partnerships and public engagement will be key to addressing the issues defined in this plan.

The management goals and associated strategies outlined in this document provide an action plan over the course of the next decade that will be used to address the challenges mentioned above. Due to limited resources and the overlap of jurisdictional boundaries, success will depend on partnerships formed with private, local, regional, state, and federal organizations and agencies. Partnerships will be formed to promote the maintenance or improvement of the quality of water reaching the aquatic preserve to meet the needs of the natural resources. Routine assessment of water quality status is required to document change over time. Resource management goals that will improve water quality include hydrologic restoration, shoreline buffer implementation and creation of oyster reef habitat. Documentation of natural resource location and extent will allow managers to evaluate the success of large-scale watershed restoration projects. Maintenance of a safe environment for fish, wildlife, and user groups, and the promotion of low-impact recreational opportunities and good stewardship are also important goals that will be addressed by aquatic preserve staff. Prioritizing issues, objectives and strategies will lead to a cohesive management program and the long-term conservation of the natural system.

FCO/Trustees Approval

FCO Approval: May 1, 2018

ARC approval: Aug. 24, 2018

Trustees approval: Dec. 4, 2018

Comments:

Acronym List

Abbreviation	Meaning
ADA	Americans with Disabilities Act
AFB	Air Force Base
DEP	Florida Department of Environmental Protection
DNR	Florida Department of Natural Resources
EPA	U.S. Environmental Protection Agency
ERSO	Ecosystem Restoration Support Organization
F.A.C.	Florida Administrative Code
FCO	Florida Coastal Office
FFY	Florida Friendly Yards
FNAI	Florida Natural Areas Inventory
F.S.	Florida Statutes
FTE	Full Time Equivalent
FWC	Florida Fish and Wildlife Conservation Commission
G	Global
GIS	geographic information system
NERR	National Estuarine Research Reserve
NOAA	National Oceanic and Atmospheric Administration
NWFLAP	Northwest Florida Aquatic Preserves
OFW	Outstanding Florida Water
OPS	Other Personal Services
RBAP	Rocky Bayou Aquatic Preserve
S	State
SAV	Submerged Aquatic Vegetation
Trustees	Board of Trustees of the Internal Improvement Trust Fund
UF/IFAS	University of Florida, Institute of Food and Agricultural Sciences
USFWS	United States Fish and Wildlife Service

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A stream separates the woodlands and pours into the bayou.

Part One

Basis for Management

Chapter One

Introduction

Chapter 1 / Introduction

The Florida aquatic preserves are administered on behalf of the state by the Florida Department of Environmental Protection's (DEP) Florida Coastal Office (FCO) as part of a network that includes 41 aquatic preserves, three National Estuarine Research Reserves (NERRs), a National Marine Sanctuary, the Coral Reef Conservation Program, the Florida Coastal Management Program, the Outer Continental Shelf Program, the Clean Marinas and Clean Vessels Act Program, and the Florida Resilient Coastlines Program (Map 1). This provides for a system of significant protections to ensure that our most popular and ecologically important underwater ecosystems are cared for in perpetuity. Each of these special places is managed with strategies based on local resources, issues and conditions.

Our expansive coastline and wealth of aquatic resources have defined Florida as a subtropical oasis, attracting millions of residents and visitors, and the businesses that serve them. Florida's submerged lands play important roles in maintaining good water quality, hosting a diversity of wildlife and habitats (including economically and ecologically valuable nursery areas), and supporting a treasured quality of life for all. In the 1960s, it became apparent that the ecosystems that had attracted so many people to Florida could not support rapid growth without science-based resource protection and management. To this end, state legislators provided extra protection for certain exceptional aquatic areas by designating them as aquatic preserves.

Title to submerged lands not conveyed to private landowners is held by the Board of Trustees of the Internal Improvement Trust Fund (the Trustees). The Governor and Cabinet, sitting as the Trustees, act as guardians for the people of the State of Florida (§253.03, Florida Statutes [F.S.]) and regulate the use of these public lands. Through statute, the Trustees have the authority to adopt rules related to the management of sovereignty submerged lands (Florida Aquatic Preserve Act of 1975, §258.36, F.S.). A higher layer of protection is afforded to aquatic preserves including areas of sovereignty lands that have been “set aside forever as aquatic preserves or sanctuaries for the benefit of future generations” due to “exceptional biological, aesthetic, and scientific value” (Florida Aquatic Preserve Act of 1975, §258.36, F.S.).

This tradition of concern and protection of these exceptional areas continues, and now includes: the Rookery Bay NERR in Southwest Florida, designated in 1978; the Apalachicola NERR in Northwest Florida, designated in 1979; and the Guana Tolomato Matanzas NERR in Northeast Florida, designated in 1999. In addition, the Florida Oceans and Coastal Council was created in 2005 to develop Florida’s ocean and coastal research priorities, and establish a statewide ocean research plan. The group also coordinates public and private ocean research for more effective coastal management. This dedication to the conservation of coastal and ocean resources is an investment in Florida’s future.



1.1 / Management Plan Purpose and Scope

With increasing development, recreation and economic pressures, our aquatic resources have the potential to be significantly impacted, either directly or indirectly. These potential impacts to resources can reduce the health and viability of the ecosystems that contain them, requiring active management to ensure the long-term health of the entire network. Effective management plans for the aquatic preserves are essential to address this goal and each site's own set of unique challenges. The purpose of these plans is to incorporate, evaluate and prioritize all relevant information about the site into a cohesive management strategy, allowing for appropriate access to the managed areas while protecting the long-term health of the ecosystems and their resources.

The mandate for developing aquatic preserve management plans is outlined in Section 18-20.013 and Subsection 18-18.013(2) of the Florida Administrative Code (F.A.C.). Management plan development and review begins with the collection of resource information from historical data, research and monitoring, and includes input from individual FCO managers and staff, area stakeholders, and members of the general public. The statistical data, public comment, and cooperating agency information is then used to identify management issues and threats affecting the present and future integrity of the site, its boundaries, and adjacent areas. This information is used in the development and review of the management plan, which is examined for consistency with the statutory authority and intent of the Aquatic Preserve Program. Each management plan is evaluated periodically and revised as necessary to allow for strategic improvements. Intended to be used by site managers and other agencies or private groups involved with maintaining the natural integrity of these resources, the plan includes scientific information about the existing conditions of the site and the management strategies developed to respond to those conditions.

To aid in the analysis and development of the management strategies for the site plans, four comprehensive management programs are identified. In each of these management programs, relevant information about the specific sites is described in an effort to create a comprehensive management plan. It is expected that the specific needs or issues are unique and vary at each location, but the four management programs will remain constant. These management programs are:

- Ecosystem Science
- Resource Management
- Education and Outreach
- Public Use

In addition, unique local and regional issues are identified, and goals, objectives and strategies are established to address these issues. Finally, the program and facility needs required to meet these goals as identified. These components are all key elements in an effective coastal management program and for achieving the mission of the sites.

The previous management plan for Rocky Bayou State Park Aquatic Preserve (hereafter referred to as Rocky Bayou Aquatic Preserve) was approved in 1991. The initial plan covered the history and management standards for the Rocky Bayou Aquatic Preserve. The current plan covers area history, resources, current and past uses, management issues, goals for addressing those issues, as well as other topics.

1.2 / Public Involvement

FCO recognizes the importance of stakeholder participation and encourages their involvement in the management plan development process. FCO is also committed to meeting the requirements of the Sunshine Law (§286.011, F.S.):

- meetings of public boards or commissions must be open to the public;
- reasonable notice of such meetings must be given; and
- minutes of the meetings must be recorded.

Several key steps are to be taken during management plan development. First, staff compose a draft plan after gathering information of current and historic uses and resource, cultural and historic sites, and other valuable information regarding the property and surrounding area. Staff then organize an advisory committee comprised of key stakeholders and conduct, in conjunction with the advisory committee, public meetings to engage the stakeholders for feedback on the draft plan and the development of the final draft of the management plan. An additional public meeting is held when the plan is reviewed by the Acquisition and Restoration Council for final approval. For additional information about the advisory committee and the public meetings refer to Appendix C - Public Involvement.



A hanging tree branch near the boat launch makes for great shade to relax under.

Chapter Two

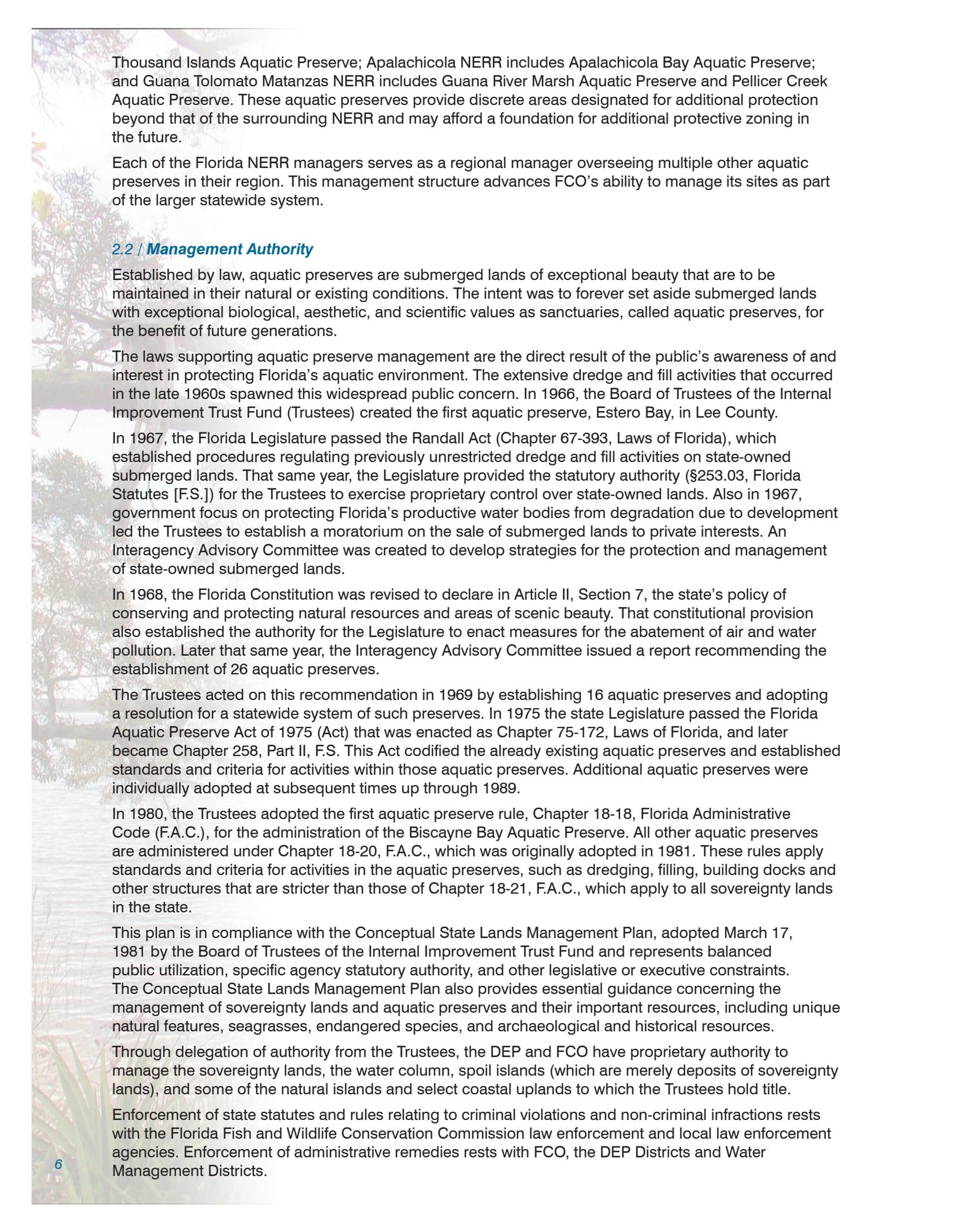
The Florida Department of Environmental Protection's Florida Coastal Office

2.1 / Introduction

The Florida Department of Environmental Protection (DEP) protects, conserves and manages Florida's natural resources and enforces the state's environmental laws. DEP is the lead agency in state government for environmental management and stewardship and commands one of the broadest charges of all the state agencies, protecting Florida's air, water and land. DEP is divided into three primary areas: Regulatory Programs, Land and Recreation, and Ecosystem Restoration. Florida's environmental priorities include restoring America's Everglades; improving air quality; restoring and protecting the water quality in our springs, lakes, rivers and coastal waters; conserving environmentally-sensitive lands; and providing citizens and visitors with recreational opportunities, now and in the future.

The Florida Coastal Office (FCO) is the unit within the DEP that manages more than four million acres of submerged lands and select coastal uplands. This includes 41 aquatic preserves, three National Estuarine Research Reserves (NERRs), the Florida Keys National Marine Sanctuary, the Florida Coastal Management Program, the Outer Continental Shelf Program, the Coral Reef Conservation Program, the Clean Marinas and Clean Vessels Act Program, and the Florida Resilient Coastlines Program. The three NERRs, the Florida Keys National Marine Sanctuary, and the Coral Reef Conservation Program are managed in cooperation with the National Oceanic and Atmospheric Administration (NOAA).

FCO manages sites in Florida for the conservation and protection of natural and historical resources and resource-based public use that is compatible with the conservation and protection of these lands. FCO is a strong supporter of the NERR system and its approach to coastal ecosystem management. The State of Florida has three designated NERR sites, each encompassing at least one aquatic preserve within its boundaries. Rookery Bay NERR includes Rookery Bay Aquatic Preserve and Cape Romano - Ten



Thousand Islands Aquatic Preserve; Apalachicola NERR includes Apalachicola Bay Aquatic Preserve; and Guana Tolomato Matanzas NERR includes Guana River Marsh Aquatic Preserve and Pellicer Creek Aquatic Preserve. These aquatic preserves provide discrete areas designated for additional protection beyond that of the surrounding NERR and may afford a foundation for additional protective zoning in the future.

Each of the Florida NERR managers serves as a regional manager overseeing multiple other aquatic preserves in their region. This management structure advances FCO's ability to manage its sites as part of the larger statewide system.

2.2 / **Management Authority**

Established by law, aquatic preserves are submerged lands of exceptional beauty that are to be maintained in their natural or existing conditions. The intent was to forever set aside submerged lands with exceptional biological, aesthetic, and scientific values as sanctuaries, called aquatic preserves, for the benefit of future generations.

The laws supporting aquatic preserve management are the direct result of the public's awareness of and interest in protecting Florida's aquatic environment. The extensive dredge and fill activities that occurred in the late 1960s spawned this widespread public concern. In 1966, the Board of Trustees of the Internal Improvement Trust Fund (Trustees) created the first aquatic preserve, Estero Bay, in Lee County.

In 1967, the Florida Legislature passed the Randall Act (Chapter 67-393, Laws of Florida), which established procedures regulating previously unrestricted dredge and fill activities on state-owned submerged lands. That same year, the Legislature provided the statutory authority (§253.03, Florida Statutes [F.S.]) for the Trustees to exercise proprietary control over state-owned lands. Also in 1967, government focus on protecting Florida's productive water bodies from degradation due to development led the Trustees to establish a moratorium on the sale of submerged lands to private interests. An Interagency Advisory Committee was created to develop strategies for the protection and management of state-owned submerged lands.

In 1968, the Florida Constitution was revised to declare in Article II, Section 7, the state's policy of conserving and protecting natural resources and areas of scenic beauty. That constitutional provision also established the authority for the Legislature to enact measures for the abatement of air and water pollution. Later that same year, the Interagency Advisory Committee issued a report recommending the establishment of 26 aquatic preserves.

The Trustees acted on this recommendation in 1969 by establishing 16 aquatic preserves and adopting a resolution for a statewide system of such preserves. In 1975 the state Legislature passed the Florida Aquatic Preserve Act of 1975 (Act) that was enacted as Chapter 75-172, Laws of Florida, and later became Chapter 258, Part II, F.S. This Act codified the already existing aquatic preserves and established standards and criteria for activities within those aquatic preserves. Additional aquatic preserves were individually adopted at subsequent times up through 1989.

In 1980, the Trustees adopted the first aquatic preserve rule, Chapter 18-18, Florida Administrative Code (F.A.C.), for the administration of the Biscayne Bay Aquatic Preserve. All other aquatic preserves are administered under Chapter 18-20, F.A.C., which was originally adopted in 1981. These rules apply standards and criteria for activities in the aquatic preserves, such as dredging, filling, building docks and other structures that are stricter than those of Chapter 18-21, F.A.C., which apply to all sovereignty lands in the state.

This plan is in compliance with the Conceptual State Lands Management Plan, adopted March 17, 1981 by the Board of Trustees of the Internal Improvement Trust Fund and represents balanced public utilization, specific agency statutory authority, and other legislative or executive constraints. The Conceptual State Lands Management Plan also provides essential guidance concerning the management of sovereignty lands and aquatic preserves and their important resources, including unique natural features, seagrasses, endangered species, and archaeological and historical resources.

Through delegation of authority from the Trustees, the DEP and FCO have proprietary authority to manage the sovereignty lands, the water column, spoil islands (which are merely deposits of sovereignty lands), and some of the natural islands and select coastal uplands to which the Trustees hold title.

Enforcement of state statutes and rules relating to criminal violations and non-criminal infractions rests with the Florida Fish and Wildlife Conservation Commission law enforcement and local law enforcement agencies. Enforcement of administrative remedies rests with FCO, the DEP Districts and Water Management Districts.

2.3 / *Statutory Authority*

The fundamental laws providing management authority for the aquatic preserves are contained in Chapters 258 and 253, F.S. These statutes establish the proprietary role of the Governor and Cabinet, sitting as the Board of Trustees of the Internal Improvement Trust Fund, as Trustees over all sovereignty lands. In addition, these statutes empower the Trustees to adopt and enforce rules and regulations for managing all sovereignty lands, including aquatic preserves. The Florida Aquatic Preserve Act was enacted by the Florida Legislature in 1975 and is codified in Chapter 258, F.S.

The legislative intent for establishing aquatic preserves is stated in Section 258.36, F.S.: “It is the intent of the Legislature that the state-owned submerged lands in areas which have exceptional biological, aesthetic, and scientific value, as hereinafter described, be set aside forever as aquatic preserves or sanctuaries for the benefit of future generations.” This statement, along with the other applicable laws, provides a foundation for the management of aquatic preserves. Management will emphasize the preservation of natural conditions and will include lands that are specifically authorized for inclusion as part of an aquatic preserve.

Management responsibilities for aquatic preserves may be fulfilled directly by the Trustees or by staff of the DEP through delegation of authority. Other governmental bodies may also participate in the management of aquatic preserves under appropriate instruments of authority issued by the Trustees. FCO staff serves as the primary managers who implement provisions of the management plans and rules applicable to the aquatic preserves. FCO does not “regulate” the lands per se; rather, that is done primarily by the DEP Districts (in addition to the Water Management Districts) which grant regulatory permits. The Florida Department of Agriculture and Consumer Services through delegated authority from the Trustees, may issue proprietary authorizations for marine aquaculture within the aquatic preserves and regulates all aquaculture activities as authorized by Chapter 597, Florida Aquaculture Policy Act, F.S. Staff evaluates proposed uses or activities in the aquatic preserve and assesses the possible impacts on the natural resources. Project reviews are primarily evaluated in accordance with the criteria in the Act, Chapter 18-20, F.A.C., and this management plan.

FCO staff comments, along with comments of other agencies and the public are submitted to the appropriate permitting staff for consideration in their issuance of any delegated authorizations in aquatic preserves or in developing recommendations to be presented to the Trustees. This mechanism provides a basis for the Trustees to evaluate public interest and the merits of any project while also considering potential environmental impacts to the aquatic preserves. Any activity located on sovereignty lands requires a letter of consent, a lease, an easement, or other approval from the Trustees.

Many provisions of the Florida Statutes that empower non-FCO programs within DEP or other agencies may be important to the management of FCO sites. For example, Chapter 403, F.S., authorizes rules concerning the designation of “Outstanding Florida Waters” (OFWs), a program that provides aquatic preserves with additional regulatory protection. Chapter 379, F.S., regulates saltwater fisheries, and provides enforcement authority and powers for law enforcement officers. Additionally, it provides similar powers relating to wildlife conservation and management. The sheer number of statutes that affect aquatic preserve management prevents an exhaustive list of all such laws from being provided here.

2.4 / *Administrative Rules*

Chapters 18-18, 18-20 and 18-21, F.A.C., are the three administrative rules directly applicable to the uses allowed in aquatic preserves specifically and sovereignty lands generally. These rules are intended to be cumulative, meaning that Chapter 18-21, F.A.C., should be read together with Chapter 18-18, F.A.C., or Chapter 18-20, F.A.C., to determine what activities are permissible within an aquatic preserve. If Chapter 18-18, F.A.C., or Chapter 18-20, F.A.C., are silent on an issue, Chapter 18-21, F.A.C., will control; if a conflict is perceived between the rules, the stricter standards of Chapter 18-18, F.A.C., or Chapter 18-20, F.A.C., supersede those of Chapter 18-21, F.A.C. Because Chapter 18-21, F.A.C. concerns all sovereignty lands, it is logical to discuss its provisions first.

Originally codified in 1982, Chapter 18-21, F.A.C., is meant “to aid in fulfilling the trust and fiduciary responsibilities of the Board of Trustees of the Internal Improvement Trust Fund for the administration, management and disposition of sovereignty lands; to insure maximum benefit and use of sovereignty lands for all the citizens of Florida; to manage, protect and enhance sovereignty lands so that the public may continue to enjoy traditional uses including, but not limited to, navigation, fishing and swimming; to manage and provide maximum protection for all sovereignty lands, especially those important to public drinking water supply, shellfish harvesting, public recreation, and fish and wildlife propagation

and management; to insure that all public and private activities on sovereignty lands which generate revenues or exclude traditional public uses provide just compensation for such privileges; and to aid in the implementation of the State Lands Management Plan.”

To that end, Chapter 18-21, F.A.C., contains provisions on general management policies, forms of authorization for activities on sovereignty lands, and fees applicable for those activities. “Activity,” in the context of the rule, includes “construction of docks, piers, boat ramps, boardwalks, mooring pilings, dredging of channels, filling, removal of logs, sand, silt, clay, gravel or shell, and the removal or planting of vegetation” (Rule 18-21.003, F.A.C.). To be authorized on sovereignty lands, activities must be not contrary to the public interest (Rule 18-21.004, F.A.C.).

Chapter 18-21, F.A.C., also sets policies on aquaculture, geophysical testing (using gravity, shock wave and other geological techniques to obtain data on oil, gas or other mineral resources), and special events related to boat shows and boat displays. Of particular importance to FCO site management, it additionally addresses spoil islands, preventing their development in most cases.

Chapters 18-18 and 18-20, F.A.C., apply standards and criteria for activities in the aquatic preserves that are stricter than those of Chapter 18-21, F.A.C. Chapter 18-18, F.A.C., is specific to the Biscayne Bay Aquatic Preserve and is more extensively described in that site’s management plan. Chapter 18-20, F.A.C., is applicable to all other aquatic preserves. It further restricts the type of activities for which authorizations may be granted for use of sovereignty lands and requires that structures that are authorized be limited to those necessary to conduct water dependent activities. Moreover, for certain activities to be authorized, “it must be demonstrated that no other reasonable alternative exists which would allow the proposed activity to be constructed or undertaken outside the preserve” (Paragraph 18-20.004(1)(g), F.A.C.).

Chapter 18-20, F.A.C., expands on the definition of “public interest” by outlining a balancing test that is to be used to determine whether benefits exceed costs in the evaluation of requests for sale, lease, or transfer of interest of sovereignty

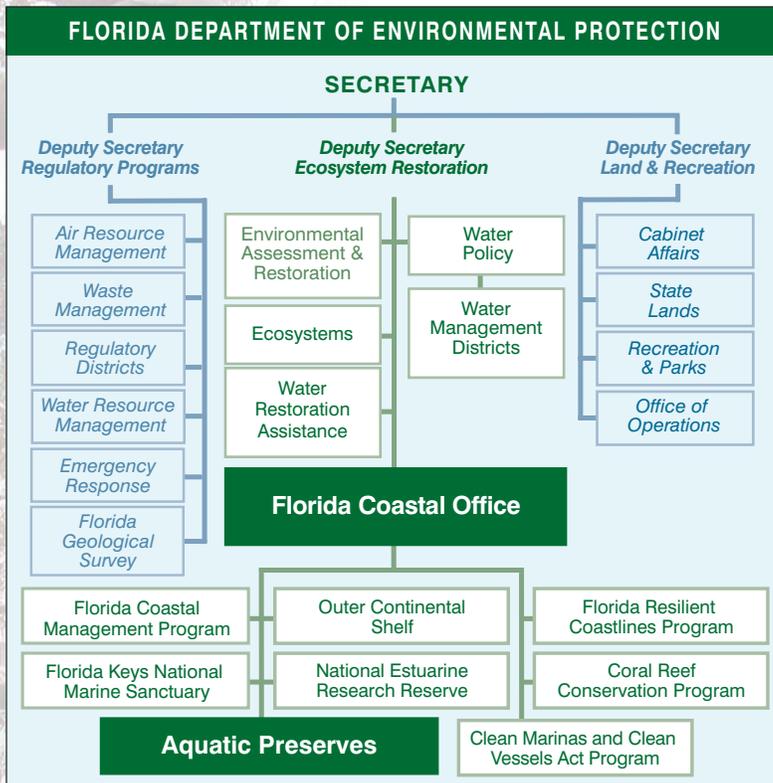


Figure 1 | State management structure.

lands within an aquatic preserve. The rule also provides for the analysis of the cumulative impacts of a request in the context of prior, existing, and pending uses within the aquatic preserve, including both direct and indirect effects.

Chapter 18-20, F.A.C., directs management plans and resource inventories to be developed for every aquatic preserve. Further, the rule provides provisions specific to certain aquatic preserves and indicates the means by which the Trustees can establish new or expand existing aquatic preserves.

As with statutes, aquatic preserve management relies on the application of many other DEP and outside agency rules. Perhaps most notably, Chapter 62-302, F.A.C., concerns the classification of surface waters, including criteria for OFW, a designation that provides for the state’s highest level of protection for water quality. All aquatic preserves contain OFW designations. No activity may be permitted within an OFW that degrades ambient water quality unless the activity is determined to be in the public interest. Once again, the list of other administrative rules that do not directly address FCO’s responsibilities but do affect FCO-managed areas is so long as to be impractical to create within the context of this management plan.



Trees cast shadows on the shoreline.

Chapter Three

Rocky Bayou Aquatic Preserve

3.1 / Historical Background

Florida's first inhabitants settled around 14,500 years ago, when sea levels were more than 300 feet lower than they are today (Donoghue, 2011; Halligan et al., 2016). These people, commonly referred to as Paleoindians, occupied a cooler and dryer Florida that was roughly twice as large as it is now. Many of their preserved sites and materials are likely buried and underwater since any places they occupied below modern sea levels would have been drowned by sea level rise by no later than 4500 years ago (Balsillie & Donoghue, 2004). Since the climate was dryer during this period, people likely relied heavily on limestone sink holes for water (Milanich, 1994). They also made use of chert nodules within the limestone around these sinkholes to make stone tools. As glaciers melted after the Last Glacial Maximum, sea levels rose, and continuous warming allowed Florida to gradually become warmer and moister. With the stabilization of sea levels between 5000 and 4500 years ago, evidence for populations using modern estuary and coastal resources is found across the central Gulf coast area. The people using these resources are commonly referred to as the Manasota cultures (Milanich, 1994; Eglin AFB, 2013)

Around 8,000 B.C., Florida saw a considerable coastal and climatological change, oak trees occupied the forests with warming climate, and a new age of settlers began to move into the coastal lands. The development of the atlatl, a short spear/dart throwing technology, during the Early Archaic period (8000-6500 B.C.), brought about new ways to hunt and gather food. During winter months tribes fished the local streams and waterways to sustain villagers. In the Middle Archaic era (6500 B.C. – 3000 B.C.), temperatures rose and rainfall subsided, with this came a shift to smaller floodplain territories (Eglin AFB, 2013). A lot of artifacts from this time period include projectile spears used for hunting and large chopping tools. During the Late Archaic period (3000-500 B.C.) site spatial analyses and artifact distributions suggest social structure became more stratified and individuals began to have specialized occupations. . The excavation of Deptford sites shows that these people also participated in long-distance trade. Some 1,800 years ago, these sedentary peoples developed further social stratification, unique ceremonial activities, and created pottery of various artistic styles. Eventually this society appears to have developed into the Weeden Island culture, which lasted about 800 years (Eglin AFB, 2013).



The water splashes gently into the roots of surrounding trees and bushes.

The Woodland presence in northwest Florida is represented by the Deptford, Santa Rosa, and Swift Creek cultures. Northwest Florida's ecotonal coast allowed members of the Deptford culture to have access to a varied supply base that included marine and terrestrial resources (Bense, 1992). It is seen through excavation that the Deptford settlers also participated in the long-distance trade of goods. Some 1,800 years ago these sedentary people began to create social structure, ceremonialism, and sophisticated artistic pottery, evolving into the Weeden Island culture lasting some 800 years (Eglin AFB, 2013).

Weeden Island culture was predominant between 600 and 1,000 A.D. and included of various regional groups consisting of a localized population surrounding a central ceremonial complex. During this period, tools and pottery both underwent additional modifications. Pottery, in particular, began to be decorated with stamps and punctuated lines (Milanich, 1994). Late in the Weeden Island era, agricultural differences are apparent with a strong dependence on maize (Eglin AFB, 2013). Locations for growth depended on soil suitable for agricultural purposes.

Continued cultural development after 1000 A.D. resulted in the numerous Florida tribes present when Europeans first arrived. These populations were decimated by disease, warfare, and the cultural impacts of Spanish colonization. Eventually, the remaining native population took refuge to the north, intermingling among the Creeks in Alabama and Georgia (Stojanowski, 2010). During the early to mid-17th century, Creeks from Georgia and Alabama, likely including some descendants from the displaced Florida natives, moved into the areas devoid of native populations, eventually becoming the Seminole (Stojanowski, 2010; Eglin AFB, 2013).

Going forward into the times of World War II, Eglin Air Force Base (AFB) became an important military installation for America. The area in which the base was built appealed to the United States military because of its placement on the gulf and its vast number of surrounding resources (Eglin AFB, 2013). Originally Eglin AFB was known as the Valparaiso Bombing and Gunnery Base, named after the businessman who spent his time attracting the military to his land and then sold it to them. The United States military renamed the base Eglin AFB in 1937 to honor Lieutenant Colonel Frederick I. Eglin. In 1940, Eglin AFB was selected as a prime location for aircraft armament and expanded its boundaries into Choctawhatchee National Forest. Throughout World War II, Eglin AFB was a major training base for the Army Air Corps (Eglin AFB, 2013).

3.2 / General Description

International/National/State/Regional Significance

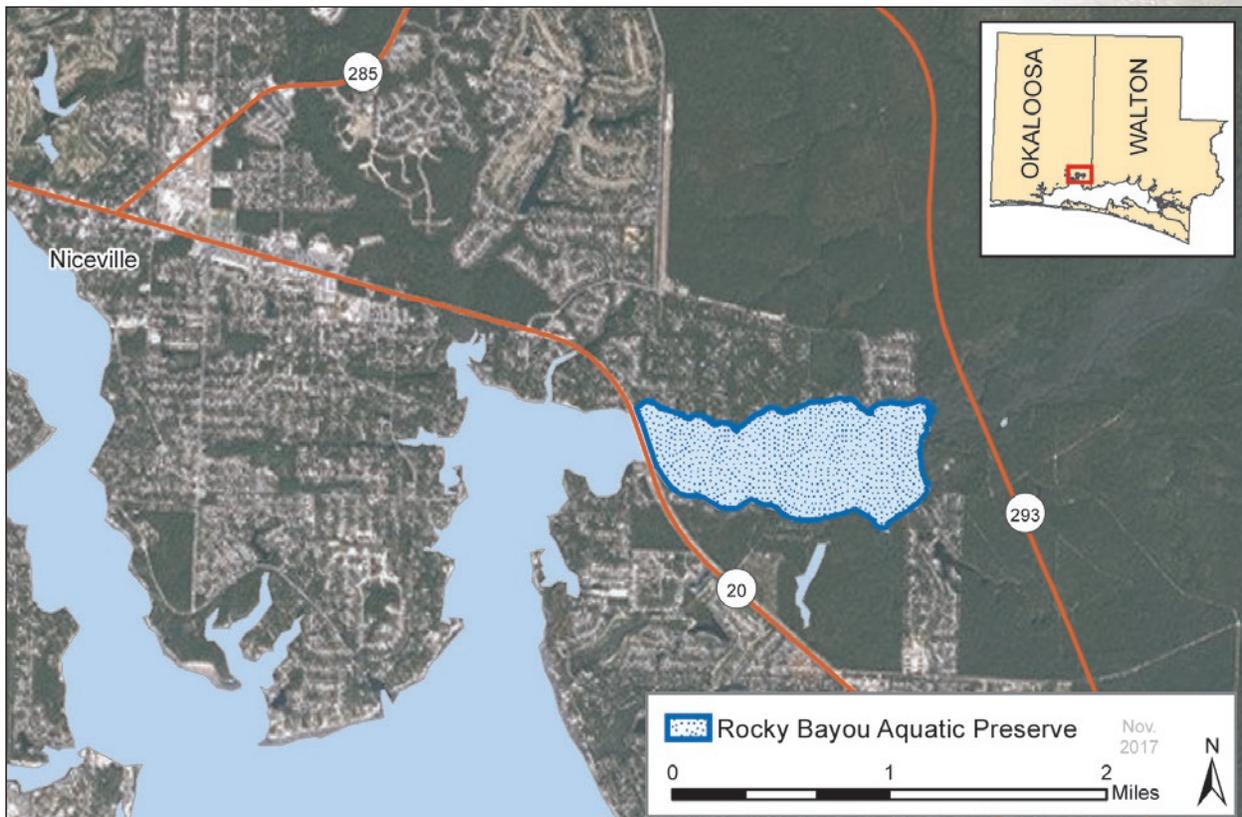
The Florida Legislature designated Rocky Bayou Aquatic Preserve (RBAP) as an official Aquatic Preserve in 1970 for the primary purpose of protecting the areas biological resources and for maintaining these resources in an essentially natural condition (Department of Natural Resources [DNR], 1991). The aquatic preserve was included in the Aquatic Preserves Act of 1975 passed by the Florida Legislature and designated as Outstanding Florida Water (OFW) in 1979 (Rule 62-302.700 (9), Florida Administrative Code). The Florida Department of Environmental Protection (DEP) affords the highest level of protection to these waters—activities or discharges proposed within an OFW must not lower ambient water quality and must be “clearly in the public interest” before the DEP issues a permit (37.414(1)(a), Florida Statutes).

RBAP is one of Florida’s smallest aquatic preserves, but that doesn’t diminish its diverse population of a variety of large fish and additional aquatic species. RBAP lies in Choctawhatchee Bay which is home to the threatened Okaloosa darter (*Etheostoma okaloosae*), the endangered Gulf sturgeon (*Acipenser oxyrinchus desotoi*), and a variety of other species such as the bald eagle (*Haliaeetus leucocephalus*) and osprey (*Pandion haliaetus*). RBAP is a part of the Choctawhatchee Bay system, and is located next to Eglin AFB. Rocky Bayou is a freshwater to brackish water system. The freshwater is fed by two major creeks - Rocky Creek and Turkey Creek - and smaller seasonal steephead streams. RBAP is also used recreationally for kayaking, hiking, jet ski, boating, and fishing (DEP, n.d.-b).

DEP works to ensure the natural coastal habitat is restored to address resource loss, habitat loss and shoreline erosion. Using both long term and short term goals DEP looks to help restore the habitat of a variety of fish, shellfish and non-aquatic species. Through water quality sampling and the rebuilding of shoreline habitat, RBAP can continue to serve the community and the species that live within.

Location / Boundaries

RBAP located near Niceville, in the southeast corner of Okaloosa County, along the northern edge of the Choctawhatchee Bay (Map 2). RBAP is bordered on the west by State Road 20 and includes all submerged lands below the mean high water line of Rocky Bayou east of State Road 20. To the northeast, RBAP is bordered by mostly undeveloped land belonging to Eglin AFB. At the southeast border is a residential subdivision known as Parkwood Estates. RBAP is one of the smallest aquatic preserves found in Florida and is roughly 480 acres. Much of the population living adjacent to the aquatic preserve is found in Niceville.



Map 2 / Rocky Bayou Aquatic Preserve.

3.3 / Resource Description

The information in this section describes the resources found in the aquatic preserve.

Surrounding Population Data and Future Projected Changes

Okaloosa County had a population of 180,822 in 2010 (U.S. Census Bureau, 2017). The estimated population for 2012 was 190,083, a 5.1 percent increase in population over two years. Okaloosa County and its neighboring counties have experienced significant growth during the past few decades, seeing a 64.5 percent increase in population since 1980. The population of Okaloosa County was estimated at 190,809 in 2015, and is projected to be 221,937 by the year 2040 (University of Florida, 2013). RBAP is located in close proximity to the city of Niceville. As of 2016, the population in Niceville was 14,974 (U.S. Census Bureau, 2017).

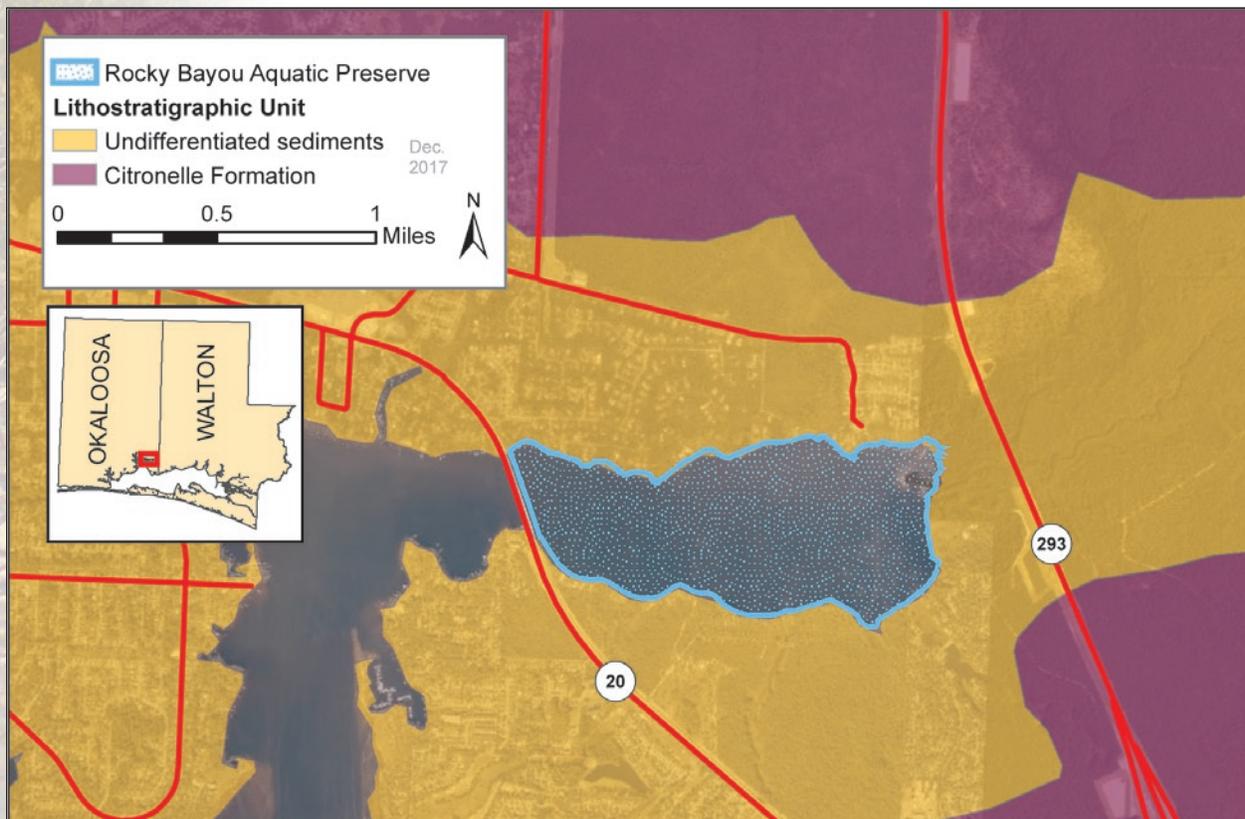
The population of Niceville in 2010 was 12,749, and it is becoming the preferred area for military employees to reside (HDR, Matrix Design Group, Inc., & Haas Center, 2010).

In 2016, 20.1 percent of Okaloosa County's residents were employed in local, state, or federal government positions, which would include employment in the nearby military installations. Other major employment sectors include jobs within the leisure and hospitality field, the trade, transportation and utilities field, the professional and business services field, and education and health services (Florida Legislature Office of Economic and Demographic Research, 2017).

The current and future development patterns within the county could impact the health of the aquatic preserve. Eglin AFB, the largest military aviation base in the country, has expanded its operations and staff. Associated with this expansion are needs for additional infrastructure to provide proper level of service standards for which Eglin AFB has prepared a Joint Land Use Survey as well as a Tri-County Growth Management Plan to ensure this occurs. As the county's population increases, demand for water, watershed pollution, impermeable surfaces, and recreational activity are expected to increase. Stormwater runoff and nutrient discharge associated with rapid population growth and infrastructure development could diminish the aquatic preserve's water quality.

Topography and Geomorphology

There are two topographic subdivisions encompassing the area: the Gulf Coastal Lowlands, which RBAP is situated in, composed of Pleistocene and Holocene shorelines, and the Western Highlands that are found less than three miles away, composed of the Pliocene rock group. The Gulf Coastal Lowlands extend across the southern half of the Panhandle and generally consist of flat plains sloping gently to



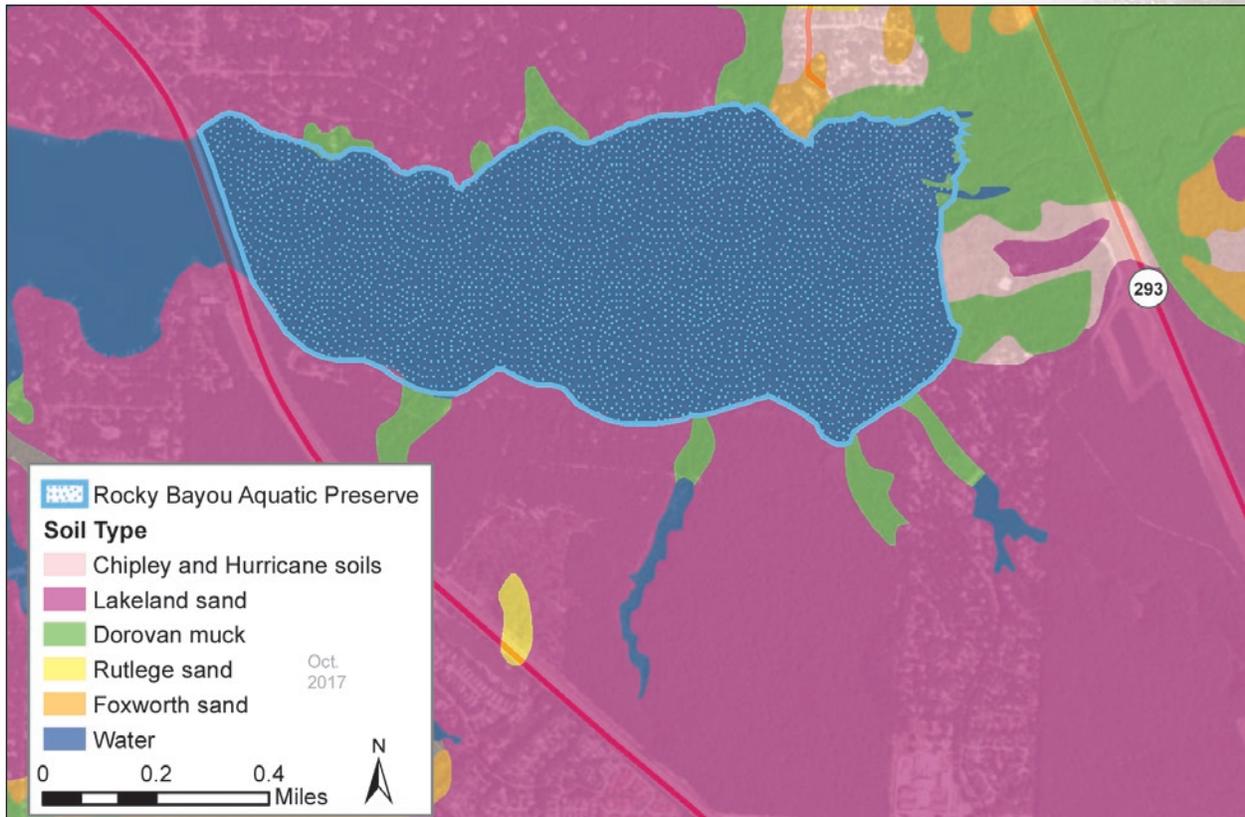
the coast while the Western Highlands are characterized by rolling hills (Fernald & Patton, 1984). In the western end of the Panhandle, the Gulf Coastal Lowlands rise to form a high, sandy plateau which is characterized by coastal terraces, separated by the scarps which formed between them (DNR, 1991). The Penholoway Terrace rises 40 to 70 feet above sea level and characterizes the geomorphology of the region and encompasses the aquatic preserve. Rocky Bayou itself has some steep banks with slopes that extend to depths of 16 feet. Another distinctive geological feature of RBAP is the low bluffs which occur along the shoreline of the bayou. These bluffs, some of which are 20 feet high, are being undercut and eroded by wave action. This process continues to move the shoreline of the bayou back into Fred Gannon Rocky Bayou State Park's recreation area. The park maintains access stairs in order to prevent additional erosion of the bluffs by foot traffic (MacLaren, 1990).

Geology

Geology is the study of the history of the earth and its life, especially as recorded in rock. The study of different rock groups or lithostratigraphic units is known as lithostratigraphy. RBAP is in the region known as the Gulf Coastal Plain, within the Gulf Coastal Lowlands subsection. The geology of the area is composed of exposed lithostratigraphic units including undifferentiated sediments dating back to the Pleistocene/Holocene, and the Citronelle Formation dating back to the Pliocene (Scott et al., 2001) (Map 3).

Underlying the Pleistocene/Holocene formation is the Citronelle Formation, which was deposited approximately five to three million years ago during the Pliocene epoch and is found from about 50 feet below sea level to 100 feet above sea level (Puri & Vernon, 1964). The Citronelle Formation is widespread in the Gulf Coastal Plain and consists primarily of sands and significant amounts of clay, silt, and gravel. Much of this formation is highly permeable and forms the sand and gravel aquifer, the primary aquifer used for human consumption in the region (Scott et al., 2001).

There are three hydrogeologic units in Okaloosa County, including the sand and gravel aquifer, the intermediate confining unit, and the Upper Floridan aquifer. The sand and gravel aquifer is the closest to the surface, ranging from 15 to 400 feet below the surface, and is comprised of very fine to very rough quartz and with gravel and clay lenses throughout. The sand and gravel aquifer is contiguous with the land surfaces, unconfined by other geologic layers, and is recharged directly by rainfall. The Floridan aquifer is the primary source of groundwater that is used by Okaloosa County and has a recharge rate of less than five inches a year. The intermediate aquifer is an important resource to the counties west of Okaloosa, and has a recharge rate of about 10 inches a year (U.S. Geological Survey, n.d.; Vecchioli, Tibbals, Duerr, & Hutchinson, 1990).



Map 4 | Soils surrounding Rocky Bayou Aquatic Preserve.

Soils

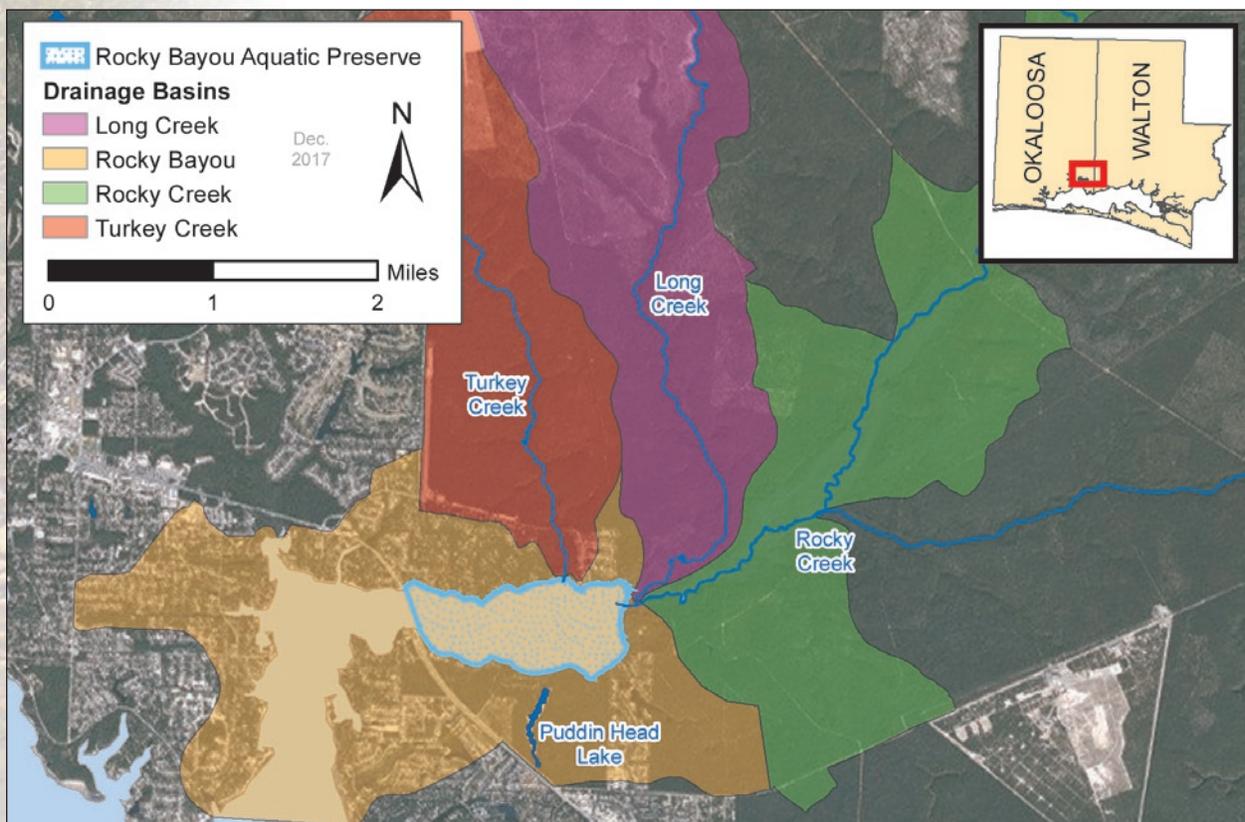
There are three soil types commonly found within RBAP. Lakeland sand has a 12 to 30 percent slope which is steep and has well drained sandy soil predominantly found around steepheads. A less porous, thick, level soil known as Dorovan muck can be found in many different community settings including mesic flatwoods, shrub bog, and seepage streams. Rutledge sand, another fairly level, less permeable soil is found within depression marshes and flatwoods.

Hydrology and Watershed

RBAP is a part of the Choctawhatchee Bay drainage basin (Wolfe, Reidenauer, & Means, 1988), and is the receiving water body for the Rocky Bayou drainage basin (Livingston, 1986), and receives runoff from approximately 66,260 acres (26,815 hectares) of surface area within Okaloosa and Walton counties (Map 5). Rocky Bayou occupies a portion of the northern edge of the bay. Rocky Bayou is a fresh to brackish water system that receives freshwater input from Rocky Creek, Long Creek which joins Rocky Creek just prior to feeding into RBAP, Turkey Creek and several smaller steephead streams. These steephead streams represent a unique topographic element present in the area, and there are three within the adjacent state park. Steepheads are highly distinctive geographic features that are found in the Florida Panhandle and are formed when groundwater emerges on a sloping surface through porous sand at the head of a stream or catchment. Because steepheads are a local topographic feature, they represent isolated environments in which rare endemic species exist. A steephead stream drains into the southwest portion of the aquatic preserve while another drains into the aquatic preserve from the southeast side. One of the steephead streams was impounded to create Puddin Head Lake, and is on the property of the state park. Another impounded steephead is located on the southeastern side of the bayou; this one has been influenced by the development of Parkwood Estates and Bluewater Elementary School (DNR, 1991).

Climate

The year-round climate of northwest Florida and RBAP is typical of the Northern Hemisphere's humid subtropical climate zone, with long, hot, humid summers, and relatively mild, short, wet winters. Humidity is relatively high (usually between 50- 60 percent in the warmest time of the day, and 70- 80 percent when it's cooler), and winds are normally from the land in fall and winter and more frequently from the Gulf in spring and summer (Winsberg, 2003). The average maximum annual temperature for RBAP is 76.7 degrees Fahrenheit with an annual average minimum temperature of 54.6 degrees Fahrenheit. The





Seagrass near the water's edge.

hottest months for RBAP are typically June, July, and August with the coldest months being December, January, and February (National Oceanic and Atmospheric Administration [NOAA], 2010).

Typically, there are two wet seasons in northwest Florida in which summer precipitation is driven by convection and winter precipitation is driven by fronts (Winsberg, 2003). Average annual precipitation for Niceville totals 70.97 inches, with summer averaging 23.43 inches and a winter average of 16.26 inches (NOAA, 2010). The months with the highest average precipitation are June, July, August, and September. The occurrence of an El Niño-Southern Oscillation or La Niña event may have a significant impact on precipitation and temperature in northwest Florida: El Niño may result in 30-40 percent more precipitation and relatively cooler temperatures than the annual average for the winter season, and La Niña may result in a much drier spring and winter than the average. Additionally, the occurrence of an El Niño event suppresses damaging winter freezes and lessens the severity of the hurricane season (Winsberg, 2003).

Tropical storms and hurricanes are both tropical low-pressure systems and are a constant threat and reality in northwest Florida. When the sustained wind velocity in a tropical system rises above 73 miles per hour, it is reclassified from a tropical storm to a hurricane (Winsberg, 2003). The hurricane season runs from June through November and is associated with the warming of Atlantic and Gulf of Mexico surface waters and warm, humid air masses. Short-term impacts include water level increases from ocean surge and upstream flooding, both of which result in significant changes in salinity (Dix, Philips, & Gleeson, 2008; Edmiston et al., 2008; Paerl et al., 2001), temperature, dissolved oxygen, turbidity (Edmiston et al., 2008) and nitrogen levels (Dix et al., 2008; Paerl et al., 2001), as well as increased erosion which may damage cultural resources. Mid-term impacts may include algal blooms spurred by the increase of nitrogen (Mallin & Corbett, 2006; Paerl et al., 2001). Long term impacts may include loss of submerged, emergent and terrestrial vegetation and loss of oyster beds (Edmiston et al., 2008).

The impact of tropical systems on estuarine systems is highly variable depending on the characteristics of the storm and the site (Edmiston et al., 2008; Mallin & Corbett, 2006) and may in fact be quite similar to the impacts of normally occurring storm events, especially for short-term impacts (Edmiston et al.,

FNAI Natural Community Type	# Acres	% Area	Federal Rank	State Rank	Comments
Estuarine Unconsolidated Substrate	2	0.5%	G5	S5	Includes only tidal flats, not submerged unconsolidated substrate
Floodplain Marsh / Salt Marsh	1	0.3%	G4	S4	
Seagrass Beds	unknown	unknown	G2	S2	
Unknown	361	99.2%	G4	S4	

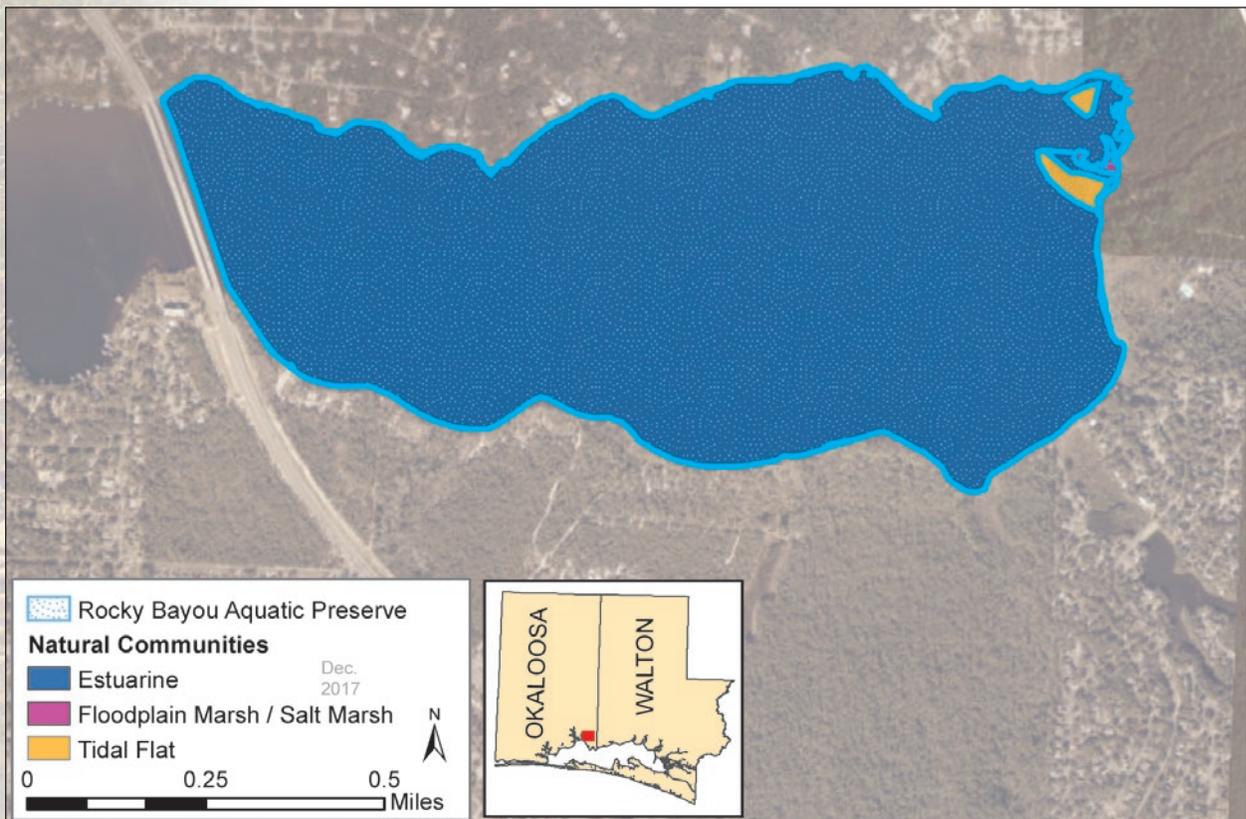
Table 1 / Summary of natural communities in Rocky Bayou Aquatic Preserve.

2008; Hagy, Lehrter & Murrell, 2006). This variability was apparent after Hurricane Ivan, a significant storm in the region that hit Gulf Shores, Alabama on September 16, 2004. This Category 3 storm on the Saffir-Simpson Hurricane Scale caused significant tree blow-downs and physical damage to human-built structures, and Florida received more than 1.4 billion dollars in recovery funds for this damage (U.S. Department of Homeland Security, 2005).

Natural Communities

The natural community classification system used in this plan was developed by the Florida Natural Areas Inventory (FNAI) and DNR, now (DEP, and updated in 2010. The community types are defined by a variety of factors, such as vegetation structure and composition, hydrology, fire regime, topography and soil type. The community types are named for the most characteristic biological or physical feature (FNAI, 2010). FNAI also assigns Global (G) and State (S) ranks to each natural community and species that FNAI tracks. These ranks reflect the status of the natural community or species worldwide (G) and in Florida (S). Lower numbers reflect a higher degree of imperilment (e.g., G1 represents the most imperiled natural communities worldwide, S1 represents the most imperiled natural communities in Florida).

Shell Mound (G2/S2) - Shell mounds are small hills, usually in coastal locations, composed entirely of shells (clams, oysters, whelks) discarded by generations of Native Americans which support an assemblage of calciphilic plant species (FNAI, 2010). Archaeological evidence indicates they were occupied at the time Europeans first landed in Florida. Originally there were many such shell mounds



16 Map 6 / Florida Natural Areas Inventory natural communities in Rocky Bayou Aquatic Preserve.

along coastal lagoons and at the mouths of rivers, but most were destroyed for road building in the early part of the last century (Small, 1929; Stalter & Kincaid, 2004). A rich calcareous soil develops on the deposited shells which supports a diverse hardwood forest on undisturbed mounds. Shell mounds are found along the coast throughout Florida and range westward and northward along the coastlines of the southeastern United States (FNAI, 2010). The shell mounds located near the aquatic preserve are in need of protection from anthropogenic and natural occurrences and staff is currently working with state park staff to preserve this natural community.

Floodplain Marsh (G3/S3) - Floodplain marsh is a wetland community occurring in river floodplains and dominated by herbaceous vegetation and/or shrubs. Generally, the vegetation gradient from high to low marsh occurs from the upland edge to the river edge, however, the high to low marsh vegetation patches may also be scattered throughout the marsh, which provides a diversity of habitats beneficial to wildlife (FNAI, 2010). Floodplain marshes are found along rivers and streams just below the headwaters to the freshwater portions of tidally influenced river mouths (FNAI, 2010).

Flat topography and slow drainage in the largest floodplain marshes create a prolonged inundation period from approximately 120 to 350 days per year with most of the marsh inundated more than 250 days (FNAI, 2010). Hydrologic alteration, such as ditching or damming, in these systems has sometimes dramatically reduced this hydroperiod. Flood pulses provide oxygenated water to the system and allow small fish and larvae of larger game fish to utilize portions of the vegetated marsh (FNAI, 2010). The continuous water fluctuations help create a patchwork of plant communities, and at times of low water, concentrate prey in small areas. These areas can be critical feeding sites for wading bird populations and bald eagles (FNAI, 2010). Currently the majority of the floodplain marsh exists on the eastern half of the aquatic preserve at the mouth of Rocky Creek, and grades into salt marsh (Map 6). Marsh (salt and floodplain) restoration is planned in this location during the upcoming years.

Seagrass Bed (G3/S2) - Estuarine seagrass beds are typically characterized as expansive stands of vascular plants. This community occurs in subtidal zones, in clear, coastal waters where wave energy is moderate. Seagrasses are not true grasses (FNAI, 2010). The most common species of seagrass found in RBAP is shoal grass (*Halodule wrightii*).

Attached to the seagrass leaf blades are numerous species of epiphytic algae and invertebrates. Together, seagrasses and their epiphytes serve as important food sources for manatees (*Trichechus manatus*), marine turtles, and many fish, including spotted seatrout (*Cynoscion nebulosus*), spot (*Leiostomus xanthurus*), sheepshead (*Archosargus probatocephalus*), and redfish (*Sciaenops ocellatus*). Dense seagrass beds also serve as shelter or nursery grounds for many invertebrates and fish, clams, shrimp, blue crab (*Callinectes sapidus*), grunt and mullet (*Mugil spp.*) (FNAI, 2010). Shoal grass grows mainly along the southern shore of the aquatic preserve and has shown to be in a stable growth pattern over the years. Monitoring and restoration is planned for the aquatic preserve in upcoming years to aid in stabilization, improved water quality and overall submerged habitat. While seagrass is within RBAP, the natural community does not show up on geographic information system (GIS) data layers. This mapping data gap will be addressed with local and state agencies.

Salt Marsh (G5/S4) (synonyms: coastal wetlands, coastal marsh, salt marsh, saltern, tidal marsh, tidal wetlands)

Salt marsh is a largely herbaceous coastal ecosystem that occurs at the interface of land and marine waters, wherever wave energy is low and mangrove density does not inhibit the growth of characteristic vegetation. Salt marsh communities are characterized by very gentle seaward slopes and are protected from large waves, either by the sloping topography of the shore, by a barrier island, or by location along a bay or estuary (FNAI, 2010). This community is at least occasionally inundated with saltwater and consists of non-woody, salt-tolerant plants, which may exist in distinct zones dominated by a single species of grass or rush. In Florida, the extent and range of salt marsh is determined by the width of the intertidal zone, which depends on the slope of the shore and the tidal range. Currently the majority of the salt marsh exists on the south and eastern shores of the aquatic preserve. Marsh (salt and floodplain) restoration is planned in this location during the upcoming years.

Estuarine Unconsolidated Substrate (G5/S5) (synonyms: beach, shore, sand bottom, sand bar, mud flat, tidal flat, soft bottom) RBAP is composed largely of estuarine unconsolidated substrate, some of the most widespread natural communities in the world. Throughout Florida, estuarine unconsolidated substrate communities can vary in origin based on the surrounding plant material. Four kinds of unconsolidated substrate—mud, mud/sand, sand, and shell—are found throughout the coastal regions of Florida and may be present in RBAP.

Biological characteristics of estuarine communities include high productivity, high dominance, and low species diversity (Myers & Ewel, 1990). Estuarine subtidal zones are important feeding grounds for many bottom feeding fish in the aquatic preserve, such as spot, catfish, and the federally threatened Gulf sturgeon; and intertidal and supratidal estuarine zones are important feeding grounds for many shore birds and invertebrates. Estuarine unconsolidated substrate is in good condition in RBAP.

Native Species

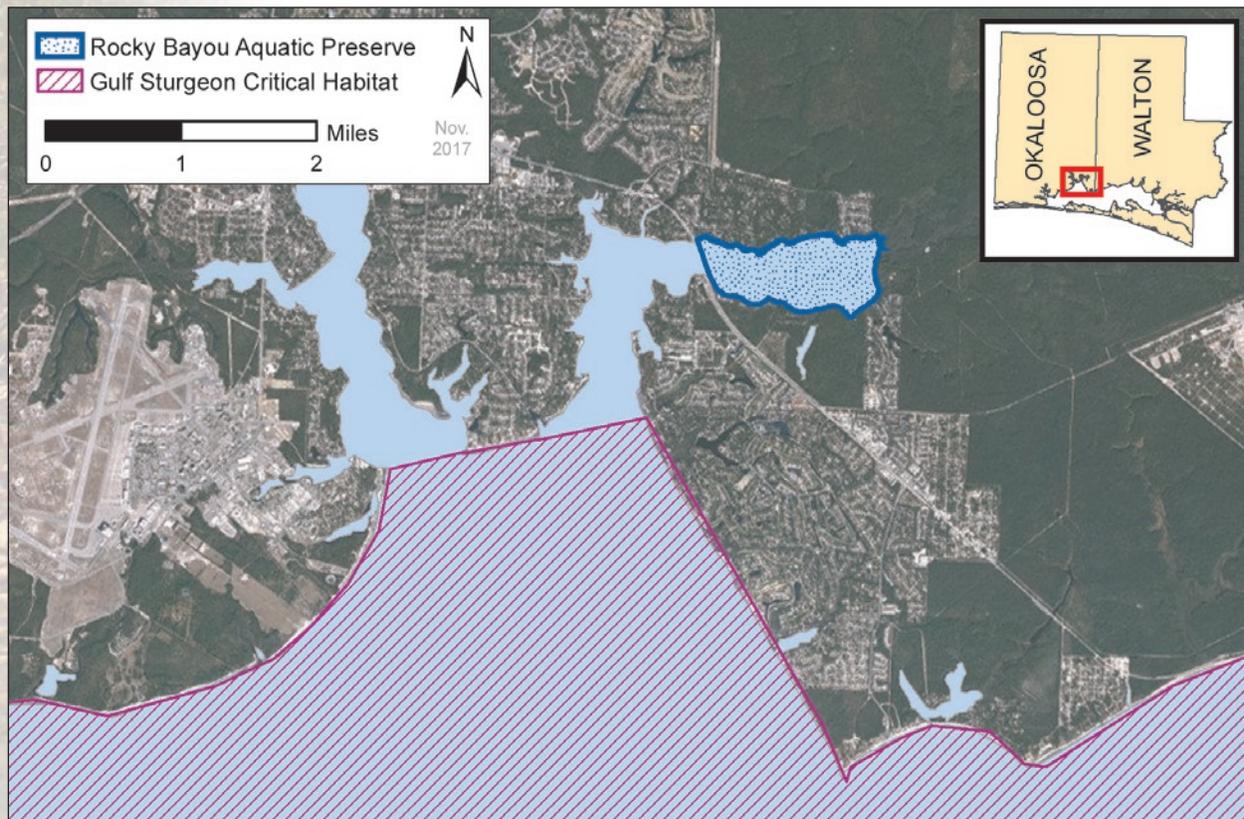
The diverse habitats found within RBAP serve as a refuge for a wide variety of fauna and flora. Fish in the aquatic preserve include species covering both marine and freshwater habitats (Florida Fish and Wildlife Commission [FWC], n.d.-b). A complete survey of habitats and species within the aquatic preserve has not been completed; however, this plan addresses the need within the next ten years. For a complete list of documented native species in RBAP and adjacent lands, see Appendix B.3 - Species Lists.

Listed Species

Two species listed by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act and species listed as threatened, endangered or of special concern in the state of Florida, are found or are likely to be found in RBAP. The two documented species in RBAP listed under the Endangered Species Act include the threatened Okaloosa darter, and the threatened Gulf sturgeon. For a complete list of listed species, please see Appendix B.3 - Species Lists.

The Okaloosa darter is a fish that makes its home in only six of the streams that enter Choctawhatchee Bay (USFWS, 2011). Stream damming, loss of habitat and decline of quality have led to their decline. However, many restoration and partnership efforts have been underway to help revitalize the habitat and conditions for them, with this species beginning to show population improvement and were down-listed to threatened (USFWS, 2011).

Gulf sturgeon is a subspecies of Atlantic sturgeon (*Acipenser oxyrinchus*). USFWS listed the subspecies as threatened in 1991. Gulf sturgeon's range is limited to the eastern Gulf of Mexico from Lake Pontchartrain/Pearl River in Louisiana to the Suwannee River in Florida. Food sources for the anadromous subspecies include amphipods, lancelets, polychaetes, gastropods, shrimp, isopods, mollusks, and crustaceans (USFWS & Gulf States Marine Fisheries Commission, 1995). In Florida, seven rivers have been documented as spawning grounds for Gulf sturgeon (USFWS & National Marine Fisheries Service, 2009). In addition to riverine systems, Gulf sturgeon rely on seagrass beds and



unconsolidated substrate natural communities (USFWS & Gulf States Marine Fisheries Commission, 1995). Research suggests that river damming is a significant threat to the fish because it limits access to riverine spawning sites (USFWS & National Marine Fisheries Service, 2009). Other threats include over-exploitation, incidental catch, dredging, removal of snags and lost habitat due to dredged material placement (USFWS & Gulf States Marine Fisheries Commission, 1995; USFWS & National Marine Fisheries Service, 2009). USFWS designated areas near the aquatic preserve as critical habitat for Gulf sturgeon (USFWS, 2003) (Map 7).

Invasive Non-native and/or Problem Species

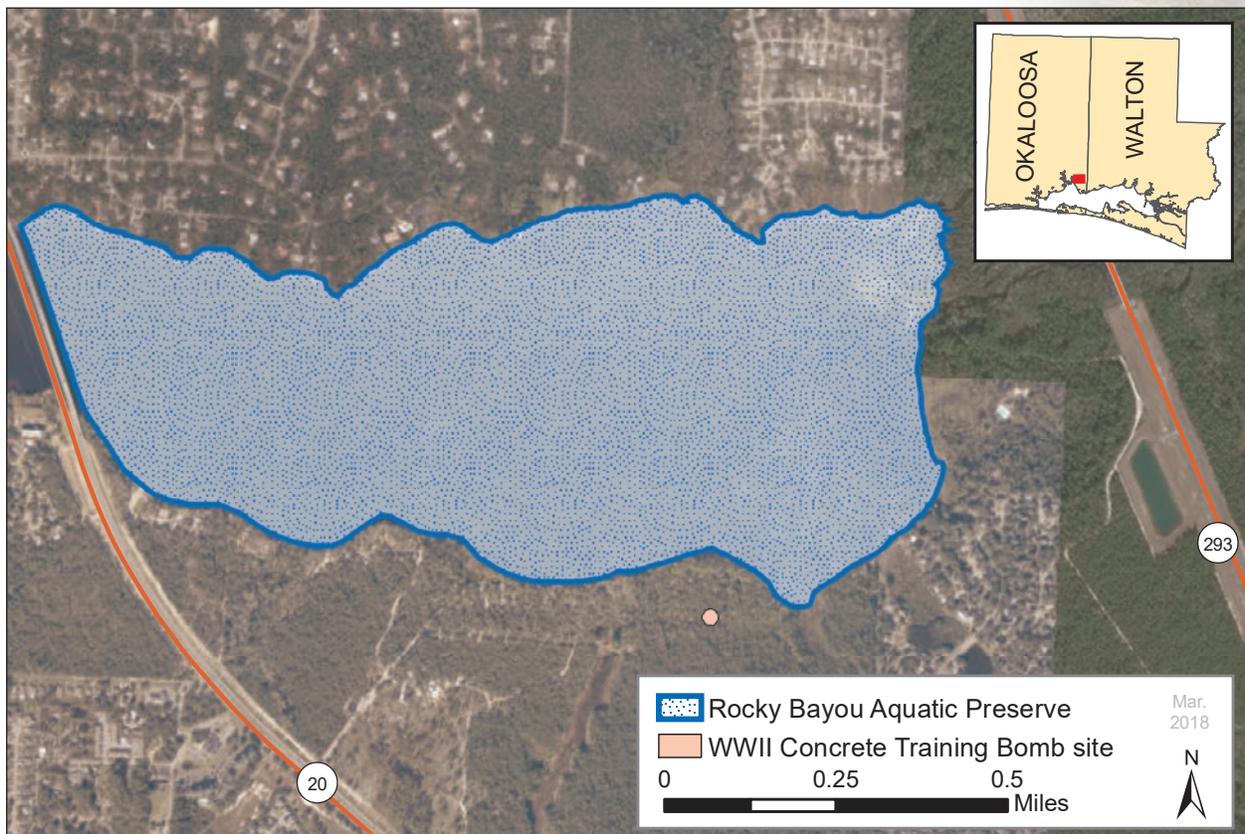
Invasive non-native species are species that have been introduced to an area, naturalized, and are spreading on their own. Not all introduced species become invasive and the ones that do are generally opportunistic, aggressive, and early colonizing species in their native range. If left unchecked, invasive non-native plants and animals alter the character, productivity and conservation values of the natural areas they invade (DNR, 1991).

In some cases, native wildlife may also pose management problems or nuisances. A nuisance animal is an individual native animal whose presence or activities create special management problems (DNR, 1991). Several species are listed as invasive or exotic in adjacent managed lands however there are no invasive or non-native species within RBAP boundaries. Beaver dams have been problematic within the streams creating impoundments. These situations are monitored and addressed. Staff will continue to monitor and evaluate any problematic areas according to the management plan.

RBAP boundaries have seen an increase in common reed (*Phragmites australis*). While the common reed is not considered an invasive species, it is categorized as a nuisance species (Gucker, 2008). It does often outcompete native species and is becoming more apparent on the shores in RBAP.

Archaeological and Historical Resources

Archaeological sites and historical resources are protected under Florida Statutes Chapter 267 and are not to be disturbed unless prior permission is granted from the Division of Historical Resources. The Florida Division of Historical Resources has documented evidence of prehistoric cultures from Archaic (8500 - 1000 B.C.) to Mississippian (1000 - 1500 A.D.) within or adjacent to the aquatic preserve

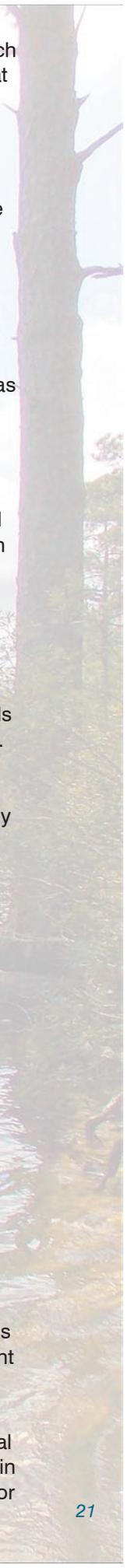


Site ID	Site Name	Location	Description
OK00073	Rocky Bayou North	Within RBAP	Artifact scatter-low density (< 2 per sq meter)
OK00432	X 194Z	Within RBAP	Bridge Remains
OK00433	X 194AA	Within .25 miles of RBAP	Campsite (prehistoric)
OK00434	IF 209	Within .25 miles of RBAP	Campsite (prehistoric)
OK00435	X 194CC	Within .25 miles of RBAP	Campsite (prehistoric)
OK00521	Bee Hive	Within RBAP	Campsite (prehistoric); shell midden
OK00522	Rocky Bayou #2	Within .25 miles of RBAP	Campsite (prehistoric); shell midden
OK00523	WWII Concrete Training Bomb	Within .25 miles of RBAP	Military
OK00534	Marker 450	Within .25 miles of RBAP	Campsite (prehistoric)
OK00535	Marker 467	Within .25 miles of RBAP	Campsite (prehistoric)
OK00536	Marker 474	Within .25 miles of RBAP	Campsite (prehistoric)
OK00944	USFS 94-2 (P) APA	Within RBAP	Campsite (prehistoric); shell midden
OK00990	Bolton	Within .25 miles of RBAP	Campsite (prehistoric)
OK00995	NN	Within RBAP	Campsite (prehistoric); shell midden
OK01032	Huntington Road #1	Within .25 miles of RBAP	Campsite (prehistoric)
OK01033	Woodbridge Road	Within .25 miles of RBAP	Campsite (prehistoric)
OK01706	01-03APA	Within .25 miles of RBAP	Campsite (prehistoric)
OK01707	01-04APA	Within .25 miles of RBAP	Campsite (prehistoric); prehistoric middens
OK01708	01-05APA	Within .25 miles of RBAP	Campsite (prehistoric)
OK02621	X-885-E	Within .25 miles of RBAP	Campsite (prehistoric)
OK02627	X-886-C	Within .25 miles of RBAP	Campsite (prehistoric)
OK02631	X-886-A/B/F/O	Within .25 miles of RBAP	Building remains
OK02632	X-886-Q	Within .25 miles of RBAP	Campsite (prehistoric)
OK02909	Kirk Douglas	Within .25 miles of RBAP	Single artifact or isolated find

Table 2 | Historical and archaeological sites associated with Rocky Bayou Aquatic Preserve. (Data provided by Department of State's Division of Historical Resources on October 23, 2017.)

boundaries totaling approximately 29 acres (Table 2). Bense (1994) described the importance of estuarine resources to these groups, as displayed in excavated middens.

Spanish exploration of Florida began in A.D. 1513. The first attempt to colonize the region was staged from Mexico, during the 1559-1561 expedition of Tristán de Luna y Arellano, who hoped to forge through the mainland and establish a Spanish colony in what is now South Carolina (Worth, 2010). The expedition was thwarted when a hurricane hit Pensacola Bay in September 1559 and devastated most of the fleet and its food supplies. The survivors made attempts to settle in other areas, but eventually



abandoned the Pensacola settlement and went to Cuba. Nearly a century later, after removing the French from what is now St. Augustine, the Spanish resettled Pensacola in 1698, marking the beginning of what is now referred to as the First Spanish period (Worth, 2010). The Spanish ruled until 1763, when the British gained control of Florida as a result of the Seven Years War. The British ruled until 1781, when Florida was given back to Spain. Florida remained a Spanish colony until July 17, 1821, when it was transferred to the United States.

All archaeological sites and historical resources in and adjacent to RBAP are being managed by state park and aquatic preserve staff. Relic dune ridges and eroding shell middens along the shoreline face threats from natural processes and anthropogenic activities. These threats are currently being addressed in this management plan and management plan updates for other managing agencies as appropriate. This site plan includes protection and restoration activities to prevent further impacts at these locations. The shell middens in RBAP have known dates from the Deptford (700-300 B.C.) and Weeden Island (450-1000 A.D.) periods. The Deptford period is characterized by elaborate ceremonies, political complexity and more permanent settlements, often oriented around coastal areas (Bense, 1992). Further evaluation of shoreline sites is recommended by professional archaeologists to examine whether or not potentially important features and discernible stratification are identified in these locations (DEP, 2017).

Additional artifacts and sites are scattered throughout adjacent managed areas and are in good condition. A single artifact is viewable at the Fred Gannon Rocky Bayou State Park ranger station and another within the grounds. The ranger station houses a single projectile point and is displayed within a wooden display case. One of the nature trails directs visitors past an artifact from the World War II era, which is roped off and contains interpretive signage.

Other Associated Resources

Seepage streams are not within aquatic preserve boundaries; however, this natural community influences the waters and habitat in this location. A unique type of seepage stream, the steephead stream, develops by a rather unusual geologic process. Rainfall percolates through the deep sandy soils capping the surrounding uplands until it encounters impermeable clays or other non-porous sediments. Water then travels laterally until reaching the surface and producing a seepage area along a slope or a spring (FNAI, 2010). The seepage waters begin to erode the hill's base and cause the overburden to slump. Thus, the steephead stream valley is largely a product of seepage erosion which begins primarily at the bottom of valleys instead of at their tops. Consequently, the gradient of steephead streams is generally much lower than that of other upland streams in similar topography, because the head of a steephead stream is already near the bottom of a valley (FNAI, 2010). Seepage stream restoration has occurred over the years at Fred Gannon Rocky Bayou State Park and the condition of the restoration is being observed and maintained by park staff.

The Great Florida Birding and Wildlife Trail offers three scenic trails throughout Fred Gannon Rocky Bayou State Park as well, which offer the opportunity to see RBAP and its surrounding habitat. The southern shoreline of RBAP has a very scenic view where you can watch osprey fly overhead, see bottlenose dolphin (*Tursiops truncatus*) play in the water, and observe paddlers boat and fish along the shore.

3.4 / Values

RBAP and the surrounding public lands are a unique ecosystem and also support many recreational activities and ecological based tourism. Nearby conservation lands support nature trails, picnicking, camping, and bird watching. Aquatic activities include kayaking, swimming, boating, and fishing. In 2011, the recreational saltwater fishery was reported to have an economic impact of \$7.6 billion for the state of Florida, and supported more than 109,000 jobs (FWC, n.d.-a). During the same year, 1.6 million people purchased saltwater recreational licenses. This powerful economic benefit derived from sport fishing would not be possible without healthy, suitable habitats, including clean rivers, bay, and estuaries to exist as breeding and nursery grounds for fisheries. Thorpe et al. (1997) reported that 90 to 98 percent of commercially and recreationally important Gulf of Mexico species of fish and shellfish are estuarine dependent at some point in their lives.

Healthy coastal wetlands can also help mitigate the negative impacts of hurricanes, serving as horizontal levees to lessen storm surges. It is estimated that Florida's coastal resources provide \$11 billion a year in storm protection services (The Nature Conservancy, 2009). Additionally, coastal estuaries act as filters for land runoff and help to replenish groundwater.

3.5 / Citizen Support Organization

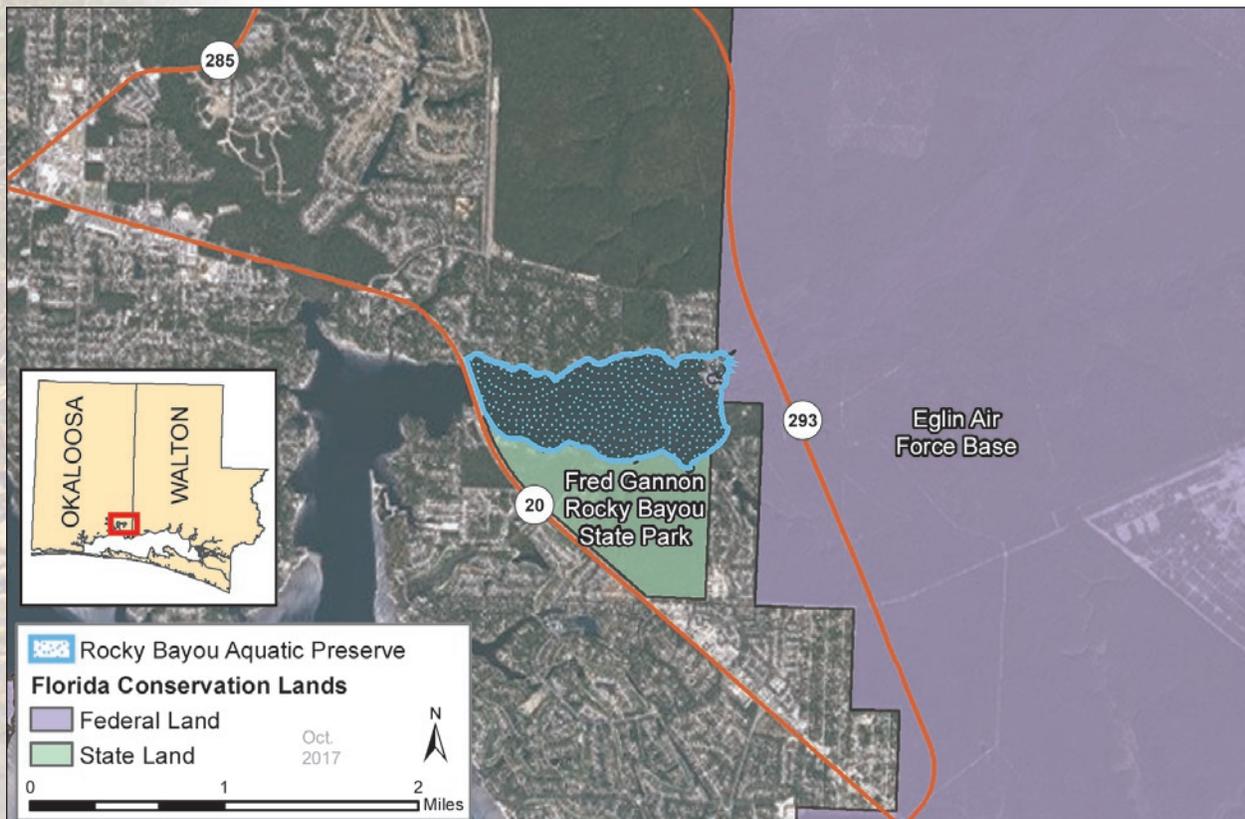
The Northwest Florida Aquatic Preserves office maintains a Citizen Support Organization, the Ecosystem Restoration Support Organization (ERSO). ERSO is a nonprofit organization, 501(c)(3) which was founded in 1999 by former restoration specialists and DEP employees. ERSO helps the Northwest Florida Aquatic Preserves office in grant funding opportunities as well as fund raising, ecotourism events and restoration project implementation. A statewide friends group for all aquatic preserves was recently created and RBAP may also participate or receive support from this group.

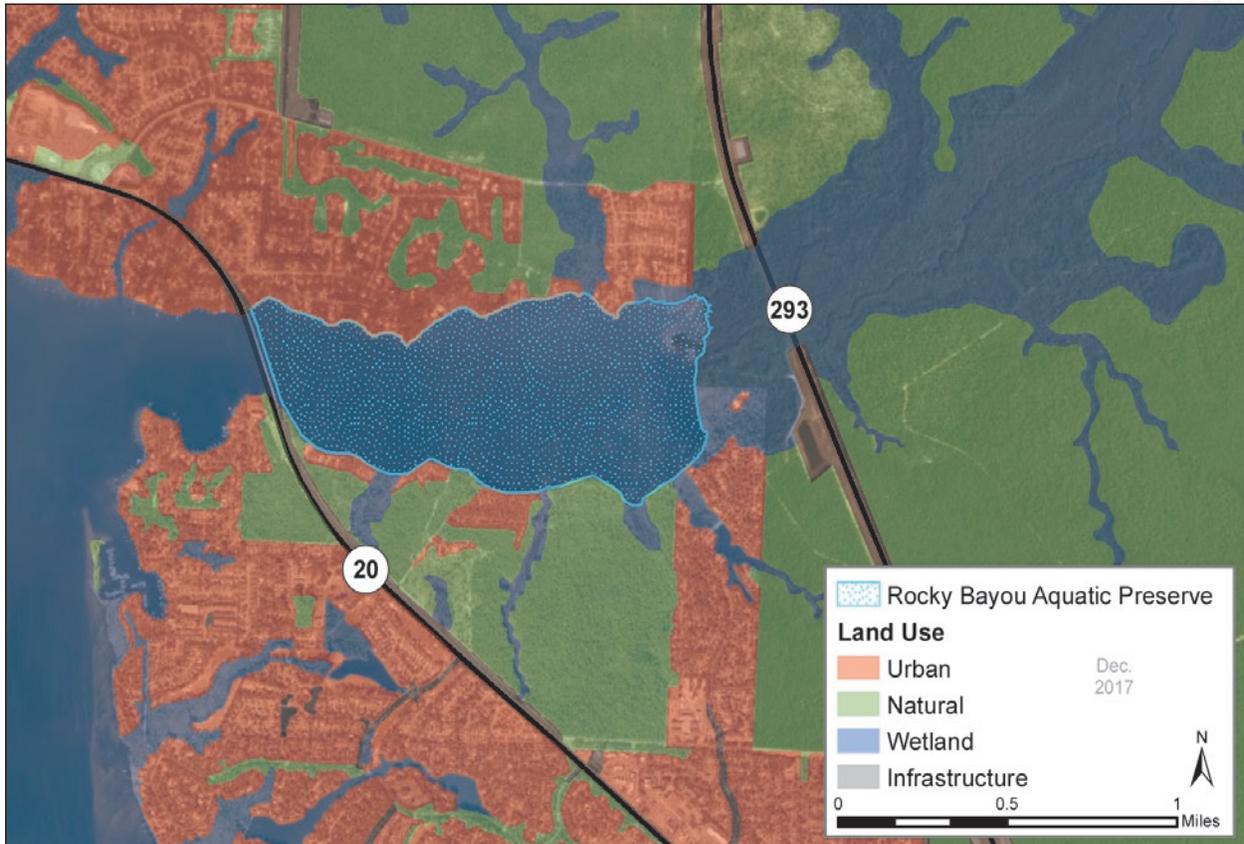
3.6 / Adjacent Public Lands and Designated Resources

RBAP is protected by approximately 50 percent public lands - Fred Gannon Rocky Bayou State Park is adjacent to the southern boundary, and Eglin AFB to the east (Map 9).

Eglin AFB is managed by the Department of Defense and covers nearly half a million acres in Santa Rosa, Okaloosa, and Walton counties. Natural communities on Eglin AFB include sandhill, slope forest, pine flatwoods and many others. The diversity and quality of natural communities on Eglin AFB serve as suitable habitat for more than 100 rare or listed plants and animals, including the federally threatened Okaloosa darter (FWC, n.d.-b). Eglin AFB also hosts the largest continuous section of old-growth longleaf pine forest in the world and within it the fourth largest population of red-cockaded woodpeckers (*Picoides borealis*) (FWC, n.d.-b). Eglin AFB also serves as an important recreation area for hunting, fishing, hiking, and biking, and contains numerous sections of the Florida Trail.

Fred Gannon Rocky Bayou State Park is managed by DEP's Division of Recreation and Parks. The park's 357 acres include trails, forests, and streams, with opportunities for bicycling, picnicking, camping, hiking, and access to the bay for fishing and boating. U.S. Air Force Colonel Fred Gannon, for whom the park was named, was instrumental in the land preservation in the 1950s and turned the once military bomb range into restored longleaf pine and trails designed for public use. Construction began in 1966 and became part of the Florida State Park system shortly after. The park currently has three nature trails (Sand Pine, Rocky Bayou, and Red Cedar) with interpretive signage and provide ideal birding and photography sites (DEP, n.d.-a).





Map 10 | Land use surrounding Rocky Bayou Aquatic Preserve.

3.7 | Surrounding Land Use

Water quality and habitat within the aquatic preserve are directly affected by surrounding land use within the drainage basin for the Florida and Alabama area, and particularly areas within Florida's Okaloosa and Walton counties. Much of the immediately adjacent areas are in a natural condition, but there is heavy development pressure, especially for residential housing (Map 10). Human activities have influenced RBAP and its watershed over the last 100 years, by erosion, wastewater discharges, stormwater, and other anthropomorphic events altering aquatic preserve conditions. Past and future restoration projects, have and will address these needs. Some of the future plans for the surrounding land use issues include implementation of the Choctawhatchee Bay System Surface Water Improvement and Management (SWIM) plan.



Staff sets up plants to be planted for part of the stream restoration project previously installed at Fred Gannon Rocky Bayou State Park.

Part Two

Management Programs and Issues

Chapter Four

The Rocky Bayou Aquatic Preserve Management Programs and Issues

The work performed by the Florida Coastal Office (FCO) is divided into components called management programs. In this management plan all site operational activities are explained within the following four management programs: Ecosystem Science, Resource Management, Education and Outreach, and Public Use.

The hallmark of Florida's Aquatic Preserve Program is that each site's natural resource management efforts are in direct response to, and designed for unique local and regional issues. When issues are addressed by an aquatic preserve it allows for an integrated approach by the staff using principles of the Ecosystem Science, Resource Management, Education and Outreach, and Public Use Programs. This complete treatment of issues provides a mechanism through which the goals, objectives and strategies associated with an issue have a greater chance of being met. For instance, an aquatic preserve may address declines in water clarity by monitoring levels of turbidity and chlorophyll (Ecosystem Science - research), planting eroded shorelines with marsh vegetation (Resource Management - habitat restoration), creating a display or program on preventing water quality degradation (Education and Outreach), and offering training to municipal officials on retrofitting stormwater facilities to increase levels of treatment (Education and Outreach).

Issue-based management is a means through which any number of partners may become involved with an aquatic preserve in addressing an issue. Because most aquatic preserves are endowed with very few staff, partnering is a necessity, and by bringing issues into a broad public consciousness partners who wish to be involved are able to do so. Involving partners in issue-based management ensures that a particular issue receives attention from angles that the aquatic preserve may not normally address.



This section will explore issues that impact the management of Rocky Bayou Aquatic Preserve (RBAP) directly, or are of significant local or regional importance that the preserve's participation in them may prove beneficial. While an issue may be the same from preserve to preserve, the goals, objectives and strategies employed to address the issue will likely vary depending on the ecological and socioeconomic conditions present within and around a particular aquatic preserve's boundary. In this management plan, RBAP will characterize each of its issues and delineate the unique goals, objectives and strategies that will set the framework for meeting the challenges presented by the issues. Beneficial projects, outside the current capacity of RBAP's funding and staffing, are identified in Appendix D.4, in case opportunities become available to support those projects in the ten-year span of this management plan.

Each issue will have goals, objectives and strategies associated with it. Goals are broad statements of what the organization plans to do and/or enable in the future. They should address identified needs and advance the mission of the organization. Objectives are a specific statement of expected results that contribute to the associated goal, and strategies are the general means by which the associated objectives will be met. Appendix D contains a summary table of all the goals, objectives and strategies associated with each issue.

4.1 / The Ecosystem Science Management Program

The Ecosystem Science Management Program supports science-based management by providing resource mapping, modeling, monitoring, research and scientific oversight. The primary focus of this program is to support an integrated approach (research, education and stewardship) for adaptive management of each site's unique natural and cultural resources. FCO ensures that, when applicable, consistent techniques are used across sites to strengthen Florida's ability to assess the relative condition of coastal resources. This enables decision-makers to more effectively prioritize restoration and resource protection goals. In addition, by using the scientific method to create baseline conditions of aquatic habitats, the Ecosystem Science Management Program allows for objective analyses of the changes occurring in the state's natural and cultural resources.

4.1.1 / Background of Ecosystem Science at Rocky Bayou Aquatic Preserve

Much of the background of ecosystem science at RBAP, prior to current management, is unavailable due to programmatic closures in 2011. This section has been composed based on site knowledge gathered since the office reopened and current management's involvement with other agencies familiar with the area.

Nutrients and water quality sampling have been conducted within RBAP by Choctawhatchee Basin Alliance and the Florida Department of Health for numerous years.

4.1.2 / Current Status of Ecosystem Science at Rocky Bayou Aquatic Preserve

Ecosystem science activities in RBAP are currently being implemented and will continue to expand in the upcoming years with additional water quality sampling and habitat restoration. Water quality sampling is being conducted within RBAP by the health department. Further monitoring is necessary within the watershed. Continuous water quality sampling is planned within the next ten years. Continuous water quality sampling will occur at one location in the aquatic preserve and all data will be shared. Due to office closures and equipment funding, site has yet to be monitored.

Additionally, salt marsh and oyster restoration will be implemented in the aquatic preserve. Through upcoming years and recent local issues, collaboration on watershed activities and health are top priority among managers, stakeholders, and the community.

4.1.3 / Ecosystem Science Issues

Two of the biggest issues RBAP is facing are water quality, and habitat loss due in part to decreased light penetration in the water. Through septic to sewer conversion on adjacent properties, as well as increased awareness and education, great strides in improved water quality can be achieved. These steps alone can be very beneficial to the health of the aquatic preserve and the watershed as a whole.

Issue I: Water Quality

Improving degraded water quality in the Choctawhatchee Bay Watershed System is a main priority for Okaloosa and Walton counties. Much of the decline in habitat throughout, including seagrass, can be

attributed to a reduction in water quality from decreased light penetration. Researchers are considering seagrass for a proposed indicator of estuarine change (Biber, Paerl, Gallegos, & Kenworthy, 2004). The degradation in water quality can be attributed to several factors, including failing septic tanks, little stormwater remediation and unpaved roads. With an estimated 20 percent of the population utilizing septic systems, rising to 50 percent in rural areas (U.S. Environmental Protection Agency [EPA], 2008), it is likely that the RBAP region is closer to the higher percentage. It is estimated that 10-20 percent of these septic systems fail each year and repairs are not always addressed in a timely manner (EPA, n.d.). Stormwater runoff is another factor currently being addressed by local agencies, and has recently been elevated to an issue of high importance. Severe flooding events in Escambia, Santa Rosa, and Okaloosa counties on April 29, 2014 overloaded current facilities and infrastructure (Okaloosa County rain event, 2014; Walton Outdoors, 2014). All of these practices discharge potential excess nitrogen and phosphorus into the estuarine system decreasing primary productivity. The EPA suggests a guideline of 10:1 ratio of concentrations of nitrogen to phosphorus (EPA, 2005).

Goal One: Improve water quality within RBAP.

Objective One: Implement research, restoration, and enhancement projects throughout RBAP that focus on improving water quality and sedimentation.

Integrated Strategies:

1. Implement a continuous water quality monitoring program, and add additional monitoring sites within RBAP, adding additional information such as rain events to determine how these affect water quality.

Performance Measure: A continuous water quality monitoring station is established.

2. Promote research within RBAP by institutions of higher education to show how regional impacts affect RBAP.

Performance Measure: Publish additional articles and publications throughout the region focusing on RBAP.

3. Use lessons from successful habitat restoration and enhancement projects to expand on how projects increase beneficial habitat and the anticipated time for improved water quality.

Performance Measure: Compile annual monitoring data, and generate a report on water quality improvements to distribute to stakeholders.

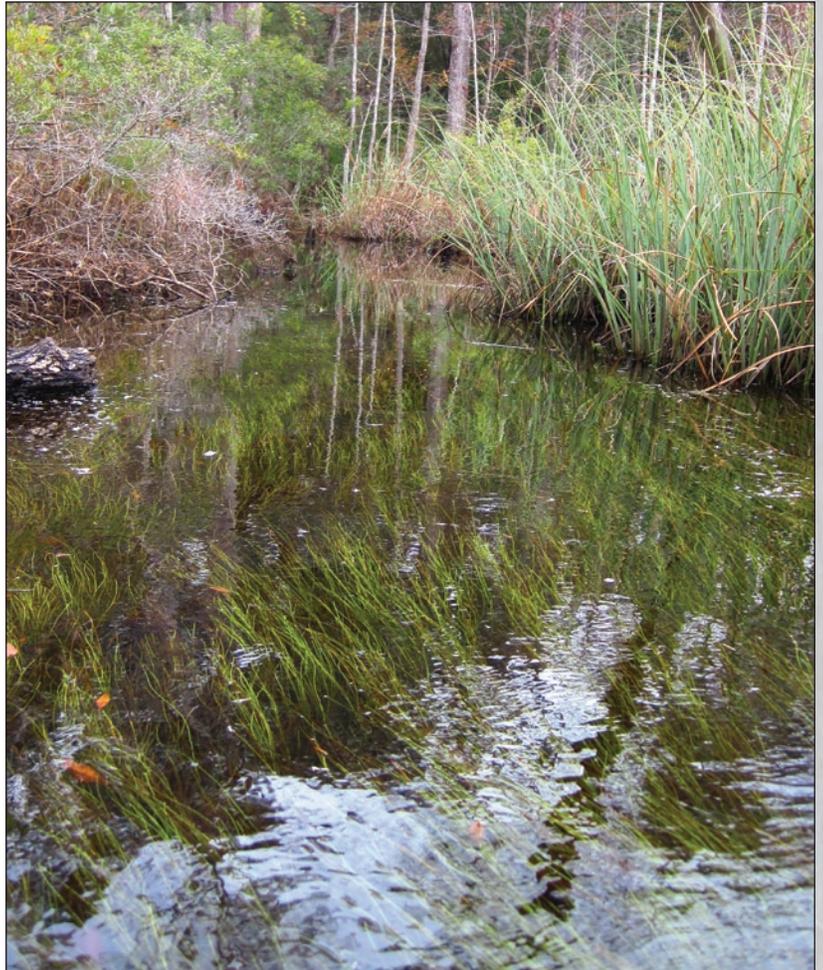
4. Determine the number of homeowners on septic systems, and work with the city of Niceville and Okaloosa County to promote cost incentives and education/outreach to homeowners for septic to sewer conversion.

Performance Measure: Track number of people who convert to sewer.

5. Promote regional based efforts to adapt stormwater infrastructure to accommodate large rain events.
- Performance Measure:* Track number of meetings attended, number of attendees, and adaptation of infrastructure to be quantified.

6. Work with local developers to utilize best management practices on future development in vicinity to minimize water quality and sedimentation impacts to RBAP.

Performance Measure: Track number of meetings with developers, and number of new homes and businesses using best management practices.



Submerged aquatic vegetation dances in the current.

Issue II: Habitat Loss

Goal One: Slow or stop the gradual habitat loss within RBAP.

Objective One: Address national, state, and local concerns about habitat decline.

Integrated Strategies:

1. Determine ideal locations and implement habitat restoration, enhancement projects, and partnerships within RBAP. A living shoreline is being planned along an eroding shoreline in coordination with the state park in order to improve salt marsh habitat and protect endangered cultural resources.
Performance Measure: Number of acres enhanced within RBAP.
2. Map benthic habitats in RBAP.
Performance Measure: A comprehensive mapping survey is completed for RBAP.
3. In cooperation with Florida Fish and Wildlife Conservation Commission (FWC) and Eglin Air Force Base (AFB), develop an Imperiled Fish and Wildlife Species Management Strategy to address imperiled fish and turtle species and associated management prescriptions for their habitats; based on site-specific occurrence, population and sustainability data.
Performance Measure: Comprehensive management strategy developed and implemented.

4.2 / The Resource Management Program

The Resource Management Program addresses how FCO manages RBAP and its resources. The primary concept of RBAP's Resource Management projects and activities are guided by FCO's mission statement: Conserving and restoring Florida's coastal and aquatic resources for the benefit of people and the environment. FCO's sites accomplish resource management by physically conducting management activities on the resources for which they have direct management responsibility, and by influencing the activities of others within and adjacent to their managed areas and within their watershed. Watershed and adjacent area management activities, and the resultant changes in environmental conditions, affect the condition and management of the resources within their boundaries. FCO managed areas are especially sensitive to upstream activities affecting water quality and quantity. FCO works to ensure that the most effective and efficient techniques used in management activities are used consistently within our sites, throughout our program, and when possible, throughout the state. The strongly integrated Ecosystem Science, Education and Outreach and Public Use Programs, provide guidance and support to the Resource Management Program. These programs work together to provide direction to the various agencies that manage adjacent properties, our partners and our stakeholders. RBAP also collaborates with these groups by reviewing various protected area management plans. The sound science provided by the Ecosystem Science Program is critical in the development of effective management projects and decisions. The nature and condition of natural and cultural resources within RBAP are diverse. This section explains the history and current status of our Resource Management efforts.

4.2.1 / Background of Resource Management at Rocky Bayou Aquatic Preserve

Much of the background of ecosystem science at RBAP, prior to current management, is unavailable due to programmatic closures in 2011. This section has been composed based on site knowledge gathered since the office reopened and current management's involvement with other agencies familiar with the area.

4.2.2 / Current Status of Resource Management at Rocky Bayou Aquatic Preserve

The resource management of RBAP, and the other two aquatic preserves within this region, is overseen by FCO's Northwest Florida Aquatic Preserves (NWFLAP) office. Through working together with other management agencies and states, the resources within RBAP can be maintained for future generations. Integration between resource management, ecosystem science, education and outreach, as well as collaboration with other organizations, optimizes the management of RBAP. Staff often works with Choctawhatchee Basin Alliance, the Northwest Florida Water Management District, Fred Gannon Rocky Bayou State Park, and Eglin AFB, as well as others. Through strong management such as these partnerships: research, education and awareness are all top priorities among constituents.

A project to restore oyster reefs within the aquatic preserve using recycled or fossilized oyster shells will begin the summer of 2018. NWFLAP will partner with Fred Gannon Rocky Bayou State Park for implementation and maintenance on the project.

4.2.3 / Resource Management Issue

Issue III: Lack of Resource Information

Coordination with Eglin AFB, FWC, and Fred Gannon Rocky Bayou State Park will allow for better communication on resources and needs. Due to distance from the NWFLAP office, staff is not always available to handle issues as promptly as they would like. Further coordination between these agencies will allow for resources to be better managed.

Goal One: Maintain resource inventories for RBAP.

Objective One: Conduct and maintain a record of submerged and emergent resources.

Integrated Strategies:

1. Record and inventory submerged aquatic vegetation (SAV), attached algae, marsh grasses, other shoreline vegetation, as well as satellite imagery and aerial photographs.
Performance Measure: Inventories are updated annually.
2. Collect data from inventories and mapping.
Performance Measure: Biological resource maps are created.
3. Identify and locate unknown archaeological and historical resources.
Performance Measure: Staff will obtain Archaeological Resource Management Training when available in the area.
Performance Measure: Staff will monitor for unidentified cultural resources during other activities in the aquatic preserve. Division of Historic Resources, Bureau of Archaeological Research archaeologists will be invited to join them in the field.
4. Monitor existing archaeological and historical resources.
Performance Measure: Staff will assess five of the five known archaeological sites within the aquatic preserve every other year, in collaboration with the state park, as appropriate.

Issue IV: Public Awareness

Goal One: Increase awareness on how upland management affects submerged resources.

Objective One: Work with local, state, and federal agencies when upland management affects submerged resources.

Integrated Strategies:

1. Attend state land management meetings.
Performance Measure: Track NWFLAP comments and suggestions in local, state and federal land management plan updates.
2. Make recommendations for additional protective strategies on managed lands.
Performance Measure: Track additional strategies suggested by NWFLAP for local, state, and federal guidelines.

4.3 / The Education and Outreach Management Program

The Education and Outreach Management Program components are essential management tools used to increase public awareness and promote informed stewardship by local communities. Education programs include on and off-site education and training activities. These activities include: field studies for students and teachers; the development and distribution of media; the distribution of information at local events; the recruitment and management of volunteers; and, training workshops for local citizens and decision-makers. The design and implementation of education programs incorporates the strategic targeting of select audiences. These audiences include all ages and walks of life; however, each represents key stakeholders and decision-makers. These efforts by the Education and Outreach Program allow the aquatic preserve to build and maintain relationships and convey knowledge to the community; invaluable components to successful management.

4.3.1 / Background of Education and Outreach at Rocky Bayou Aquatic Preserve

Much of the background of education and outreach at RBAP, prior to current management, is unavailable due to programmatic closures in 2011. This section has been composed based on site knowledge gathered since the office reopened and current management's involvement with other agencies familiar with the area.



Wooded brush fills the untouched shoreline.

4.3.2 / Current Status of Education and Outreach at Rocky Bayou Aquatic Preserve

RBAP under NWFLAP management has several formal education and outreach programs. Every spring, staff participates in the Choctawhatchee Estuary Family Festival at Fred Gannon Rocky Bayou State Park. In addition to information booths and displays, NWFLAP will begin implementing restoration projects in the aquatic preserve. Volunteers will be recruited for these projects and will learn about the importance of the aquatic preserve program.

4.3.3 / Education and Outreach Issue

Issue II: Habitat Loss (continued from Ecosystem Science section)

Goal One: Slow or stop gradual habitat loss within RBAP. (same goal from Ecosystem Science section)

Objective One: Address national, state, and local concerns about habitat decline. (same objective from Ecosystem Science section)

Integrated Strategies: (numbering continued from Ecosystem Science section)

1. Facilitate education and outreach on importance of estuarine ecosystem and habitat, for environmental, recreational, and commercial importance.

Performance Measure: Track number of attendees at events.

2. Work with local community and stakeholders on suggested land use for coastal integrity and habitat preservation.

Performance Measure: Track number of stakeholders reached through surveys and distributed outreach materials.

Issue IV: Public Awareness (continued from Resource Management section)

Goal Two (numbering continued from Resource Management section): Increase public awareness of FCO and NWFLAP.

Objective One: Coordinate with local, state, and federal agencies, as well as community.

Integrated Strategy:

1. Inform and educate agencies and public about NWFLAP's mission.

Performance Measure: Track number of attendees to NWFLAP events and inquiries from agencies.

Performance Measure: Track distributed outreach materials to user groups.

Performance Measure: Track number of events or articles mentioning NWFLAP.

Goal Three: Increase public awareness of RBAP and its significance.

Objective One: Coordinate with local, state, and federal agencies, as well as community.

Integrated Strategies:

1. Install signage at access points to help user groups understand aquatic preserve rules and boundaries.

Performance Measure: Track number of inquiries tallied by online resources via access to social media and signage prompts.

2. Attend public events to educate the public about RBAP.

Performance Measure: Track number of events attended by NWFLAP staff.

Performance Measure: Track number of people attending events with NWFLAP displays.

Goal Four: Inform user groups about coastal resiliency and how to implement coastal resilient features for lands and infrastructure.

Objective One: Inform public on potential environmental effects of climate change.

Integrated Strategy:

1. Utilize tools to show effects of sea level rise and its progression.

Performance Measure: Track number of presentations on sea level rise and long term effects.

Objective Two: Inform coastal property owners of structural adaptation options available to improve coastal risk reduction.

Integrated Strategies:

1. Utilize tools to show effects of sea level rise in reference to properties.

Performance Measure: Track number of presentations for coastal property owners.

Performance Measure: Track number of restoration and enhancement projects implemented.

2. Hold public meetings for coastal property owners on potential infrastructure changes and practices.

Performance Measure: Track number of presentations for coastal property owners.

Performance Measure: Track number of restoration and enhancement projects implemented.

Goal Five: Inform coastal property owners on proper land use.

Objective One: Share knowledge and tools with public on habitat preservation and improving water quality.

Integrated Strategies:

1. Promote Florida Friendly Yards (FFY).

Performance Measure: Track number of FFY presentations.

Performance Measure: Track number of integrated FFYs.

Performance Measure: Track number of information request about FFYs.

2. Promote FFY recommendation of a minimum 10-foot vegetative buffer along coastal properties.

Performance Measure: Measure linear feet of proper buffers through shoreline surveys.

3. Promote conversion of hardened shorelines to living shorelines.

Performance Measure: Measure linear feet of shoreline converted to living shorelines.

4. Promote use of native plants, rain gardens, and lawn control through collaboration with University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS), Okaloosa Extension agents.

Performance Measure: Track number of inquiries about land use programs.

Performance Measure: Track number of implemented integrated land use strategies.

Performance Measure: Track educational materials distributed to coastal property owners.

Goal Six: Inform public concerning marine debris.

Objective One: Promote knowledge of marine debris impacts and effects to wildlife and the environment.

Integrated Strategy:

1. In collaboration with UF/IFAS Sea Grant, and FWC, educate public on marine debris, and its effects on wildlife and the environment.

Performance Measure: Decline in overall marine debris.

Performance Measure: Track educational materials distributed.

Performance Measure: Decline in number of injured animals reported by FWC.

Goal Seven: Inform the public concerning SAV and safe boating to ensure habitat protection.

Objective One: Increase knowledge of propeller scarring effects through seagrass beds.

Integrated Strategy:

1. Educate the public on propeller scarring and how to avoid further resource damage.

Performance Measure: Decline in propeller scarring through areas of managed resources.

Performance Measure: Track educational materials distributed.

Performance Measure: Signage installed.



An enjoyable day of smooth water paddling.

4.4 / The Public Use Management Program

The Public Use Management Program addresses the delivery and management of public use opportunities at RBAP. The components of this program focus on providing the public recreational opportunities within the site's boundaries which are compatible with resource management objectives. The goal for public access management in FCO managed areas is to "promote and manage public use of our preserves and reserves that supports the research, education, and stewardship mission of FCO."

While access by the general public has always been a priority, the conservation of FCO's sites is the primary management concern for FCO. It is essential for staff to analyze existing public uses and define management strategies that balance these activities where compatible in a manner that protects natural, cultural and aesthetic resources. This requires gathering existing information on use, needs, and opportunities, as well as a thorough consideration of the existing and potential impacts to critical upland, wetland and submerged habitats. This includes the coordination of visitor program planning with social science research. One of FCO's critical management challenges during the next 10 years is balancing anticipated increases in public use with the need to ensure preservation of site resources. This section explains the history and current status of our Public Use efforts.

4.4.1 / Background of Public Use at Rocky Bayou Aquatic Preserve

The Public Use Management Program addresses the delivery and management of public use opportunities at RBAP. The components of this program focus on providing public recreational opportunities, within the sites boundaries which are compatible with resource management objectives. The goal for public access management in FCO managed areas is to promote and manage public use of our preserves and reserves that supports the research, education, and stewardship mission of FCO.

While access to the general public has always been a priority, the conservation of FCO's sites is the primary management concern for FCO. It is essential for staff to analyze existing public uses and define management strategies that balance these activities where compatible in a manner that protects natural, cultural and aesthetic resources. This requires gathering existing information on use, needs, and opportunities, as well as a thorough consideration of the existing and potential impacts to critical upland, wetland and submerged habitat. This includes the coordination of visitor program planning with social science research. One of FCO's critical management challenges during the next 10 years is balancing anticipated increases in public use with the need to ensure preservation of site resources. Much of the background of public use at RBAP, prior to current management, is unavailable due to programmatic closures in 2011. This section has been composed based on site knowledge gathered since the office reopened and current management's involvement with other agencies familiar with the area.

4.4.2 / Current Status of Public Use at Rocky Bayou Aquatic Preserve

RBAP is accessed via several locations. Boat launch and shoreline access at the state park allow for recreation from motorized vessels, kayaks, and shoreline fishing (Map 11). With the northern shore being residential, many homes are equipped with docks and the west side of the aquatic preserve opens to the rest of Choctawhatchee Bay. The aquatic preserve is a regular spot for locals and visitors to boat, jet ski, swim, and fish.

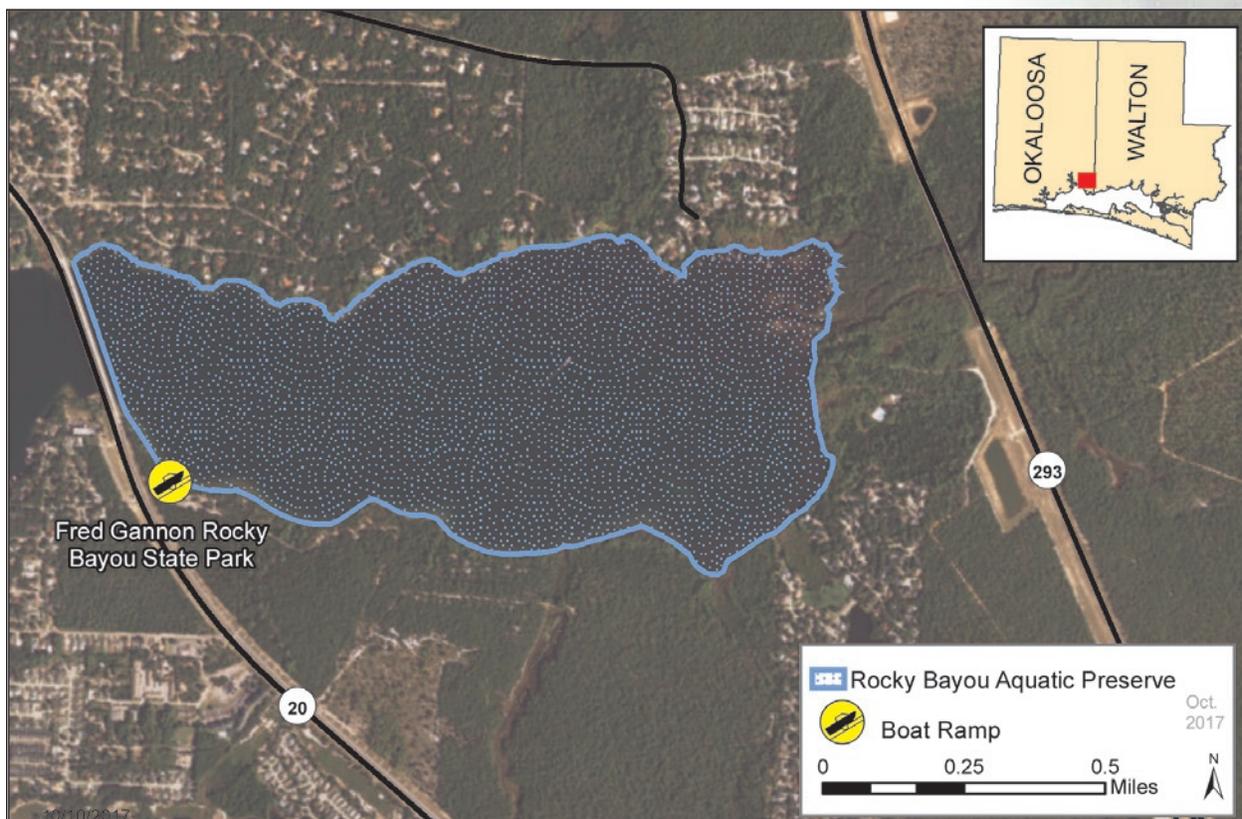
4.4.3 / Public Use Issue

With RBAP being such a popular recreation location and a smaller body of water, the overlap of motorized activities makes nonmotorized recreation difficult. FWC and parks staff have been keeping watch of these activities and note that conditions are worse on holidays, and weekends during summer months.

Issue V: Sustainable Public Use

Goal One: Identify locations of concern in RBAP.

Objective One: Address recreational safety for RBAP and state park patrons, as well as shoreline protection.



Map 11 / Public access at Rocky Bayou Aquatic Preserve.

Integrated Strategies:

1. Work with FWC during times of concern to address safety.

Performance Measure: No incidents reported.

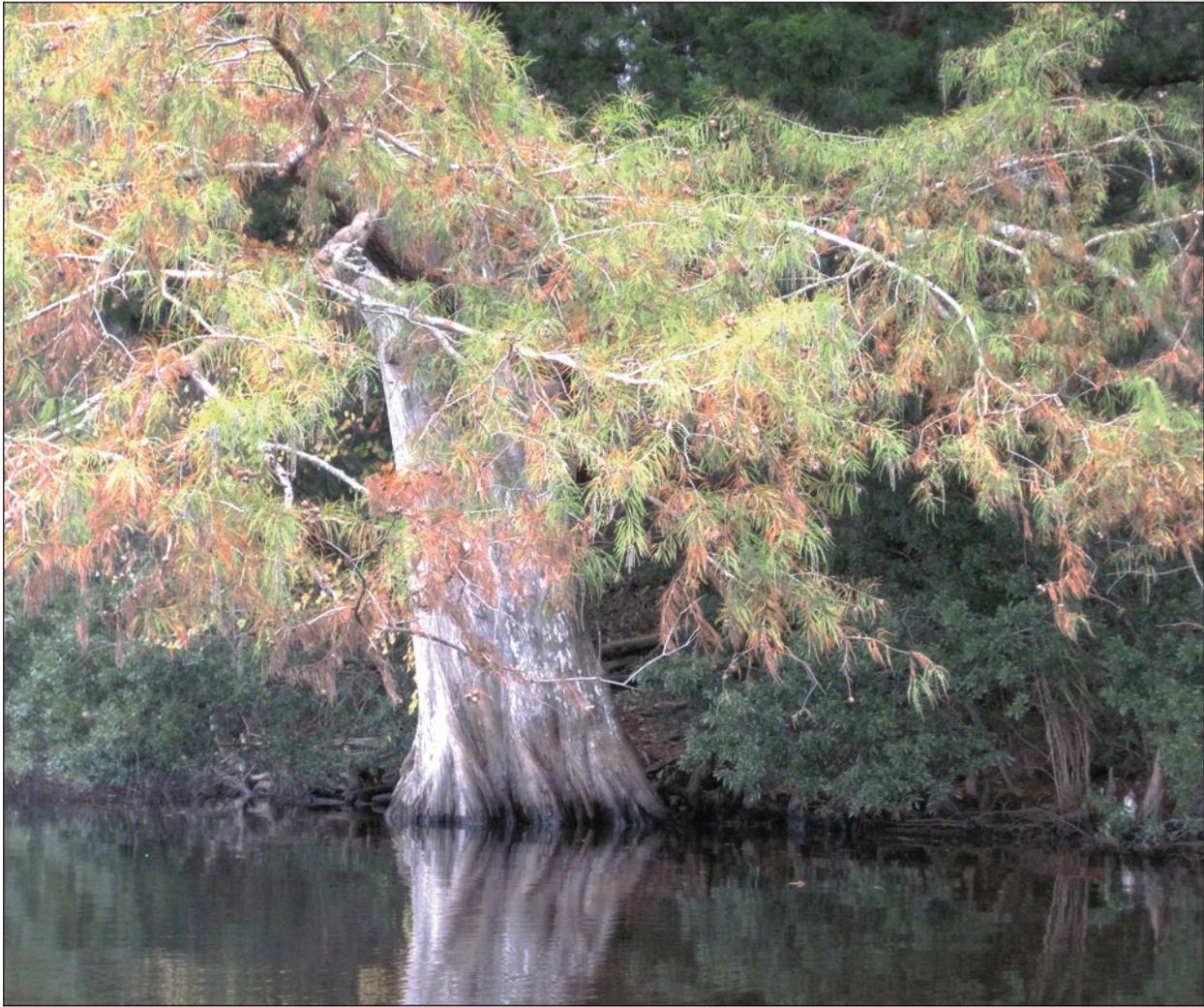
Performance Measure: No additional propeller scarring or groundings observed and mapped.

2. Co-manage area with state park staff to possibly include “no motor zones” near the state park shoreline and to possibly include “No Wake Zones” in other RBAP areas.

Performance Measure: Reduction in incidents reported.

Performance Measure: Shoreline erosion is slowed or stopped as shown by aerial mapping and habitat rebounding.





Color erupts from the branches of a tree naturally painting the shoreline.

Part Three

Additional Plans

Chapter Five

Administrative Plan

The management program for the Rocky Bayou Aquatic Preserve (RBAP), as well as two other aquatic preserves (Fort Pickens State Park Aquatic Preserve and Yellow River Marsh Aquatic Preserve), is implemented by the Northwest Florida Aquatic Preserves (NWFLAP) manager and one Full Time Equivalent (FTE; full benefits, salaried) serving as assistant manager. Any restoration projects and nursery facilities are operating under grant funding and Other Personal Services (OPS; partial benefits, hourly) staff. Management and administrative duties are undertaken by the two FTE employees. These tasks include purchasing, budget approval and reconciliation, reporting, grant writing and reporting, staff management and field monitoring, recording and assessment. Oversight for the NWFLAP spans a majority of the Florida Panhandle and is nearly 100 miles from the westernmost to easternmost managed site.

In addition to aquatic preserve management, NWFLAP, through grant awards, implements habitat restoration and enhancement projects in their managed areas as well as areas that will influence the quality of NWFLAP resources. Many management duties are required for these grants in addition to the regular aquatic preserve management responsibilities, such as reporting, budget allocations, and addressing staffing needs.



Staffing Needs

Successful implementation of the strategies outlined in this management plan depends on funding and staffing factors over the next 10 years. The conversion of two employees (Environmental Specialist I) from grant funded OPS positions to Career Service FTE positions will reduce turnover and ensure the quality of current and future restoration projects, research and monitoring efforts, and expanding the education and outreach program are obtainable and successful. The office utilizes three facilities, one of which has a laboratory. The two additional FTE positions requested would help with facility maintenance, ecotourism, vehicle and vessel maintenance, volunteer coordination, education/outreach, monitoring, and administrative duties.



A dove lovingly keeps its nest safe and warm.

Chapter Six

Facilities Plan

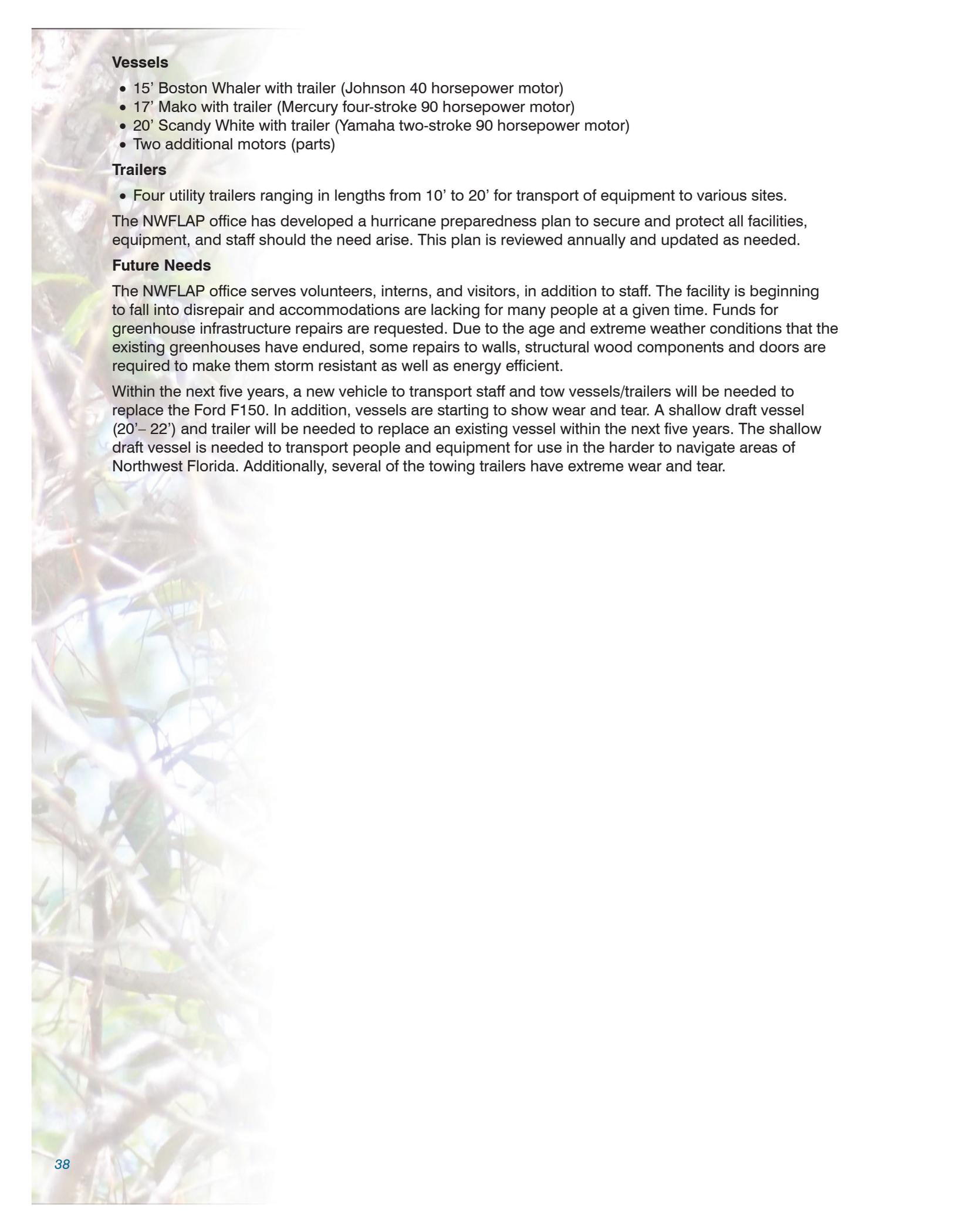
Facilities

The main office location for Northwest Florida Aquatic Preserves (NWFLAP) is in the Northwest District Regulatory Office at the James Building in Pensacola. Staff occupies two offices, a laboratory and a storage space within the building. NWFLAP also occupies a nursery facility within Ellyson Industrial Park in Pensacola. This location consists of a modular office space with storage, a large warehouse, two full size greenhouses, grow out and aquaculture space, and space for boat, vehicle and trailer storage. This location is also utilized by the Florida Department of Environmental Protection Northwest District Regulatory Office for file storage and for the Air Quality Monitoring Program. All facilities are compliant with Americans with Disabilities Act (ADA) specifications.

The modular office at the nursery has had several roof patches/repairs over the last five years and every year the air conditioning unit/HVAC has had repairs. The office is being replaced with a new modular or mobile facility. This space will become the primary location for NWFLAP staff and provide a more central location for staff between all aquatic preserves, with this being the main office space and visitor center.

Vehicles

- 2002 Toyota Prius (77,098 miles as of January 1, 2018): used for transportation for long distance, especially Central Office, meetings and conferences, and commuting around town.
- 2007 Ford F-150 (104,237 miles as of January 1, 2018): used for majority of towing and hauling equipment, occasional travel for distance and project implementation.
- 2011 Chevy Silverado (47,717 miles as of January 1, 2018): used for towing and hauling equipment, occasional travel for distance and project implementation; grant funded.



Vessels

- 15' Boston Whaler with trailer (Johnson 40 horsepower motor)
- 17' Mako with trailer (Mercury four-stroke 90 horsepower motor)
- 20' Scandy White with trailer (Yamaha two-stroke 90 horsepower motor)
- Two additional motors (parts)

Trailers

- Four utility trailers ranging in lengths from 10' to 20' for transport of equipment to various sites.

The NWFLAP office has developed a hurricane preparedness plan to secure and protect all facilities, equipment, and staff should the need arise. This plan is reviewed annually and updated as needed.

Future Needs

The NWFLAP office serves volunteers, interns, and visitors, in addition to staff. The facility is beginning to fall into disrepair and accommodations are lacking for many people at a given time. Funds for greenhouse infrastructure repairs are requested. Due to the age and extreme weather conditions that the existing greenhouses have endured, some repairs to walls, structural wood components and doors are required to make them storm resistant as well as energy efficient.

Within the next five years, a new vehicle to transport staff and tow vessels/trailers will be needed to replace the Ford F150. In addition, vessels are starting to show wear and tear. A shallow draft vessel (20'– 22') and trailer will be needed to replace an existing vessel within the next five years. The shallow draft vessel is needed to transport people and equipment for use in the harder to navigate areas of Northwest Florida. Additionally, several of the towing trailers have extreme wear and tear.

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Legal Documents

A.1 / Aquatic Preserve Resolution

WHEREAS, the State of Florida, by virtue of its sovereignty, is the owner of the beds of all navigable waters, salt and fresh, lying within its territory, with certain minor exceptions, and is also the owner of certain other lands derived from various sources; and

WHEREAS, title to these sovereignty and certain other lands has been vested by the Florida Legislature in the State of Florida Board of Trustees of the Internal Improvement Trust Fund, to be held, protected and managed for the long range benefit of the people of Florida; and

WHEREAS, the State of Florida Board of Trustees of the Internal Improvement Trust Fund, as a part of its overall management program for Florida's state-owned lands, does desire to insure the perpetual protection, preservation and public enjoyment of certain specific areas of exceptional quality and value by setting aside forever these certain areas as aquatic preserves or sanctuaries; and

WHEREAS, the ad hoc Florida Inter-Agency Advisory Committee on Submerged Land Management has selected through careful study and deliberation a number of specific areas of state-owned land having exceptional biological, aesthetic and scientific value, and has recommended to the State of Florida Board of Trustees of the Internal Improvement Trust Fund that these selected areas be officially recognized and established as the initial elements of a statewide system of aquatic preserves for Florida;

NOW, THEREFORE, BE IT RESOLVED by the State of Florida Board of Trustees of the Internal Improvement Trust Fund:

THAT it does hereby establish a statewide system of aquatic preserves as a means of protecting and preserving in perpetuity certain specially selected areas of state-owned land: and

THAT specifically described, individual areas of state-owned land may from time to time be established as aquatic preserves and included in the statewide system of aquatic preserves by separate resolution of the State of Florida Board of Trustees of the Internal Improvement Trust Fund; and

THAT the statewide system of aquatic preserves and all individual aquatic preserves established thereunder shall be administered and managed, either by the said State of Florida Board of Trustees of the Internal Improvement Trust Fund or its designee as may be specifically provided for in the establishing resolution for each individual aquatic preserve, in accordance with the following management policies and criteria:

- (1) An aquatic preserve is intended to set aside an exceptional area of state-owned land and its associated waters for preservation essentially in their natural or existing condition by reasonable regulation of all human activity which might have an effect on the area.
- (2) An aquatic preserve shall include only lands or water bottoms owned by the State of Florida, and such private lands or water bottoms as may be specifically authorized for inclusion by appropriate instrument from the owner. Any included lands or water bottoms to which a private ownership claim might subsequently be proved shall upon adjudication of private ownership be automatically excluded from the preserve, although such exclusion shall not preclude the State from attempting to negotiate an arrangement with the owner by which such lands or water bottoms might be again included within the preserve.
- (3) No alteration of physical conditions within an aquatic preserve shall be permitted except: (a) minimum dredging and spoiling for authorized public navigation projects, or (b) other approved activity designed to enhance the quality or utility of the preserve itself. It is inherent in the concept of the aquatic preserve that, other than as contemplated above, there be: no dredging and filling to create land, no drilling of oil wells or excavation for shell or minerals, and no erection of structures on stilts or otherwise unless associated with authorized activity, within the confines of a preserve - to the extent these activities can be lawfully prevented.
- (4) Specifically, there shall be no bulkhead lines set within an aquatic preserve. When the boundary of a preserve is intended to be the line of mean high water along a particular shoreline, any bulkhead line subsequently set for that shoreline will also be at the line of mean high water.
- (5) All human activity within an aquatic preserve shall be subject to reasonable rules and regulations promulgated and enforced by the State of Florida Board of Trustees of the Internal Improvement Trust Fund and/or any other specifically designated managing agency. Such rules and regulations shall not interfere unduly with lawful and traditional public uses of the area, such as fishing (both sport and commercial), hunting, boating, swimming and the like.
- (6) Neither the establishment nor the management of an aquatic preserve shall infringe upon the lawful and traditional riparian rights of private property owners adjacent to a preserve. In furtherance of these

rights, reasonable improvement for ingress and egress, mosquito control, shore protection and similar purposes may be permitted by the State of Florida Board of Trustees of the Internal Improvement Trust Fund and other jurisdictional agencies, after review and formal concurrence by any specifically designated managing agency for the preserve in question.

(7) Other uses of an aquatic preserve, or human activity within a preserve, although not originally contemplated, may be permitted by the State of Florida Board of Trustees of the Internal Improvement Trust Fund and other jurisdictional agencies, but only after a formal finding of compatibility made by the said Trustees on the advice of any specifically designated managing agency for the preserve in question.

IN TESTIMONY WHEREOF, the Trustees for and on behalf of the State of Florida Board of Trustees of the Internal Improvement Trust Fund have hereunto subscribed their names and have caused the official seal of said State of Florida Board of Trustees of the Internal Improvement Trust Fund to be hereunto affixed, in the City of Tallahassee, Florida, on this the 24th day of November A. D. 1969.

CLAUDE R. KIRK, JR, Governor

TOM ADAMS, Secretary of State

EARL FAIRCLOTH, Attorney General

FRED O. DICKINSON, JR., Comptroller

BROWARD WILLIAMS, Treasurer

FLOYD T. CHRISTIAN, Commissioner of Education

DOYLE CONNER, Commissioner of Agriculture

As and Constituting the State of Florida Board of Trustees of the Internal Improvement Trust Fund

A.2 / Florida Statutes

All the statutes can be found according to number at www.leg.state.fl.us/Statutes

Florida Statutes, Chapter 253: State Lands

Florida Statutes, Chapter 258: State Parks and Preserves
Part II (Aquatic Preserves)

Florida Statutes, Chapter 267 (Historical Resources)

Florida Statutes, Chapter 370: Saltwater Fisheries

Florida Statutes, Chapter 372: Wildlife

Florida Statutes, Chapter 403: Environmental Control

(Statute authorizing the Florida Department of Environmental Protection (DEP) to create Outstanding Florida Waters is at 403.061(27))

Florida Statutes, Chapter 597: Aquaculture

A.3 / Florida Administrative Codes

All rules can be found according to number at www.flrules.org/Default.asp

Florida Administrative Code, Chapter 18-20: Florida Aquatic Preserves
www.flrules.org/gateway/ChapterHome.asp?Chapter=18-20

Florida Administrative Code, Chapter 18-21: Sovereignty Submerged Lands Management
www.flrules.org/gateway/ChapterHome.asp?Chapter=18-21

Florida Administrative Code, Chapter 62-302: Surface Water Quality Standards
(Rule designating Outstanding Florida Waters is at 62-302.700)
www.flrules.org/gateway/ChapterHome.asp?Chapter=62-302

MASTER MEMORANDUM OF UNDERSTANDING

FDACS CONTRACT #

MEMORANDUM OF UNDERSTANDING

003325

Among

DEPARTMENT OF DEFENSE,
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION,
FLORIDA DIVISION OF FORESTRY,
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION,
INTERNATIONAL PAPER,
NATIONAL FORESTS IN ALABAMA,
NATIONAL PARK SERVICE,
NOKUSE PLANTATION,
NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT, and
THE NATURE CONSERVANCY

THIS MEMORANDUM OF UNDERSTANDING (hereinafter referred to as "MOU" or "Understanding") is made and entered into on the 24th day of September, 2006, among Conecuh National Forest (National Forests in Alabama), Department Of Defense, Florida Department Of Environmental Protection, Florida Division Of Forestry (Florida Department of Agriculture and Consumer Services), Florida Fish and Wildlife Conservation Commission, International Paper, National Park Service, Nokuse Plantation, Northwest Florida Water Management District, and The Nature Conservancy (hereinafter referred to as "parties").

This MOU hereby replaces and supercedes that certain MOU between Eglin Air Force Base (Air Armament Center), Blackwater River State Forest (Florida Department of Agriculture and Consumer Services-Division of Forestry), Northwest Florida Water Management District, Conecuh National Forest (National Forests in Alabama), Florida Department of Environmental Protection, International Paper and The Nature Conservancy (Florida Southeast Division, Alabama Field Office and Alabama Natural Heritage Program), dated April, 4, 2003.

The parties have responsibilities on and collectively own and manage approximately 1,050,000 acres in the ecosystems of the region (see Attachment). These acres comprise the largest remaining nearly contiguous block of longleaf pine uplands in the southeastern United States and include portions of five major watersheds, including the Escambia-Conecuh, Blackwater, Yellow, Choctawhatchee, and Perdido River drainages.

The purpose of this MOU is to develop and implement a voluntary and cooperative stewardship strategy to sustain the long-term viability of native plants and animals, the integrity of ecosystems, the production of commodities and ecosystem services, and the human communities that depend upon all of them.

MASTER MEMORANDUM OF UNDERSTANDING

The general goals of this MOU include the following:

-To assist, share information and coordinate efforts with the other parties in fulfilling the purposes of the MOU.

-To provide a model for local, state, federal, and private entities working together to fulfill the purpose of the MOU.

-To communicate to the public success in meeting both individual and common goals related to the MOU.

-To cooperate with other agencies and organizations including:

- U.S. Fish and Wildlife Service
- Universities and Junior Colleges
- The National Biological Service
- The Florida Department of Transportation
- The Alabama Department of Conservation and Natural Resources
- The Longleaf Alliance
- Southern Group of State Foresters

This MOU recognizes that the individual parties (public and private) have legitimate and varied management goals ranging from military missions, to producing forest commodities, providing recreational opportunities, protecting water quality, and conserving native species and ecosystem integrity. This MOU is in no way intended to limit or constrain the party's individual goals.

This MOU is entered into pursuant and subject to all applicable federal, state, and local laws. This MOU is not entered in the interest of obtaining advice or recommendations for any office or agency of the federal government and nothing herein shall be construed, nor is intended to state or imply, that this MOU establishes a federal advisory committee or that the Federal Advisory Committee Act (5 U.S.C. Appendix 2) shall apply.

IN ORDER TO FULFILL the stated purpose and intent of this MOU, the Parties agree in principle to the following:

1. To develop jointly a voluntary strategy, to be reviewed and updated annually, that will document critical ecosystem elements, processes, and interactions, identify priority ecosystem goals and objectives, both individually and jointly, and measure progress in attaining goals and objectives.
2. To develop jointly a voluntary red-cockaded woodpecker management strategy, and strategies for other listed species as appropriate, to be reviewed and updated annually, that will coordinate objectives and management efforts among the parties toward the mutual goal of recovering the red-cockaded woodpecker and other listed species.

MASTER MEMORANDUM OF UNDERSTANDING

3. To develop jointly a voluntary longleaf pine and other natural communities restoration strategies, to be reviewed and updated annually, that will coordinate objectives, strategies and actions among the parties and other efforts toward the mutual goal of recovering representative and ecologically functional examples of the longleaf pine ecosystem.
4. To share and exchange relevant information and technology as appropriate and need to compile and implement the above strategies.
5. To develop specific agreements and working plans for individual projects considered by all or some of the parties hereto to have mutual interest. Such agreements and working plans will be developed whenever deemed appropriate by the relevant parties.
6. To consider entering into specific agreements among all or some of the parties and/or third parties, as occasion demands, for the use of specialized equipment, transfer of funds, purchasing of supplies, and other matters pertaining to the general purposes of management agreed upon by all or some of the parties hereto. Any allocation of responsibilities and liabilities, including limitation of expenditures under this Understanding, will be as set forth in specific working agreement entered into by the relevant parties.
7. To hold at least one meeting per year and more often as required to discuss management opportunities and coordinate management and monitoring efforts and to keep written records made under this Understanding.
8. To make this Understanding effective as of the date it is executed by the last party and continuing for a term of one year and renewing automatically on an annual basis unless terminated in writing by one or more of the parties hereto pursuant to paragraph 9 below.
9. To terminate this understanding at any time by mutual agreement by all parties with any party having the right to withdraw from this Understanding by giving the other parties 30 days notice.
10. To amend this Understanding as necessary at any time to incorporate new parties, new information or changes in any parties authorities, policies, directives, or goals, subject to concurrence by all parties.
11. Nothing in this Understanding shall be construed to place financial commitment upon any of the parties. Actions taken and funds expended to implement this Understanding are contingent upon appropriations, priorities, and other constraints.

MASTER MEMORANDUM OF UNDERSTANDING

NATIONAL FORESTS IN ALABAMA

Joseph R. Pitt Forest Supervisor 1/31/06
Signature Title Date

NATIONAL PARK SERVICE

[Signature] Superintendent 9/11/11
Signature Title Date

NOKUSE PLANTATION

[Signature] owner 8-12-00
Signature Title Date

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

[Signature] Executive Director 06/16/06
Signature Title Date

THE NATURE CONSERVANCY

[Signature] Florida State Director 09/24/06
Signature Title Date

MASTER MEMORANDUM OF UNDERSTANDING

ATTACHMENT
Ownership Included in Memorandum of Understanding

<u>OWNERSHIP/MANAGER</u>	<u>NAME OF PROPERTY</u>	<u>ACREAGE (Approx.)</u>
DEPARTMENT OF DEFENSE	Eglin Air Force Base, Naval Air Station Pensacola, and Naval Air Station Whiting Field	481,241
FLORIDA DIVISION OF FORESTRY	Blackwater River, Pine Log, and Point Washington State Forests	211,752
NW FLORIDA WATER MANAGEMENT DISTRICT	Garcon Point, Escribano Point, Yellow River, Choctawhatchee River, Blackwater River, and Escambia River Water Management Areas	112,963
NATIONAL FORESTS IN ALABAMA	Conecuh National Forest	83,790
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	NW Florida Aquatic and Buffer Preserves, and Blackwater River, Perdido Key, Tarkiln Bayou, and Big Lagoon State Parks	57,270
NOKUSE PLANTATION	Nokuse North and Nokuse South	50,000
NATIONAL PARK SERVICE	Gulf Islands National Seashore and Naval Live Oaks, Florida	24,795
INTERNATIONAL PAPER	International Paper Connector Parcel and Coldwater Creek	24,263
THE NATURE CONSERVANCY	Choctawhatchee River Delta Preserve, and Perdido River Nature Preserve	5,081
FLORIDA FISH & WILDLIFE CONSERVATION COMMISSION	Escribano Point	1,166
TOTAL ACREAGE ENROLLED IN GCPEP (As Of April 2005)		1,052, 321

FDACS CONTRACT #
003325

FIRST AMENDMENT TO MASTER MEMORANDUM OF UNDERSTANDING
Among
DEPARTMENT OF DEFENSE
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA DIVISION OF FORESTRY
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
NATIONAL FORESTS IN ALABAMA
NATIONAL PARK SERVICE
NOKUSE PLANTATION
NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT and
THE NATURE CONSERVANCY
(the "Parties")

THIS FIRST AMENDMENT is made as of the 6th day of September, 2011, by and between the Parties;

WHEREAS, the Parties entered into that certain Memorandum of Understanding bearing FDACS Contract #003325 (the "MOU"); and

WHEREAS, The Longleaf Alliance, Inc. and Westervelt Ecological Services, LLC (the "Additional Parties") have expressed a desire to participate in the MOU and the Parties desire to amend the MOU to add the Additional Parties and to modify certain terms of the MOU.

NOW, THEREFORE, for and in consideration of the good and valuable consideration exchanged between the parties, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree and the MOU is amended as follows:

1. The Longleaf Alliance and Westervelt Ecological Services, LLC, upon signature hereto, shall each become a party to the MOU and shall assume all rights and responsibilities set forth in the MOU for the Parties.
2. The Attachment to the MOU is hereby deleted in its entirety and replaced with Attachment A attached hereto and by reference made a part hereof.

The MOU in all other respects and as amended herein is hereby ratified and confirmed as being in full force and effect as of the date hereof.

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ATTACHMENT A
Ownership Included in Memorandum of Understanding

<u>OWNERSHIP/MANAGER</u>	<u>NAME OF PROPERTY</u>	<u>ACREAGE</u> (Approx.)
DEPARTMENT OF DEFENSE	Eglin Air Force Base, Naval Air Station Pensacola, and Naval Air Station Whiting Field	481,241
FLORIDA DIVISION OF FORESTRY	Blackwater River, Pine Log, and Point Washington State Forests	226,265
NW FLORIDA WATER MANAGEMENT DISTRICT	Garcon Point, Escribano Point, Yellow River, Choctawhatchee River, Blackwater River, Perdido River, and Escambia River Water Management Areas.	118,715
NATIONAL FORESTS IN ALABAMA	Conecuh National Forest	83,790
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	NW Florida Aquatic and Buffer Preserves, and Blackwater River, Perdido Key, Tarkiln Bayou, and Big Lagoon State Parks	57,270
NOKUSE PLANTATION	Nokuse North and Nokuse South	50,653
NATIONAL PARK SERVICE	Gulf Islands National Seashore and Naval Live Oaks, Florida	24,795
THE NATURE CONSERVANCY	Choctawhatchee River Delta Preserve, and Perdido River Nature Preserve	5,081
FLORIDA FISH & WILDLIFE CONSERVATION COMMISSION	Escribano Point	1,166
WESTERVELT ECOLOGICAL SERVICES, LLC	Pensacola Bay Mitigation Bank	1,190.52
TOTAL ACREAGE ENROLLED IN GCPEP (As of August, 2010)		1,050,166.52

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DEPARTMENT OF DEFENSE, 97th AIR BASE WING

William A. McLaughlin 23 Mar 11
Signature Title Date

DEPARTMENT OF THE NAVY, NAVAL AIR STATION WHITING FIELD

Peter Hall 9 May 2011
Signature PETER HALL, CAPT, USN Title COMMANDING OFFICER Date

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, DIVISION OF RECREATION AND PARKS

Robert S. Gray 8/15/11
Signature Title Environmental Administrator Date

FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

Mike Burhan 9/22/10
Signature Title Director of Administration Date

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

Gregory L. Holder 1.20.11
Signature APPROVED AS TO FORM Title ASSISTANT EXECUTIVE DIRECTOR GREG HOLDER Date
AND LEGAL SUFFICIENCY
Commission Attorney

NATIONAL FORESTS IN ALABAMA

Mera Crable Harty 10/7/2010
Signature Title Forest Supervisor Date

NATIONAL PARK SERVICE

Donald R. Ben 6/13/11
Signature Title Superintendent Date

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF COASTAL AND AQUATIC MANAGED AREAS

Larry Nall 9/6/11
Signature Larry Nall Title Acting Director Date

NOKUSE PLANTATION INC.

[Signature] CEO 2-23-11
Signature Title Date

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

[Signature] Executive Director 02/24/11
Signature Title Date

THE NATURE CONSERVANCY

[Signature] State Director 9-15-10
Signature Title Date
Legal Review: LPR - 09/14/10

THE LONGLEAF ALLIANCE, INC.

[Signature] President 6/11/2011
Signature Title Date

WESTERVELT ECOLOGICAL SERVICES, LLC

[Signature] Vice President 2/17/2011
Signature Title Date

DEPARTMENT OF THE NAVY, NAVAL AIR STATION PENSACOLA

[Signature] 7 APRIL 2011
Signature Title Date
C. W. PLUMMER, CAPT, USN COMMANDING OFFICER

**RESOLUTION OF THE PARTIES To The Master Memorandum of Understanding
Bearing FDACS Contract No. 003325
AMENDING THE MEMORANDUM OF UNDERSTANDING (MOU) TO ADD GULF
POWER CO. AS A PARTY**

Resolution No. 1

WITNESSETH:

**APPROVAL OF GULF POWER CO. AS AN ADDITIONAL PARTY TO THE
MEMORANDUM OF UNDERSTANDING (MOU)**

Whereas, the Parties to that certain Memorandum of Understanding bearing FDACS Contract # 003325 (herein, the "MOU") met via Steering Committee Meeting on January 9, 2013 and via Phone Conference January 10-11, 2013 to discuss the addition of Gulf Power Co. as an additional Party to the MOU. An authorized representative of each of the Parties was present at either the Steering Committee Meeting or follow up phone conference;

Whereas, pursuant to Paragraph 10 of the MOU, the Parties have the authority to amend the MOU to add Parties through concurrence of all the Parties;

Whereas, the Parties, through their duly appointed representatives, unanimously agreed/concurred on the addition of Gulf Power Co. as an additional Party at the above-referenced meetings; and

Whereas Gulf Power Co. indicates its desire to become a Party to the MOU.

Whereas, via said unanimous consensus, the Parties further have requested that Vernon Compton, the Project Director execute this Resolution on behalf of the Parties and have Gulf Power Co. execute this Resolution on its behalf;

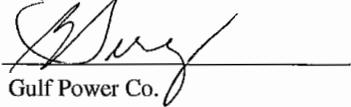
NOW, THEREFORE BE IT RESOLVED, by the MOU Parties duly assembled:

The MOU is hereby Amended to add Gulf Power Co. as an additional Party.

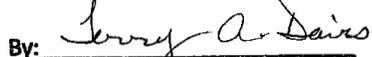
Approved this 14th day of February 2014.



Project Director


Gulf Power Co.

Attest:

By: 
Terry A. Davis, Assistant Secretary

**RESOLUTION OF THE PARTIES OF THE GULF COASTAL PLAIN ECOSYSTEM
PARTNERSHIP
AMENDING THE MEMORANDUM OF UNDERSTANDING (MOU) TO ADD
RESOURCE MANAGEMENT SERVICE, LLC AS A PARTY**

Resolution No. 2

WITNESSETH:

**APPROVAL OF RESOURCE MANAGEMENT SERVICE, LLC AS AN ADDITIONAL
PARTY TO THE GULF COASTAL PLAIN ECOSYSTEM PARTNERSHIP (GCPEP)
MEMORANDUM OF UNDERSTANDING (MOU)**

Whereas, the Parties of GCPEP (herein, the "Parties") met via Steering Committee Meeting on August 26, 2015 and via Phone Conference September 10, 2015 to discuss the addition of Resource Management Service LLC as an additional Party to GCPEP. An authorized representative of each of the Parties was present at either the Steering Committee Meeting or follow up phone conference;

Whereas, pursuant to Paragraph 10 of the MOU, the Parties have the authority to amend the MOU to add Parties through concurrence of all the Parties;

Whereas, the Parties, through their duly appointed representatives, unanimously agreed/concurred on the addition of Resource Management Service, LLC as an additional Party at the above-referenced meetings; and

Whereas Resource Management Service, LLC indicates its desire to become a Party to the GCPEP partnership.

Whereas, via said unanimous consensus, the Parties further have requested that Vernon Compton, the GCPEP Project Director execute this Resolution on behalf of the Partnership and have Resource Management Service, LLC execute this Resolution on its behalf;

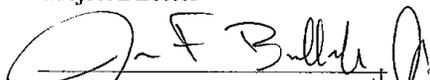
NOW, THEREFORE BE IT RESOLVED, by the GCPEP Parties duly assembled:

The MOU is hereby Amended to add Resource Management Service, LLC as an additional Party to GCPEP.

Approved this 25th day of September 2015.



Project Director



Resource Management Service, LLC

1/7/2016 CALI-H

RESOLUTION OF THE PARTIES OF THE
GULF COASTAL PLAIN ECOSYSTEM PARTNERSHIP AMENDING
THE MASTER MEMORANDUM OF UNDERSTANDING BEARING FDACS
CONTRACT NO. 003325 TO ADD ESCAMBIA COUNTY, FLORIDA AS A PARTY

Resolution No. 3

WITNESSETH:

APPROVAL OF ESCAMBIA COUNTY, FLORIDA AS AN ADDITIONAL PARTY TO
THE GULF COASTAL PLAIN ECOSYSTEM PARTNERSHIP (GCPEP)
MEMORANDUM OF UNDERSTANDING (MOU)

Whereas, the Parties of GCPEP (herein, the "Parties") met via Steering Committee Meeting on August 26, 2015 and via Phone Conference September 10, 2015 to discuss the addition of Escambia County, Florida as an additional Party to GCPEP. An authorized representative of each of the Parties was present at either the Steering Committee Meeting or follow up phone conference; and

Whereas, pursuant to Paragraph 10 of the MOU, the Parties have the authority to amend the MOU to add Parties through concurrence of all the Parties; and

Whereas, the Parties, through their duly appointed representatives, unanimously agreed/concurred on the addition of Escambia County, Florida as an additional Party at the above-referenced meetings; and

Whereas Escambia County, Florida indicates its desire to become a Party to the GCPEP partnership; and

Whereas, via said unanimous consensus, the Parties further have requested that Vernon Compton, the GCPEP Project Director execute this Resolution on behalf of the Partnership and have Escambia County, Florida execute this Resolution on its behalf.

NOW, THEREFORE BE IT RESOLVED, by the GCPEP Parties duly assembled:

The MOU is hereby amended to add Escambia County, Florida as an additional Party to GCPEP.

THE LONGLEAF ALLIANCE, INC.



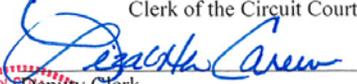
Vernon Compton, GCPEP Project Director

BOARD OF COUNTY COMMISSIONERS
ESCAMBIA COUNTY, FLORIDA



Grover C. Robinson, IV, Chairman

ATTEST: PAM CHILDERS
Clerk of the Circuit Court





BCC Approved: 01-07-2016

Date Executed

1/7/2016

Approved as to form and legal
sufficiency.

By/Title: 
Date: 12/11/15

Verified By: 
Date: 1/12/2016

**RESOLUTION OF THE PARTIES OF THE GULF COASTAL PLAIN ECOSYSTEM
PARTNERSHIP
AMENDING THE MEMORANDUM OF UNDERSTANDING (MOU) TO ADD
NATIONAL WILD TURKEY FEDERATION AS A PARTY**

Resolution No. 4

WITNESSETH:

**APPROVAL OF NATIONAL WILD TURKEY FEDERATION AS AN ADDITIONAL
PARTY TO THE GULF COASTAL PLAIN ECOSYSTEM PARTNERSHIP (GCPEP)
MEMORANDUM OF UNDERSTANDING (MOU)**

Whereas, the Parties of GCPEP (herein, the "Parties") met via Steering Committee Meeting on August 24, 2016 and via Phone Conference August 31, 2016 to discuss the addition of National Wild Turkey Federation as an additional Party to GCPEP. An authorized representative of each of the Parties was present at the Steering Committee Meeting and/or the follow up phone conference;

Whereas, pursuant to Paragraph 10 of the MOU, the Parties have the authority to amend the MOU to add Parties through concurrence of all the Parties;

Whereas, the Parties, through their duly appointed representatives, unanimously agreed/concurred on the addition of National Wild Turkey Federation as an additional Party at the above-referenced meetings; and

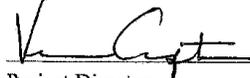
Whereas National Wild Turkey Federation indicates its desire to become a Party to the GCPEP partnership.

Whereas, via said unanimous consensus, the Parties further have requested that Vernon Compton, the GCPEP Project Director execute this Resolution on behalf of the Partnership and have National Wild Turkey Federation execute this Resolution on its behalf;

NOW, THEREFORE BE IT RESOLVED, by the GCPEP Parties duly assembled:

The MOU is hereby Amended to add National Wild Turkey Federation as an additional Party to GCPEP.

Approved this 22nd day of September 2016.



Project Director



National Wild Turkey Federation

**MEMORANDUM OF AGREEMENT
BETWEEN THE
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FLORIDA COASTAL OFFICE
AND
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF RECREATION AND PARKS DISTRICT 1
FOR
NATIVE PLANT PROPAGATION**

THIS AGREEMENT, entered into by the FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION FLORIDA COASTAL OFFICE, NORTHWEST FLORIDA AQUATIC PRESERVES OFFICE, an office within the Florida Department of Environmental Protection, an agency of the State of Florida, whose address is 160 W. Government Street, Pensacola, Florida 32502 (hereinafter referred to as "NWFLAP"), and the FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF RECREATION AND PARKS DISTRICT 1, also an office within the Florida Department of Environmental Protection, an agency of the State of Florida, whose address is 4620 State Park Lane, Panama City, Florida 32408 (hereinafter referred to as the "D1"), for the purposes of native plant propagation.

WITNESSETH:

WHEREAS, D1 has issued a research and collection permit for the purpose of collecting plant seed and cuttings and/ or bare root material from District 1 State Parks to NWFLAP; and

WHEREAS, D1 and NWFLAP entered into a MOA for native plant propagation on February 9th, 2009, which expired on December 31st, 2015. D1 and NWFLAP desire to continue that relationship through the execution of this MOA; and

NOW THEREFORE IN CONSIDERATION of the mutual covenants herein, the parties do hereby agree as follows:

1. NWFLAP agrees to work in cooperation with D1 for re-vegetation and restoration of D1 lands by agreeing to grow native vegetative material for specified D1 projects; and

2. D1 will involve NWFLAP management and nursery staff in plant species selection for D1 projects of which NWFLAP will be propagating native plant material; and

3. D1 shall allow NWFLAP to collect a reasonable amount of stock/donor plant material via seeds, cuttings and/or bare root material from State Park lands as needed and as approved by D1 technical support personnel for the purpose of using local, native plant material for re-vegetation efforts; and

5. D1 agrees to provide NWFLAP at least 6 months lead time to allow for collection and propagation of grasses and non-woody plant material. D1 agrees to allow at minimum a one year lead time for the collection and propagation of woody plant material. The ability of NWFLAP to provide sufficient and adequate plant material for D1 project requests will depend on the provision of adequate lead time to propagate requested material; and

6. D1 agrees to remit payment to NWFLAP upon receipt of plant material on a per unit fee schedule by plant type to be determined based on the plant species required/requested for the project. The fee schedule and plant species quantity request will be through email exchange and shall include: price per plant (based on species and/or type), quantity of each requested plant species and timeframe for delivery/pick up of plant material. Invoices will be forwarded by NWFLAP to the appropriate D1 office for payment. D1 will pay via JT (Journal Transfer) for invoiced plant material.

- A. NWFLAP agrees to provide D1 with native plant material and to be paid on a per plant basis as agreed upon through email exchange between the Project Managers which shall include: price per plant (based on species and/or type), quantity of each requested plant species and timeframe for delivery/pick up of plants ordered.
- B. NWFLAP agrees to provide all equipment, materials, supplies and labor necessary to grow the plants at NWFLAP Coastal Restoration Nursery.
- C. D1 agrees to provide NWFLAP staff access to State Park lands for the purposes of material collection. D1 agrees to allow NWFLAP to collect a reasonable amount of stock/donor plant material via seeds and cuttings from State park lands as needed and approved by the D1 Project Manager, for the purposes of using local, native plant material for re-vegetation/propagation efforts.
- D. D1 agrees to a fee schedule payment, based on quantity of plants at the agreed to rate per plant, at delivery of plant material through a JT into the budget codes provided by NWFLAP. The parties understand and agree that D1 is not obligated to pay for plants delivered in excess of the quantity ordered. However, D1 may agree through a separate email to purchase additional quantities of plants, if available, prior to delivery of the plants by NWFLAP.
- E. Plant material is being grown by NWFLAP on a fee schedule basis. If circumstances arise that prevent the D1 from rendering full agreed upon payment to NWFLAP for propagated plant material, this contract will revert to an advance payment agreement where the FDEP FLORIDA COASTAL OFFICE shall be required to pay in full upfront at the start of plant material propagation for future requested projects. The advance will be based on an email exchange with established rates pursuant to item 1. Outstanding payments may be negotiated on a prorated basis at the discretion of NWFLAP representatives.

- F. D1 Project Manager shall be the District biologist or their designee. D1 Project Manager shall be responsible for coordinating with the appropriate D1 staff regarding the acquisition of plant material and the scheduling of such acquisition. The NWFLAP Project Manager shall be the Program Manager or their designee.
- G. All parties to this Agreement shall commence and complete the Project with all practicable dispatch, in a sound, economical, and efficient manner and in accordance with the provisions herein and all applicable state and federal laws.
- H. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida.
- I. If any provision of this Agreement is held invalid, the remainder of this Agreement shall not be affected. In such instances, the remainder would then continue to the terms and requirements of applicable law.
- J. This Agreement shall be effective upon execution by all parties and remain in effect until December 31, 2020.
- K. Each party hereto agrees that it shall be solely responsible for the negligent or wrongful acts of its employees or agents. However, nothing contained herein shall constitute a waiver by either party of its sovereign immunity or the provisions of Section 768.28, Florida Statutes.
- L.
 1. Either party may terminate this Agreement at any time in the event of the failure of the other party to fulfill any of its obligations under this Agreement. Prior to termination, the terminating party shall provide thirty (30) calendar days written notice of its intent to terminate and shall provide the other party an opportunity to consult with the terminating party regarding the reason(s) for termination.
 2. Either party may terminate this Agreement for convenience by providing the other party with thirty (30) calendar days written notice.
 3. If a termination is initiated, payment for ordered and propagated plants shall be due within 30 days following contract termination to NWFLAP by way of a JT to NWFLAP designated account.
- M. This Agreement represents the entire agreement between NWFLAP and D1, and supersedes all prior negotiations, representations or agreements either written or oral, with exception of agreement of plant orders conducted via email exchange as described in paragraph 1. This Agreement may be amended only by written instrument signed by authorized representatives of NWFLAP and D1.

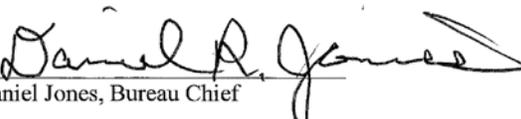
IN WITNESS HEREOF, NWFLAP and D1 have caused this Agreement to be executed by their authorized representatives on the day and year last written below.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
FLORIDA COASTAL OFFICE

By: 
Jennifer W. Harper, FCO Northwest Region Administrator

Date: 11/16/2015

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
DIVISION OF RECREATION AND PARKS
DISTRICT 1

By: 
Daniel Jones, Bureau Chief

Date: 12/11/15

CITIZEN SUPPORT ORGANIZATION AGREEMENT

THIS AGREEMENT is made the 3rd day of December, 2013, by the State of Florida Department of Environmental Protection ("Department") for the purposes of recognizing Ecosystem Restoration Support Organization, Inc., hereinafter called "ERSO," as an approved Citizen Support Organization for the Northwest Florida Aquatic Preserve Program ("NWFAP").

PARTIES

1. The Department is an agency of the state created under section 20.255, F.S.
2. The NWFAP is a field office within the Department's Office of Coastal and Aquatic Managed Areas ("CAMA"), hereinafter collectively called "NWFAP."
3. The NWFAP acts as manager over the Fort Pickens Aquatic Preserve, the Yellow River Marsh Aquatic Preserve, the Rocky Bayou Aquatic Preserve and the St. Andrews Bay Aquatic Preserve.
4. ERSO is a not for profit Florida corporation incorporated under the provisions of chapter 617, F.S., and approved by the Department of State.

PURPOSE

5. The NWFAP is vested with restoring and enhancing sea grass, emergent marsh, and sand dune ecosystems within the Fort Pickens Aquatic Preserve, the Yellow River Marsh Aquatic Preserve, the Rocky Bayou Aquatic Preserve and the St. Andrews Bay Aquatic Preserve for faunal habitat, shoreline erosion control, public enjoyment, and healthful recreation.
6. ERSO desires to act as an approved Citizen Support Organization ("CSO") for the NWFAP, with all rights and privileges provided in section 20.2551, F.S.
7. By this Letter of Agreement, the NWFAP has determined that ERSO's organization and purpose, as provided in ERSO's Articles of Incorporation, incorporated and made part of this agreement as Attachment A, are consistent with the goals of the Department and are in the best interests of the state.

NOW THEREFORE, it is agreed:

8. The Department hereby grants to ERSO the exclusive approval to serve as the Citizen Support Organization for the NWFAP, in accordance with the provisions of section 20.2551, F.S., subject to all terms and conditions set forth in this agreement.
9. This agreement shall take effect upon execution and shall continue indefinitely or until terminated pursuant to paragraphs 8-9, below, or modified pursuant to paragraph 10, below.
10. Any violation of, or failure to comply with, the terms of this approval shall, at the option of the Department, terminate this agreement after three days from receipt of notice in writing to ERSO.
11. This agreement may be terminated by either party without cause after 90 days from the receipt of notice in writing to the other party.
12. The Department may modify this Agreement at any time by letter modification or substantial rewrite of this Agreement. ERSO may either execute the modification or terminate its status as a CSO.

13. ERSO shall have appropriate use of the NWFAP's laboratory, nursery, office space, facilities, and equipment when approved, in writing, a minimum of 15 business days in advance of use by the NWFAP Manager.

14. ERSO is hereby authorized to: conduct programs and activities; raise funds; request and receive grants, gifts, and bequests of money; acquire, receive, hold, invest, and administer, in its own name, securities, funds, objects of value, or other property, real or personal; make expenditures to or for the direct or indirect benefit of the NWFAP; and conduct official meetings of ERSO.

15. All notices and orders given to ERSO may be served by mail at the following address: Ecosystem Restoration Support Organization, 411 E. Government St., Pensacola, FL 32502. All notices and orders given to the NWFAP may be served by mail at the following address: FDEP, NWFAP Manager, 160 Governmental Center, Suite 308, Pensacola, FL 32501.

16. The NWFAP Manager is hereby designated as the Department's agreement manager and shall be responsible for insuring performance of the terms and conditions of this agreement.

17. The NWFAP may permit, without charge, appropriate use of NWFAP property, equipment, staff and facilities by ERSO subject to the conditions of this paragraph. Such use must be directly in keeping with the approved purposes of ERSO, and may not be made at times or places that would unreasonably interfere with the NWFAP's use of property and facilities or normal NWFAP operations. In order to use property or facilities of the NWFAP, the ERSO must:

A. Comply with all NWFAP, CAMA, and Department policies, rules and regulations as they may be amended periodically;

B. Develop and submit to the NWFAP manager, for review and prior written approval, a program or schedule of all projects, activities and events it plans to carry out on NWFAP property, including the designation of a specific location and time for such use, no less than ten business days prior to the project, activity, or event; and

C. Be responsible for maintaining the property, facilities, or equipment assigned in a clean and orderly state.

18. ERSO agrees that all funds generated by ERSO will be used for the direct benefit of the office of the NWFAP or in accordance with Articles III and IV of Attachment A of this agreement. At no time shall less than 85% of all revenue collected by ERSO be used for the direct benefit of the office of the NWFAP and its Aquatic Preserves.

19. ERSO agrees to provide a for financial reporting by the submittal of:

A. A Monthly gross sales report, submitted quarterly within 30 days of the end of each calendar quarter; and

B. An annual Profit and Loss (P&L) statement, where annual means the state fiscal year, July 1 through June 30, submitted within 30 days of the end of each fiscal year.

20. In accordance with section 215.981(2), F.S., should ERSO's annual expenditures (of the state fiscal year, July 1 through June 30 of each year) exceed \$300,000, ERSO shall provide for an annual financial audit of its accounts and records to be conducted by an independent certified public accountant in accordance with Chapter 10.700, Rules of the Auditor General. Financial Accounting Standards No. 117, Financial Statements of Not-For-Profit Organizations established by the Financial Accounting Standards Board. The audit report shall be submitted within 9 months after the end of the fiscal year to the Auditor General and to the NWFAP Manager.

21. ERSO agrees and consents to allow the NWFAP, CAMA, or the Department to conduct operational and financial reviews of ERSO's finances without prior notice.

22. It is acknowledged that ERSO is operating as a citizen support organization and volunteer nonprofit organization for the benefit of the Florida Department of Environmental Protection. As such, activities of ERSO may be covered by state liability protection as outlined in Sections 110.504 and 768.28, F.S. Nothing in this agreement shall be interpreted to act as a waiver of the state's sovereign immunity.

IN WITNESS WHEREOF, based on the foregoing, the State of Florida Department of Environmental Protection herein approves ERSO as Citizen Support Organization.

Approved as to form and legality:

By: *Kauschullius*
Attorney

STATE OF FLORIDA, DEPARTMENT
OF ENVIRONMENTAL PROTECTION

By: *Lee Edmiston*
Lee Edmiston
Regional Environmental Administrator
Coastal and Aquatic Managed Areas

Signed as a recognition of this LETTER OF AGREEMENT and its conditional approval:

ATTEST:

By: *Kim Kirschenfeld*
Kim Kirschenfeld, Secretary

ECOSYSTEM RESTORATION SUPPORT
ORGANIZATION, INC.

By: *Taylor Kirschenfeld*
Taylor Kirschenfeld, President

Resource Data

B.1 | Glossary of Terms

References to these definitions can be found at the end of this list and in Appendix B.3.

aquaculture - the cultivation of aquatic organisms. (Lincoln et al., 2003)

codify - to arrange laws and rules systematically. (Neufeldt & Sparks, 1990)

diversity - a measure of the number of species and their relative abundance in a community. (Lincoln et al., 2003)

drainage basin (catchment) - the area from which a surface watercourse or a groundwater system derives its water; watershed. (Allaby, 2005)

easement - a right that one may have in another's land. (Neufeldt & Sparks, 1990)

ecosystem - a community of organisms and their physical environment interacting as an ecological unit. (Lincoln et al., 2003)

emergent - an aquatic plant having most of the vegetative parts above water; a tree which reaches above the level of the surrounding canopy. (Lincoln et al., 2003)

endangered species - an animal or plant species in danger of extinction throughout all or a significant portion of its range. (U.S. Fish and Wildlife Service [USFWS], 2015)

endemic - native to, and restricted to, a particular geographical region. (Lincoln et al., 2003)

extinction - the disappearance of a species from a given habitat. (Lincoln et al., 2003)

fauna - the animal life of a given region, habitat or geological stratum. (Lincoln et al., 2003)

flora - the plant life of a given region, habitat or geological stratum. (Lincoln et al., 2003)

geographic information system (GIS) - computer system supporting the collection, storage, manipulation and query of spatially referred data, typically including an interface for displaying geographical maps. (Lincoln et al., 2003)

intertidal zone - the shore zone between the highest and lowest tides; littoral. (Lincoln et al., 2003)

listed species - a species, subspecies, or distinct population segment that has been added to the Federal list of endangered and threatened wildlife and plants. (USFWS, 2015)

mandate - an order or command; the will of constituents expressed to their representative, legislature, etc. (Neufeldt & Sparks, 1990)

mesic - pertaining to conditions of moderate moisture or water supply; used of organisms occupying moist habitats. (Lincoln et al., 2003)

population - all individuals of one or more species within a prescribed area. A group of organisms of one species, occupying a defined area and usually isolated to some degree from other similar groups. (Lincoln et al., 2003)

runoff - part of precipitation that is not held in the soil but drains freely away. (Lincoln et al., 2003)

salinity - a measure of the total concentration of dissolved salts in seawater. (Lincoln et al., 2003)

species - a group of organisms, minerals or other entities formally recognized as distinct from other groups; the basic unit of biological classification. (Lincoln et al., 2003)

species of concern - an informal term referring to a species that might be in need of conservation action. This may range from a need for periodic monitoring of populations and threats to the species and its habitat, to the necessity for listing as threatened or endangered. Such species receive no legal protection and use of the term does not necessarily imply that a species will eventually be proposed for listing. "Imperiled species" is another general term for listed as well as unlisted species that are declining. (USFWS, 2015)

stakeholder - any person or organization who has an interest in the actions discussed or is affected by the resulting outcomes of a project or action. (USFWS, 2015)

subtidal - environment which lies below the mean low water level. (Allaby, 2005)

supratidal - the zone on the shore above mean high tide level. (Lincoln et al., 2003)

threatened species - an animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. (USFWS, 2015)

turbid - cloudy; opaque with suspended matter. (Lincoln et al., 2003)

upland - land elevated above other land. (Neufeldt & Sparks, 1990)

vegetation - plant life or cover in an area; also used as a general term for plant life. (Lincoln et al., 2003)

water column - the vertical column of water in a sea or lake extending from the surface to the bottom. (Lincoln et al., 2003)

watershed - an elevated boundary area separating tributaries draining in to different river systems; drainage basin. (Lincoln et al., 2003)

wetland - an area of low lying land, submerged or inundated periodically by fresh or saline water. (Lincoln et al., 2003)

wildlife - any undomesticated organisms; wild animals. (Allaby, 2005)

B.2 / References

- Allaby, M. (Ed.). (2005). *Oxford dictionary of ecology* (3rd ed.). Oxford, UK: Oxford University Press.
- Balsillie, J.H. & Donoghue, J.F. (2004) *High resolution sea-level history for the Gulf of Mexico since the last glacial maximum* (Report of Investigations No. 103). Tallahassee, FL: Florida Geological Survey.
- Bense, J. (Ed.). (1992). *Santa Rosa-Swift Creek in Northwest Florida*. Paper presented at the 49th Annual Meeting of the Southeastern Archeological Conference, Little Rock, AR. Retrieved November 15, 2016 from <https://uwf.edu/cassh/departments/anthropology-and-archaeology/research/faculty-and-staff-projects/prehistoric/bernath/santa-rosa---swift-creek/>
- Bense, J. (1994). *Archaeology of the Southeastern United States: Paleoindian to World War I*. New York, NY: Academic Press.
- Biber, P.D., Paerl, H.W., Gallegos, C.L., & Kenworthy, W.J. (2004). *Evaluating and defining water-quality criteria for seagrass habitats using a bio-optical indicator*. Paper presented at the 2004 Environmental Monitoring & Assessment Program Symposium 2004. Abstract retrieved November 28, 2017 from <http://archive.epa.gov/emap/archive-emap/web/html/biber.html>
- Dix, N., Philips, E., & Gleeson, R. (2008). Water quality changes in the Guana Tolomato Matanzas National Estuarine Research Reserve, Florida associated with four tropical storms. *Journal of Coastal Research*, (Special Issue 55), 26-37. <http://dx.doi.org/10.2112/SI55-008.1>
- Donoghue, J.F. (2011). Sea level history of the northern Gulf of Mexico coast and sea level rise scenarios for the near future. *Climatic Change*, 107, 17-33. <http://dx.doi.org/10.1007/s10584-011-0077-x>
- Edmiston, L., Fahrny, S., Lamb, M., Levi, L., Wanat, J., Avant, J., Wren, K., & Selly, N. (2008). Tropical storm and hurricane impacts on a Gulf Coast estuary: Apalachicola Bay, Florida. *Journal of Coastal Research*, (Special Issue 55), 38-49. <http://dx.doi.org/10.2112/SI55-009.1>
- Eglin Air Force Base, Natural Resources. (2013). Historic Overview. Retrieved October 27, 2016 from <https://eglin.isportsman.net/files/Historic%20OverView.pdf>
- Fernald, E.A. & Patton, D.J. (1984). *Water resources atlas of Florida*. Tallahassee, FL: Florida State University.
- Florida Department of Environmental Protection. (2017). *Fred Gannon Rocky Bayou State Park unit management plan*. Unpublished draft.
- Florida Department of Environmental Protection. (n.d.-a). *Fred Gannon Rocky Bayou State Park*. Florida Department of Environmental Protection, Department of Recreation and Parks Retrieved November 18, 2016 from <https://www.floridastateparks.org/park/Rocky-Bayou>
- Florida Department of Environmental Protection. (n.d.-b). *Rocky Bayou Aquatic Preserve*. Retrieved November 18, 2016 from <http://dep.state.fl.us/coastal/sites/rocky/>
- Florida Department of Natural Resources. (1991). *Rocky Bayou Aquatic Preserve management plan*. Tallahassee, FL: Florida Department of Natural Resources
- Florida Fish and Wildlife Conservation Commission. (n.d.-a). *The economic impact of saltwater fishing in Florida*. Retrieved on August 21, 2017 from <http://www.myfwc.com/conservation/value/saltwater-fishing>
- Florida Fish and Wildlife Conservation Commission. (n.d.-b). *Eglin Air Force Base WMA*. Retrieved October 23, 2015 from <http://myfwc.com/viewing/recreation/wmas/cooperative/eglin-air-force-base>.
- Florida Legislature Office of Economic and Demographic Research. (2017). *Area profiles: Okaloosa County* [Data file]. Retrieved December 1, 2017 from <http://edr.state.fl.us/Content/area-profiles/county/okaloosa.pdf>
- Florida Natural Areas Inventory. (2010). *Guide to the natural communities of Florida*. Tallahassee, FL: Florida Natural Areas Inventory. Retrieved November 28, 2017 from <http://www.fnai.org/naturalcommguide.cfm>
- Gucker, Corey L. (2008). *Phragmites australis*. Retrieved November 28, 2017 from U.S. Department of Agriculture, Forest Service website: <https://www.fs.fed.us/database/feis/plants/graminoid/phraus/all.html>
- Hagy, J.D., Lehrter, J.C., & Murrell, M.C. (2006). Effects of Hurricane Ivan on water quality in Pensacola Bay, Florida. *Estuaries and Coasts*, 29(6A), 919-925. <http://dx.doi.org/10.1007/BF02798651>
- Halligan, J.J., Waters, M.R., Perrotti, A., Owens, I.J., Fenberg, J.M., Bourne, M.D., ... Dunbar, J.S. (2016). Pre-Clovis occupation 14,550 years ago at the Page-Ladson site, Florida, and the peopling of the Americas. *Science Advances*, 2(5), e1600375. <http://dx.doi.org/10.1126/sciadv.1600375>
- HDR, Matrix Design Group, Inc., & Haas Center. (2010). *Tri-county growth management plan: Eglin AFB BRAC impact*. Retrieved May 4, 2017 from: <http://cityofniceville.org/docs/admin/growthPlan.pdf>
- Lincoln, R.J., Boxshall, G.A., & Clark, P.F. (2003). *A dictionary of ecology, evolution and systematics*. New York: Cambridge University Press.
- Livingston, R.J. (1986). *The Choctawhatchee-River-Bay System*. Tallahassee, FL: Florida State University, Tallahassee, FL

- MacLaren, P. (1990). *Resource management audit: Rocky Bayou State Recreation Area*. Florida Department of Environmental Protection.
- Mallin, M.A., & Corbett, C.A. (2006). How hurricane attributes determine the extent of environmental effects: Multiple hurricanes and different coastal systems. *Estuaries and Coasts*, 29(6A), 1046-1061. <https://doi.org/10.1007/BF02798667>
- Milanich, J.T. (1994). *Archaeology of Precolumbian Florida*. Gainesville, FL: University Press of Florida.
- Myers, R.L., & Ewel, J.J. (1990). *Ecosystems of Florida*. Orlando, FL: University of Central Florida Press.
- National Oceanic and Atmospheric Administration. (2010). *1981 to 2010 Climate normals Niceville, FL*. Retrieved October 27, 2016 from <https://www.ncdc.noaa.gov/cdo-web/datatools/normals>
- Neufeldt, V., & Sparks, A.N. (1990). *Webster's new world dictionary* (3rd Ed.). Cleveland, OH: Webster's New World Dictionaries.
- Okaloosa County rain event update #5: Includes Health Department advisories. (2014, April 30). *Okaloosa County News Release*. Retrieved January 5, 2018 http://www.co.okaloosa.fl.us/sites/default/files/doc/news/2014/update5_04-30-14.pdf
- Paerl, H., Bales, J., Ausley, L., Buzzelli, C., Crowder, L., Eby, L., Fear, J., Go, M., Peierls, B., Richardson, T., & Ramus, J. (2001). Ecosystem impacts of three sequential hurricanes (Dennis, Floyd and Irene) on the United States' largest lagoonal estuary, Pamlico Sound, NC. *Proceedings of the National Academy of Sciences*, 98(10), 5655-5660. <http://dx.doi.org/10.1073/pnas.101097398>
- Puri, H.S., & Vernon, R.O. (1964). *Summary of the geology of Florida and a guidebook to classic exposures* (Special publication no. 5). Tallahassee, FL: Florida Geological Survey.
- Scott, T.M., Campbell, K.M., Rupert, F.R., Arthur, J.D., Missimer, T.M., Lloyd, J.M., Yon, W.J., & Duncan, J.G. (2001). *Geologic map of the state of Florida*. Tallahassee, FL: Florida Geologic Survey and Florida Department of Environmental Protection.
- Small, J.K. (1929). *From Eden to Sahara*. Lancaster, PA: The Science Press Printing Company.
- Stalter, R. & Kincaid, D. (2004). The vascular flora of five Florida shell middens. *The Journal of the Torrey Botanical Society*, 131(1), 93-103. <http://dx.doi.org/10.2307/4126930>
- Stojanowski, C.M. (2010). *Bioarchaeology of ethnogenesis in the colonial Southeast*. Gainesville, FL: University Press of Florida.
- The Nature Conservancy. (2009). *Economic benefits of land conservation: A case for Forever Florida*. Retrieved August 21, 2017 from <http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/florida/howwework/economic-benefits-of-land-conservation-2.pdf>
- Thorpe, P., Bartel, R., Ryan, P., Albertson, K., Pratt, T., & Cairns, D. (1997). *The Pensacola Bay System Surface Water Improvement and Management plan: A comprehensive plan for the restoration and preservation of the Pensacola Bay System*. Havana, FL: Northwest Florida Water Management District.
- University of Florida. (2013). *Population studies program: Okaloosa County*. Retrieved from April 4, 2017 from <http://bebr.ufl.edu/population>
- U.S. Census Bureau. (2017). Niceville city, FL. Retrieved December 1, 2017 from <https://www.census.gov/quickfacts/fact/table/okaloosacountyflorida,nicevillecityflorida/PST045216>
- U.S. Department of Homeland Security. (2005, September 9). *Hurricane Ivan recovery in the Panhandle adds up to \$1.4 billion* [Press release]. Retrieved on December 1, 2017 from Internet Archive Wayback Machine website: <https://web.archive.org/web/20120211081018/http://www.fema.gov/news/newsrelease.fema?id=18831>
- U.S. Environmental Protection Agency. (2005). *The ecological condition of the Pensacola Bay System, Northwest Florida*. (EPA/620/R-05/002). Gulf Breeze, FL: U.S. Environmental Protection Agency, Gulf Ecology Division.
- U.S. Environmental Protection Agency. (2008). *Septic systems fact sheet*. (EPA#832-F-08-057). Retrieved February 24, 2016 from http://water.epa.gov/aboutow/owm/upload/2009_06_22_septics_septic_systems_factsheet.pdf
- U.S. Environmental Protection Agency. (n.d.). *Septic (onsite/decentralized) systems*. Retrieved February 24, 2016 from <https://epa.gov/infrastructure/septic>
- U.S. Fish and Wildlife Service. (2003, March 17). *U.S. Fish and Wildlife Service and the National Marine Fisheries Service designate critical habitat for the Gulf sturgeon* [Press release]. Retrieved February 24, 2016 from <http://www.fws.gov/southeast/news/2003/r03-017.html>
- U.S. Fish and Wildlife Service. (2011, March 8). *Recovery success stories: Okaloosa darter* [Press release]. Retrieved December 1, 2017 from <http://fws.gov/endangered/what-we-do/ep-08.html>
- U.S. Fish and Wildlife Service. (2015). *Endangered species glossary*. U.S. Fish and Wildlife Service, Endangered Species Program. Retrieved July 24, 2017 from <http://www.fws.gov/endangered/about/glossary.html>

- 
- U.S. Fish and Wildlife Service and Gulf States Marine Fisheries Commission. (1995). *Gulf sturgeon recovery/management plan*. Atlanta, GA: U.S. Fish and Wildlife Service Southeastern Region. Retrieved February 24, 2016 from <http://www.gsmfc.org/publications/WB-Sport%20Fish/Gulf%20Sturgeon%20Plan.pdf>
- U.S. Geological Survey. (n.d.). *Ground water atlas of the United States: Alabama, Florida, Georgia, South Carolina*. (HA 730-G). Retrieved December 1, 2017 from http://pubs.usgs.gov/ha/ha730/ch_g/G-text3.html
- Vecchioli, J., Tibbals, C.H., Duerr, A.D., & Hutchinson, C.B. (1990). *Ground-water recharge in Florida: a pilot study in Okaloosa, Pasco and Volusia counties*. (Water Resources Investigation Report 90-4195). Tallahassee, FL: U.S. Geological Survey & Florida Department of Environmental Regulation. Retrieved December 1, 2017 from <https://pubs.usgs.gov/wri/1990/4195/report.pdf>
- Winsberg, M.D. (2003). *Climate of Florida*. Tallahassee, FL: Florida State University, Florida Climate Center.
- Walton Outdoors. (2014, April 30). *North Central Gulf Coast receives historic flash flood event – April 29-30 2014*. Retrieved January 5, 2018 from <https://www.waltonoutdoors.com/north-central-gulf-coast-receives-historic-flash-flood-event-april-29-30-2014/>
- Wolfe, S.H., Reidenauer, J.A., & Means, D.B. (1988). *An ecological characterization of the Florida Panhandle*. (FWS Biological Report 88(12); OCS Study MMS88-0063). Washington, DC: U.S. Department of the Interior, Fish and Wildlife Service; Minerals Management Service. Retrieved January 5, 2018 from <https://www.boem.gov/ESPIS/3/3706.pdf>
- Worth, J. (2010). *Foreword to the Luna Papers, 1559-1561: Volumes I & 2 (Reprint of 1928 edition)*. Tuscaloosa, AL: University of Alabama Press.

B.3 / Species Lists

B.3.1 / Native Species List

Common Name	Scientific Name	Status
Legend: FT = Federally- and State-Designated Threatened • FE = Federally- and State-Designated Endangered ST = State-Designated Threatened • SE = State-Designated Endangered • SSC = State Species of Special Concern • (S/A) = listed due to similarity of appearance • BGEPA = Bald and Golden Eagle Protection Act C= commercially exploited		
Plants		
Three-seeded mercury	<i>Acalypha gracilens</i>	
Red maple	<i>Acer rubrum</i>	
Red buckeye	<i>Aesculus pavia</i>	
Lesser snakeroot	<i>Ageratina aromatica</i>	
Hazel alder	<i>Alnus serrulata</i>	
Ragweed	<i>Ambrosia artemisiifolia</i>	
Common serviceberry	<i>Amelanchier arborea</i>	
False-indigo	<i>Amorpha fruticosa</i>	
Fringed bluestar	<i>Amsonia ciliata</i>	
Glaucous bushy bluestem	<i>Andropogon glomeratus var. glaucopsis</i>	
Silver bluestem	<i>Andropogon ternarius</i>	
Broomsedge bluestem	<i>Andropogon virginicus</i>	
Green silkscale	<i>Anthaenantia villosa</i>	
Crowded three-awn grass	<i>Aristida condensata</i>	
Woolysheath threeawn	<i>Aristida lanosa</i>	
Arrow feather threeawn	<i>Aristida purpurascens</i>	
Wiregrass	<i>Aristida stricta</i>	
Cane	<i>Arundinaria gigantea</i>	
Butterfly milkweed	<i>Asclepias tuberosa</i>	
Smallflower pawpaw	<i>Asimina parviflora</i>	
Yellow foxglove	<i>Aureolaria flava</i>	
Common carpetgrass	<i>Axonopus fissifolius</i>	
Saltbush	<i>Baccharis halimifolia</i>	
Coastalplain honeycombhead	<i>Balduina angustifolia</i>	
Florida wild indigo	<i>Baptisia calycosa var. villosa</i>	
Gopherweed	<i>Baptisia lanceolata</i>	
Soft greeneyes	<i>Berlandiera pumila</i>	
Marsh beggarticks	<i>Bidens mitis</i>	
Crossvine	<i>Bignonia capreolata</i>	
Boghemp	<i>Boehmeria cylindrica</i>	
Watershield	<i>Brasenia schreberi</i>	
Hairsedge	<i>Bulbostylis ciliatifolia</i>	
Northern bluethread	<i>Burmannia biflora</i>	
Scarlet calamint	<i>Calamintha coccinea</i>	
American beautyberry	<i>Callicarpa americana</i>	
Prickly bog sedge	<i>Carex atlantica subs. capillaoea</i>	
Baltzell's sedge	<i>Carex baltzellii</i>	ST
Sandwoods sedge	<i>Carex dasycarpa</i>	
Elliott's sedge	<i>Carex elliotii</i>	
Clustered sedge	<i>Carex glaucescens</i>	
Vanillaleaf	<i>Carphephorus odoratissimus</i>	
Wild olive	<i>Cartrema americana</i>	
Pignut hickory	<i>Carya glabra</i>	

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Mockernut hickory	<i>Carya tomentosa</i>	
Chinquapin	<i>Castanea pumila</i>	
Hackberry	<i>Celtis laevigata</i>	
Coastal sandbur	<i>Cenchrus spinifex</i>	
Centella	<i>Centella asiatica</i>	
Butterfly pea	<i>Centrosema virginianum</i>	
Buttonbush	<i>Cephalanthus occidentalis</i>	
Florida rosemary	<i>Ceratiola ericoides</i>	
Hyssopleaf sandmat	<i>Chamaesyce hyssopifolia</i>	
Partridge pea	<i>Chamaecrista fasciculata</i>	
Sensitive pea	<i>Chamaecrista nictitans</i>	
Spotted sandmat	<i>Chamaesyce maculata</i>	
Sunbonnets	<i>Chaptalia tomentosa</i>	
Slender woodoats	<i>Chasmanthium laxum</i>	
Long-leaf woodoats	<i>Chasmanthium sessiliflorum</i>	
White fringetree	<i>Chionanthus virginicus</i>	
Woody goldenrod	<i>Chrysoma pauciflosculosa</i>	
Cottony goldenaster	<i>Chrysopsis gossypina</i> ssp. <i>hyssopifolia</i>	
Sawgrass	<i>Cladium jamaicense</i>	
Resurrection cladonia	<i>Cladonia prostrata</i>	
Reindeer lichen	<i>Cladonia</i> spp.	
Coastal sweetpepperbush	<i>Clethra alnifolia</i>	
Black titi	<i>Cliftonia monophylla</i>	
Atlantic pigeonwings	<i>Clitoria mariana</i>	
Tread softly	<i>Cnidocolus stimulosus</i>	
Whitemouth dayflower	<i>Commelina erecta</i>	
Blue mistflower	<i>Conoclinium coelestinum</i>	
False rosemary	<i>Conradina canescens</i>	
Canadian horseweed	<i>Conyza canadensis</i>	
Coastalplains tickseed	<i>Coreopsis falcata</i>	
Flowering dogwood	<i>Cornus florida</i>	
Swamp lily	<i>Crinum americanum</i>	
Slender scratchdaisy	<i>Croptilon divaricatum</i>	
Rabbitbells	<i>Crotalaria rotundifolia</i>	
Silver croton	<i>Croton argyranthemus</i>	
Toothachegrass	<i>Ctenium aromaticum</i>	
Baldwin's flatsedge	<i>Cyperus croceus</i>	
Wiry flatsedge	<i>Cyperus filiculmis</i>	
Haspan flatsedge	<i>Cyperus haspan</i>	
Bristly flatsedge	<i>Cyperus hystricinus</i>	
Leconte's flatsedge	<i>Cyperus lecontei</i>	
Fragrant flatsedge	<i>Cyperus odoratus</i>	
Pinebarrens flatsedge	<i>Cyperus ovatus</i>	
White titi	<i>Cyrilla racemiflora</i>	
Downy danthonia	<i>Danthonia sericea</i>	
Swamp loosestrife	<i>Decodon verticillatus</i>	

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Smooth ticktreoil	<i>Desmodium laevigatum</i>	
Narrow leaved ticktrefoil	<i>Desmodium paniculatum</i>	
Velvetleaf ticktrefoil	<i>Desmodium viridiflorum</i>	
Needleleaf witchgrass	<i>Dicanthelium aciculare</i>	
Tapered witchgrass	<i>Dicanthelium acuminatum</i>	
Variable witchgrass	<i>Dicanthelium commutatum</i>	
Cypress witchgrass	<i>Dicanthelium dichotomum</i>	
Eggleaf witchgrass	<i>Dicanthelium ovale</i>	
Southern crabgrass	<i>Digitaria ciliaris</i>	
Buttonweed	<i>Diodia virginiana</i>	
Persimmon	<i>Diospyros virginiana</i>	
Saltgrass	<i>Distichlis spicata</i>	
Gulf sebastian-bush	<i>Ditrysinia fruticosa</i>	
Water sundew	<i>Drosera intermedia</i>	ST
Threeway sedge	<i>Dulichium arundinaceum</i>	
Baldwin's spikerush	<i>Eleocharis baldwinii</i>	
Gulf coast spikerush	<i>Eleocharis cellulosa</i>	
Jointed spikerush	<i>Eleocharis equisetoides</i>	
Yellow spikerush	<i>Eleocharis flavescens</i>	
Brightgreen spikerush	<i>Eleocharis olivacea</i>	
Robbin's spikerush	<i>Eleocharis robbinsii</i>	
Elephant's foot	<i>Elephantopus tomentosus</i>	
Virginia wildrye	<i>Elymus virginicus</i>	
Red lovegrass	<i>Eragrostis secundiflora</i> ssp. <i>oxylepis</i>	
American burnweed	<i>Erechtites hieraciifolius</i>	
Daisy fleabane	<i>Erigeron strigosus</i>	
Flattened pipewort	<i>Eriocaulon compressum</i>	
Dogtongue	<i>Eriogonum tomentosum</i>	
Rattlesnake master	<i>Eryngium yuccifolium</i>	
Coralbean	<i>Erythrina herbacea</i>	
Swamp doghobble	<i>Eubotrys racemosa</i>	
Dogfennel	<i>Eupatorium capillifolium</i>	
Yankeeweed	<i>Eupatorium compositifolium</i>	
Summer spurge	<i>Euphorbia discoidalis</i>	
Panhandle spurge	<i>Euphorbia floridana</i>	
Fingergrass	<i>Eustachys petraea</i>	
Slender flattop goldenrod	<i>Euthamia caroliniana</i>	
Flattopped goldenrod	<i>Euthamia graminifolia</i>	
American beech	<i>Fagus grandifolia</i>	
Marsh fimbry	<i>Fimbristylis castanea</i>	
Cottonweed	<i>Froelichia floridana</i>	
Southern umbrella-sedge	<i>Fuirena scirpoidea</i>	
Eastern milkpea	<i>Galactia volubilis</i>	
Downy milkpea	<i>Galactia regularis</i>	
Coastal bedstraw	<i>Galium hispidulum</i>	
Hairy bedstraw	<i>Galium pilosum</i>	

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Spoonleaf purple everlasting	<i>Gamochaeta purpurea</i>	
Slenderstalk beeblossom	<i>Gaura filipes</i>	
Dwarf huckleberry	<i>Gaylussacia dumosa</i>	
Wooly huckleberry	<i>Gaylussacia mosieri</i>	
Blue huckleberry	<i>Gaylussacia frondosa</i>	
Yellow jessamine	<i>Gelsemium sempervirens</i>	
Cranesbill	<i>Geranium carolinianum</i>	
Waterspider false reinorchid	<i>Habenaria repens</i>	
Two-wing silverbell	<i>Halesia diptera</i>	
Shoal grass	<i>Halodule wrightii</i>	
Witch hazel	<i>Hamamelis virginiana</i>	
Georgia frostweed	<i>Helianthemum georgianum</i>	
Rayless sunflower	<i>Helianthus radula</i>	
Camphorweed	<i>Heterotheca subaxillaris</i>	
Spiked crested coralroot	<i>Hexalectris spicata</i>	
Comfortroot	<i>Hibiscus aculeatus</i>	
Queendevil	<i>Hieracium gronovii</i>	
Little barley	<i>Hordeum pusillum</i>	
Innocence	<i>Houstonia procumbens</i>	
Largeleaf marshpennywort	<i>Hydrocotyle bonariensis</i>	
Manyflower marshpennywort	<i>Hydrocotyle umbellata</i>	
Roundpot St. John's wort	<i>Hypericum cistifolium</i>	
Peelbark St. John's wort	<i>Hypericum fasciculatum</i>	
Pineweed	<i>Hypericum gentianoides</i>	
Carolina St. John's wort	<i>Hypericum nitidum</i>	
Atlantic St. John's wort	<i>Hypericum reductum</i>	
Dahoon	<i>Ilex cassine</i> spp.	
Large gallberry	<i>Ilex coriacea</i>	
Possumhaw	<i>Ilex decidua</i>	
Gallberry	<i>Ilex glabra</i>	
American holly	<i>Ilex opaca</i>	
Yaupon	<i>Ilex vomitoria</i>	
Florida anise	<i>Illicium floridanum</i>	
Carolina indigo	<i>Indigofera caroliniana</i>	
Manroot	<i>Ipomoea pandurata</i>	
Saltmarsh morning-glory	<i>Ipomoea sagittata</i>	
Virginia willow	<i>Itea virginica</i>	
Marsh elder	<i>Iva frutescens</i>	
Leathery rush	<i>Juncus coriaceus</i>	
Forked rush	<i>Juncus dichotomus</i>	
Soft rush	<i>Juncus effusus</i>	
Shore rush	<i>Juncus marginatus</i>	
Creeping rush	<i>Juncus repens</i>	
Black needlerush	<i>Juncus roemerianus</i>	
Needlepod rush	<i>Juncus scirpoides</i>	
Roundhead rush	<i>Juncus validus</i>	

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Southern red cedar	<i>Juniperus silicicola</i>	
Saltmarsh mallow	<i>Kosteletzkya virginica</i>	
Sandspur	<i>Krameria lanceolata</i>	
Whitehead bogbutton	<i>Lachnocaulon anceps</i>	
Canada lettuce	<i>Lactuca canadensis</i>	
Grassleaf lettuce	<i>Lactuca graminifolia</i>	
Long-leaved pinweed	<i>Lechea mucronata</i>	
Virginia pepperweed	<i>Lepidium virginianum</i>	
Creeping bushclover	<i>Lespedeza repens</i>	
Hairy bushclover	<i>Lespedeza hirta</i>	
Appalachian blazing star	<i>Liatris squarrosa</i>	
Common Blazing star	<i>Liatris gracilis</i>	
Piedmont gayfeather	<i>Liatris pauciflora</i> var. <i>secunda</i>	
Fineleaf blazing star	<i>Liatris tenuifolia</i>	
Gopher apple	<i>Licania michauxii</i>	
Canadian toadflax	<i>Linaria canadensis</i>	
Yellow toadflax	<i>Linum floridanum</i>	
Sweetgum	<i>Liquidambar styraciflua</i>	
Pondspice	<i>Litsea aestivalis</i>	SE
Florida lobelia	<i>Lobelia floridana</i>	
Red honeysuckle	<i>Lonicera sempervirens</i>	
Seedbox	<i>Ludwigia alternifolia</i>	
Anglestem primrosewillow	<i>Ludwigia leptocarpa</i>	
Seaside primrosewillow	<i>Ludwigia maritima</i>	
Mexican primrosewillow	<i>Ludwigia octovalvis</i>	
Marsh seedbox	<i>Ludwigia palustris</i>	
Hairy primrosewillow	<i>Ludwigia pilosa</i>	
Gulf coast lupine	<i>Lupinus westianus</i>	ST
Watergrass	<i>Luziola fluitans</i>	
Southern club moss	<i>Lycopodiella appressa</i>	
Feather-stem club moss	<i>Lycopodium prostrata</i>	
Water horehound	<i>Lycopus rubellus</i>	
Rusty staggerbush	<i>Lyonia ferruginea</i>	
Fetterbush	<i>Lyonia lucida</i>	
Saltmarsh loosestrife	<i>Lythrum lineare</i>	
Southern magnolia	<i>Magnolia grandiflora</i>	
Sweetbay	<i>Magnolia virginiana</i>	
Bog moss	<i>Mayaca fluviatilis</i>	
Twoflower melicgrass	<i>Melica mutica</i>	
Climbing cucumber	<i>Melothria pendula</i>	
Shade mudflower	<i>Micranthemum umbrosum</i>	
Climbing hempweed	<i>Mikania scandens</i>	
Sensitive brier	<i>Mimosa quadrivalvis</i>	
Pinebarren stitchwort	<i>Minuartia caroliniana</i>	
Partridgeberry	<i>Mitchella repens</i>	
Indianpipe	<i>Monotropa uniflora</i>	

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Red mulberry	<i>Morus rubra</i>	
Wax myrtle	<i>Myrica cerifera</i>	
Odorless wax myrtle	<i>Myrica inodora</i>	
Loose watermilfoil	<i>Myriophyllum laxum</i>	
Spatterdock	<i>Nuphar advena</i>	
American white waterlily	<i>Nymphaea odorata</i>	
Big floatingheart	<i>Nymphoides aquatica</i>	
Blackgum	<i>Nyssa biflora</i>	
Clustered mille grains	<i>Oenlandia uniflora</i>	
Seabeach evening primrose	<i>Oenothera humifusa</i>	
False gromwell	<i>Onosmodium virginianum</i>	
Prickly pear	<i>Opuntia humifusa</i>	
Goldenclub	<i>Orontium aquaticum</i>	
Cinnamon fern	<i>Osmunda cinnamomea</i>	C
Royal fern	<i>Osmunda regalis</i>	C
Tufted eastern hophornbeam	<i>Ostrya virginiana</i>	
Yellow woodsorrell	<i>Oxalis priceae</i>	
Sourwood	<i>Oxydendrum arboreum</i>	
Beaked panicgrass	<i>Panicum anceps</i>	
Maidencane	<i>Panicum hemitomom</i>	
Switchgrass	<i>Panicum virgatum</i>	
Pineland nilwort	<i>Paronychia patula</i>	
Virginia creeper	<i>Parthenocissus quinquefolia</i>	
Thin paspalum	<i>Paspalum setaceum</i>	
Spoonflower	<i>Peltandra sagittifolia</i>	
Red bay	<i>Persea borbonia</i>	
Swamp bay	<i>Persea palustris</i>	
Florida phlox	<i>Phlox floridana</i>	
Downy phlox	<i>Phlox pilosa</i>	
Chokeberry	<i>Photinia pyrifolia</i>	
Common reed	<i>Phragmites australis</i>	
Frog fruit	<i>Phyla nodiflora</i>	
Coastal groundcherry	<i>Physalis angustifolia</i>	
Pokeweed	<i>Phytolacca americana</i>	
Sand pine	<i>Pinus clausa</i>	
Slash pine	<i>Pinus elliottii</i>	
Longleaf pine	<i>Pinus palustris</i>	
Blackseed needlegrass	<i>Piptochaetium avenaceum</i>	
Narrowleaf silkgrass	<i>Pityopsis graminifolia</i>	
Virginia plantain	<i>Plantago virginica</i>	
Yellow fringed orchid	<i>Platanthera ciliaris</i>	
Resurrection fern	<i>Pleopeltis polypodioides var. michauxiana</i>	
Rosy camphorweed	<i>Pluchea baccharis</i>	
Stinking camphorweed	<i>Pluchea foetida</i>	
Paintedleaf	<i>Poinsettia cyathophora</i>	
Littleleaf milkwort	<i>Polygala brevifolia</i>	

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Orange milkwort	<i>Polygala lutea</i>	
Racemed milkwort	<i>Polygala polygama</i>	
Tall jointweed	<i>Polygonella gracilis</i>	
Large-leaved jointweed	<i>Polygonella macrophylla</i>	ST
October flower	<i>Polygonella polygama</i>	
False waterpepper	<i>Polygonum hydropiperoides</i>	
Dotted smartweed	<i>Polygonum punctatum</i>	
Juniperleaf	<i>Polypremum procumbens</i>	
Pickerelweed	<i>Pontederia cordata</i>	
Marsh mermaidweed	<i>Proserpinaca palustris</i>	
Combleaf mermaidweed	<i>Proserpinaca pectinata</i>	
Alabama cherry	<i>Prunus alabamensis</i>	
Flatwoods plum	<i>Prunus umbellata</i>	
Sweet everlasting	<i>Pseudognaphalium obtusifolium</i>	
Bracken fern	<i>Pteridium aquilinum</i> var. <i>pseudocaudatum</i>	
Carolina desert chicory	<i>Pyrrhopappus carolinianus</i>	
White oak	<i>Quercus alba</i>	
Arkansas oak	<i>Quercus arkansana</i>	
Chapman's oak	<i>Quercus chapmanii</i>	
Southern red oak	<i>Quercus falcata</i>	
Sand live oak	<i>Quercus geminata</i>	
Bluejack oak	<i>Quercus incana</i>	
Turkey oak	<i>Quercus laevis</i>	
Laurel oak	<i>Quercus laurifolia</i>	
Sand post oak	<i>Quercus margaretta</i>	
Blackjack oak	<i>Quercus marilandica</i>	
Myrtle oak	<i>Quercus myrtifolia</i>	
Water oak	<i>Quercus nigra</i>	
Running oak	<i>Quercus pumila</i>	
Post oak	<i>Quercus stellata</i>	
Live oak	<i>Quercus virginiana</i>	
Savannah meadowbeauty	<i>Rhexia alifanus</i>	
Yellow meadowbeauty	<i>Rhexia lutea</i>	
Swamp azalea	<i>Rhododendron viscosum</i>	
Winged sumac	<i>Rhus copallinum</i>	
Dollarleaf	<i>Rhynchosia reniformis</i>	
Bunched beaksedge	<i>Rhynchospora cephalantha</i>	
Loosehead beaksedge	<i>Rhynchospora chalarocephala</i>	
Shortbristle horned beaksedge	<i>Rhynchospora corniculata</i>	
Royal snoutbean	<i>Rhynchospora cytisoides</i>	
Fascicled beaksedge	<i>Rhynchospora fascicularis</i>	
Thread leaf beackrush	<i>Rhynchospora filifolia</i>	
Globe beaksedge	<i>Rhynchospora globularis</i>	
Slender beaksedge	<i>Rhynchospora gracilentia</i>	
Giant whitetop	<i>Rhynchospora latifolia</i>	
Brownish beaksedge	<i>Rhynchospora leptocarpa</i>	

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Sandyfield beaksedge	<i>Rhynchospora megalocarpa</i>	
Smallhead beaksedge	<i>Rhynchospora microcephala</i>	
Shortbeak beaksedge	<i>Rhynchospora nitens</i>	
Sand blackberry	<i>Rubus cuneifolius</i>	
Sawtooth blackberry	<i>Rubus pensilvancus</i>	
Southern dewberry	<i>Rubus trivialis</i>	
Black-eyed susan	<i>Rudbeckia hirta</i>	
Wild petunia	<i>Ruellia caroliniensis</i>	
Widgeon grass	<i>Ruppia maritima</i>	
Silver plumegrass	<i>Saccharum alopecuroides</i>	
American cupscale	<i>Sacciolepis striata</i>	
Quillwort arrowhead	<i>Sagittaria isoetiformis</i>	
Bulltongue arrowhead	<i>Sagittaria lancifolia</i>	
Black willow	<i>Salix nigra</i>	
Blue sage	<i>Salvia azurea</i>	
Lyreleaf sage	<i>Salvia lyrata</i>	
Canadian blacksnakeroot	<i>Sanicula canadensis</i>	
Whitetop pitcher plant	<i>Sarracenia leucophylla</i>	SE
Parrot pitcherplant	<i>Sarracenia psittacina</i>	ST
Gulf purple pitcherplant	<i>Sarracenia rosea</i>	
Red flower pitcherplant	<i>Sarracenia rubra</i>	ST
Lizard's tail	<i>Saururus cernuus</i>	
Little bluestem	<i>Schizachyrium scoparium</i>	
Threesquare bulrush	<i>Schoenoplectus pungens</i>	
Woolgrass	<i>Scirpus cyperinus</i>	
Tall nutgrass	<i>Scleria triglomerata</i>	
Saw palmetto	<i>Serenoa repens</i>	
Indian hemp	<i>Sida rhombifolia</i>	
Black haw	<i>Sideroxylon lanuginosum</i>	
Sleepy catchfly	<i>Silene antirrhina</i>	
Carolina catchfly	<i>Silene caroliniana</i>	
Starry rosinweed	<i>Silphium asteriscus</i>	
Kidneyleaf rosinweed	<i>Silphium compositum</i>	
Earleaf greenbrier	<i>Smilax auriculata</i>	
Saw greenbrier	<i>Smilax bona-nox</i>	
Cat greenbrier	<i>Smilax glauca</i>	
Laurel greenbrier	<i>Smilax laurifolia</i>	
Sarsaparilla vine	<i>Smilax pumila</i>	
Lanceleaf greenbrier	<i>Smilax smallii</i>	
Carolina nettle	<i>Solanum carolinense</i>	
Carolina goldenrod	<i>Solidago arguta</i>	
Dixie goldenrod	<i>Solidago brachyphylla</i>	
Canada goldenrod	<i>Solidago canadensis</i>	
Plnebarren goldenrod	<i>Solidago fistulosa</i>	
Sweet goldenrod	<i>Solidago odora</i>	
Downy ragged goldenrod	<i>Solidago petiolaris</i>	

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Downy goldenrod	<i>Solidago puberula</i> var. <i>pulverulenta</i>	
Seaside goldenrod	<i>Solidago sempervirens</i>	
Elliott's Indian grass	<i>Sorghastrum elliotii</i>	
Smooth cordgrass	<i>Spartina alterniflora</i>	
Saltmeadow cordgrass	<i>Spartina patens</i>	
Bristly scaleseed	<i>Spermolepis echinata</i>	
Prairie wedgescale	<i>Sphenopholis obtusata</i>	
Grass-leaved ladiestresses	<i>Spiranthes praecox</i>	
Hidden dropseed	<i>Sporobolus clandestinus</i>	
Pineywoods dropseed	<i>Sporobolus junceus</i>	
Coastal dropseed	<i>Sporobolus virginicus</i>	
Queensdelight	<i>Stillingia sylvatica</i>	
Trailing fuzzybean	<i>Strophostyles helvola</i>	
Coastalplain dawnflower	<i>Stylisma patens</i>	
Rice button aster	<i>Symphotrichum dumosum</i>	
Yellow hatpins	<i>Syngonanthus flavidulus</i>	
Pond cypress	<i>Taxodium ascendens</i>	
Scurf hoarypea	<i>Tephrosia chrysophylla</i>	
Goat's rue	<i>Tephrosia mohrii</i>	
Marsh fern	<i>Thelypteris palustris</i>	
Hairy maiden fern	<i>Thelypteris virginiana</i>	
Water cowbane	<i>Tiedemannia filiformis</i>	
Basswood	<i>Tilia americana</i>	
Poison ivy	<i>Toxicodendron radicans</i>	
Poison sumac	<i>Toxicodendron vernix</i>	
Small's noseburn	<i>Tragia smallii</i>	
Wavelength noseburn	<i>Tragia urens</i>	
Forked bluecurls	<i>Trichostema dichotomum</i>	
Tall redtop	<i>Tridens flavus</i>	
Arrowgrass	<i>Triglochin striata</i>	
Purple sandgrass	<i>Triplasis purpurea</i>	
Eastern gamagrass	<i>Tripsacum dactyloides</i>	
Common cattail	<i>Typha latifolia</i>	
Two-flower bladderwort	<i>Utricularia biflora</i>	
Zig-zag bladderwort	<i>Utricularia subulata</i>	
Sparkleberry	<i>Vaccinium arboreum</i>	
Highbush blueberry	<i>Vaccinium corymbosum</i>	
Darrow's blueberry	<i>Vaccinium darrowii</i>	
Shiny blueberry	<i>Vaccinium myrsinites</i>	
Tapegrass	<i>Vallisneria americana</i>	
Texas vervain	<i>Verbena halei</i>	
Giant ironweed	<i>Vernonia gigantea</i>	
Possumhaw	<i>Viburnum nudum</i>	
Rusty blackhaw	<i>Viburnum rufidulum</i>	
Bog white violet	<i>Viola lanceolata</i>	
Summer grape	<i>Vitis aestivalis</i>	

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Muscadine	<i>Vitis rotundifolia</i>	
American wisteria	<i>Wisteria frutescens</i>	
Netted chain fern	<i>Woodwardia areolata</i>	
Virginia chain fern	<i>Woodwardia virginica</i>	
Coastal yellow-eyed grass	<i>Xyris ambigua</i>	
Carolina yellow-eyed grass	<i>Xyris caroliniana</i>	
Fringed yellow-eyed grass	<i>Xyris fimbriata</i>	
Common yellow-eyed grass	<i>Xyris jupicai</i>	
Acid-swamp yellow-eyed grass	<i>Xyris serotina</i>	
Adam's needle	<i>Yucca filamentosa</i>	

Fish

Scrawled cowfish	<i>Acanthostracion quadricornis</i>	
Lined sole	<i>Achirus lineatus</i>	
Gulf sturgeon	<i>Acipenser oxyrhynchus desotoi</i>	FT
Alabama shad	<i>Alosa alabamae</i>	
Orange filefish	<i>Aluterus schoepfi</i>	
Striped anchovy	<i>Anchoa hepsetus</i>	
Bay anchovy	<i>Anchoa mitchilli</i>	
Ocellated flounder	<i>Ancylopsetta ommata</i>	
Singlespot frogfish	<i>Antennarius radiosus</i>	
Sheepshead	<i>Archosargus probatocephalus</i>	
Hardhead catfish	<i>Arius felis</i>	
Southern stargazer	<i>Astroscopus y-graecum</i>	
Alligator gar	<i>Atractosteus spatula</i>	
Silver perch	<i>Bairdiella chrysoura</i>	
Frillfin goby	<i>Bathygobius soporator</i>	
Gulf menhaden	<i>Brevoortia patronus</i>	
Blue runner	<i>Caranx fusus</i>	
Jack crevalle	<i>Caranx hippos</i>	
Rock sea bass	<i>Centropristis philadelphica</i>	
Black sea bass	<i>Centropristis striata</i>	
Atlantic spadefish	<i>Chaetodipterus faber</i>	
Florida blenny	<i>Chasmodes saburrae</i>	
Stripped burrfish	<i>Chilomycterus schoepfi</i>	
Atlantic bumper	<i>Chloroscombrus chrysurus</i>	
Bay wiff	<i>Citharichthys spilopterus</i>	
Darter goby	<i>Ctenogobius boleosoma</i>	
Mexican flounder	<i>Cyclopsetta chittendeni</i>	
Sand seatrout	<i>Cynoscion arenarius</i>	
Spotted seatrout	<i>Cynoscion nebulosus</i>	
Southern stingray	<i>Dasyatis americana</i>	
Round scad	<i>Decapterus punctatus</i>	
Dwarf sand perch	<i>Diplectrum bivittatum</i>	
Threadfin shad	<i>Dorosoma petenense</i>	
Ladyfish	<i>Elops saurus</i>	

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Emerald sleeper	<i>Erotelis smaragdus</i>	
Okaloosa darter	<i>Etheostoma okaloosae</i>	FT
Fringed flounder	<i>Etropus crossotus</i>	
Western Atlantic round herring	<i>Etrumeus sadina</i>	
Spotfin mojarra	<i>Eucinostomus argenteus</i>	
Skilletfish	<i>Gobiesox strumosus</i>	
Highfin goby	<i>Gobionellus oceanicus</i>	
Code goby	<i>Gobiosoma robustum</i>	
Naked goby	<i>Gobiosoma bosc</i>	
Smooth butterfly ray	<i>Gymnura micrura</i>	
Scaled sardine	<i>Harengula jaguana</i>	
Bluntnose stingray	<i>Hypanus say</i>	
Common halfbeak	<i>Hyporhamphus unifasciatus</i>	
Feather blenny	<i>Hypsoblennius hentz</i>	
Channel catfish	<i>Ictalurus punctatus</i>	
Pinfish	<i>Lagodon rhomboides</i>	
Spot	<i>Leiostomus xanthurus</i>	
Longnose gar	<i>Lepisosteus osseus</i>	
Rainwater killifish	<i>Lucania parva</i>	
Red snapper	<i>Lutjanus campechanus</i>	
Grey snapper	<i>Lutjanus griseus</i>	
Inland silverside	<i>Menidia beryllina</i>	
Gulf kingfish	<i>Menticirrhus littoralis</i>	
Northern kingcroaker	<i>Menticirrhus saxatilis</i>	
Southern kingfish	<i>Menticirrhus americanus</i>	
Clown goby	<i>Microgobius gulosus</i>	
Green goby	<i>Microgobius thalassinus</i>	
Atlantic croaker	<i>Micropogonias undulatus</i>	
Largemouth bass	<i>Micropterus salmoides</i>	
Planehead filefish	<i>Monacanthus hispidus</i>	
Stripped bass	<i>Morone saxatilis</i>	
Striped mullet	<i>Mugil cephalus</i>	
Black grouper	<i>Mycteroperca bonaci</i>	
Gag grouper	<i>Mycteroperca microlepis</i>	
Speckled worm eel	<i>Myrophis punctatus</i>	
Leatherjacket	<i>Oligoplites saurus</i>	
Crested cusk-eel	<i>Ophidion josephi</i>	
Gulf toadfish	<i>Opsanus beta</i>	
Pigfish	<i>Orthopristis chrysoptera</i>	
Southern flounder	<i>Paralichthys lethostigma</i>	
Gulf flounder	<i>Paralichthys albigitta</i>	
Gulf butterfish	<i>Peprilus burti</i>	
Atlantic threadfin	<i>Polydactylus octonemus</i>	
Bluefish	<i>Pomatomus saltatrix</i>	
Black crappie	<i>Pomoxis nigromaculatus</i>	
Atlantic midshipman	<i>Porichthys plectrodon</i>	

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Bighead sea robin	<i>Prionotus tribulus</i>	
Blackwing sea robin	<i>Prionotus rubio</i>	
Leopard sea robin	<i>Prionotus scitulus</i>	
Cownose ray	<i>Rhinoptera bonasus</i>	
Spanish sardine	<i>Sardinella aurita</i>	
Brazilian lizardfish	<i>Saurida brasiliensis</i>	
Red drum	<i>Sciaenops ocellatus</i>	
Spanish mackerel	<i>Scomberomorus maculatus</i>	
Atlantic moonfish	<i>Selene setapinnis</i>	
Bucktooth parrotfish	<i>Sparisoma radians</i>	
Southern puffer	<i>Sphoeroides nephelus</i>	
Northern sennet	<i>Sphyraena borealis</i>	
Atlantic needlefish	<i>Strongylura marina</i>	
Spotfin tonguefish	<i>Symphurus diomedeanus</i>	
Blackcheek tonguefish	<i>Symphurus plagiusa</i>	
Chain pipefish	<i>Syngnathus louisianae</i>	
Dusky pipefish	<i>Syngnathus floridae</i>	
Inshore lizardfish	<i>Synodus foetens</i>	
Florida pompano	<i>Trachinotus carolinus</i>	
Atlantic cutlassfish	<i>Trichiurus lepturus</i>	
Hogchoker	<i>Trinectes maculatus</i>	
Southern hake	<i>Urophycis floridana</i>	
Cleaver wrasse	<i>Xyrichtys novacula</i>	

Amphibians

Florida cricket frog	<i>Acris gryllus dorsalis</i>	
Two-toed amphiuma	<i>Amphiuma means</i>	
One-toed amphiuma	<i>Amphiuma pholeter</i>	
Oak toad	<i>Anaxyrus quercicus</i>	
Southern toad	<i>Anaxyrus terrestris</i>	
Three-lined salamander	<i>Eurycea glutolineata</i>	
Southern two-lined salamander	<i>Eurycea cirrigera</i>	
Eastern narrow-mouthed toad	<i>Gastrophryne carolinensis</i>	
Bird-voiced treefrog	<i>Hyla avivoca</i>	
Green treefrog	<i>Hyla cinerea</i>	
Gray treefrog	<i>Hyla chrysoscelis</i>	
Pine woods treefrog	<i>Hyla femoralis</i>	
Barking treefrog	<i>Hyla gratiosa</i>	
Squirrel treefrog	<i>Hyla squirella</i>	
Bullfrog	<i>Lithobates catesbeianis</i>	
Bronze frog	<i>Lithobates clamitans</i>	
Pig frog	<i>Lithobates gryllio</i>	
Southern leopard frog	<i>Lithobates sphenoccephalus</i>	
Eastern newt	<i>Notophthalmus viridescens</i>	
Northern slimy salamander	<i>Plethodon glutinosus</i>	
Southern spring peeper	<i>Pseudacris crucifer</i>	

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Southern chorus frog	<i>Pseudacris nigrita</i>	
Red salamander	<i>Pseudotriton ruber</i>	
Mud salamander	<i>Pseudotriton montanus</i>	

Reptiles

Florida cottonmouth	<i>Agkistrodon piscivorus conanti</i>	
American alligator	<i>Alligator mississippiensis</i>	FT(S/A)
Green anole	<i>Anolis carolinensis carolinensis</i>	
Florida softshell turtle	<i>Apalone ferox</i>	
Common snapping turtle	<i>Chelydra serpentina</i>	
Florida cooter	<i>Chrysemys floridana floridana</i>	
Six-lined racrunner	<i>Cnemidophorus sexlineatus sexlineatus</i>	
Southern black racer	<i>Coluber constrictor priapus</i>	
Eastern diamondback rattlesnake	<i>Crotalus adamanteus</i>	
Chicken turtle	<i>Deirochelys reticularia</i>	
Southern ringneck snake	<i>Diadophis punctatus punctatus</i>	
Mud snake	<i>Farancia abacura</i>	
Rainbow snake	<i>Farancia erythrogramma</i>	
Mud snake	<i>Farancia abacura</i>	
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Eastern kingsnake	<i>Lampropeltis getulus getulus</i>	
Scarlet kingsnake	<i>Lampropeltis triangulum elapsoides</i>	
Eastern coachwhip	<i>Masticophis flagellum flagellum</i>	
Eastern coral snake	<i>Micrurus fulvius</i>	
Green water snake	<i>Nerodia cyclopion</i>	
Banded water snake	<i>Nerodia fasciata</i>	
Eastern glass lizard	<i>Ophisaurus ventralis</i>	
Corn snake	<i>Pantherophis guttatus guttatus</i>	
Florida pine snake	<i>Pituophis melanoleucus mugitus</i>	
Southeastern five-lined skink	<i>Plestiodon inexpectatus</i>	
Broad-headed skink	<i>Plestiodon laticeps</i>	
Southern fence lizard	<i>Sceloporus undulatus undulatus</i>	
Ground skink	<i>Scincella lateralis</i>	
Dusky pygmy rattlesnake	<i>Sistrurus miliarius barbouri</i>	
Common musk turtle	<i>Sternotherus adoratus</i>	
Gulf Coast box turtle	<i>Terrapene carolina major</i>	
Eastern ribbon snake	<i>Thamnophis sauritus sauritus</i>	
Eastern garter snake	<i>Thamnophis sirtalis sirtalis</i>	
Gulf Coast spiny softshell	<i>Trionyx spiniferus asperus</i>	

Birds

Cooper's hawk	<i>Accipiter cooperii</i>	
Sharp-shinned hawk	<i>Accipiter striatus</i>	
Spotted sandpiper	<i>Actitis macularius</i>	
Red-winged blackbird	<i>Agelaius phoeniceus</i>	
Wood duck	<i>Aix sponsa</i>	

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Northern pintail	<i>Anas acuta</i>	
American wigeon	<i>Anas americana</i>	
Green-winged teal	<i>Anas carolinensis</i>	
Northern shovler	<i>Anas clypeata</i>	
Blue-winged teal	<i>Anas discors</i>	
Mallard	<i>Anas platyrhynchos</i>	
Gadwall	<i>Anas strepera</i>	
Anhinga	<i>Anhinga anhinga</i>	
Chuck-will's widow	<i>Antrostomus carolinensis</i>	
Whip-poor-will	<i>Antrostomus vociferus</i>	
Ruby-throated hummingbird	<i>Archilochus colubris</i>	
Great egret	<i>Ardea alba</i>	
Great blue heron	<i>Ardea herodias</i>	
Ruddy turnstone	<i>Arenaria interpres</i>	
Lesser scaup	<i>Aythya affinis</i>	
Redhead	<i>Aythya americana</i>	
Ring-necked duck	<i>Aythya collaris</i>	
Greater scaup	<i>Aythya marila</i>	
Canvasback	<i>Aythya valisineria</i>	
Tufted titmouse	<i>Baeolophus bicolor</i>	
Cedar waxwing	<i>Bombycilla cedrorum</i>	
American bittern	<i>Botaurus lentiginosus</i>	
Canada goose	<i>Branta canadensis</i>	
Great horned owl	<i>Bubo virginianus</i>	
Cattle egret	<i>Bubulcus ibis</i>	
Bufflehead	<i>Bucephala albeola</i>	
Common goldeneye	<i>Bucephala clangula</i>	
Red-tailed hawk	<i>Buteo jamaicensis</i>	
Red-shouldered hawk	<i>Buteo lineatus</i>	
Broad-winged hawk	<i>Buteo platypterus</i>	
Green heron	<i>Butorides virescens</i>	
Sanderling	<i>Calidris alba</i>	
Northern cardinal	<i>Cardinalis cardinalis</i>	
Turkey vulture	<i>Cathartes aura</i>	
Veery	<i>Catharus fuscescens</i>	
Hermit thrush	<i>Catharus guttatus</i>	
Gray-cheeked thrush	<i>Catharus minimus</i>	
Swainson's thrush	<i>Catharus ustulatus</i>	
Brown creeper	<i>Certhia americana</i>	
Chimney swift	<i>Chaetura pelagica</i>	
Killdeer	<i>Charadrius vociferus</i>	
Black tern	<i>Chlidonias niger</i>	
Common nighthawk	<i>Chordeiles minor</i>	
Bonaparte's gull	<i>Chroicocephalus philadelphia</i>	
Northern harrier	<i>Circus cyaneus</i>	
Marsh wren	<i>Cistothorus palustris</i>	

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Yellow-billed cuckoo	<i>Coccyzus americanus</i>	
Black-billed cuckoo	<i>Coccyzus erythrophthalmus</i>	
Northern flicker	<i>Colaptes auratus</i>	
Common ground-dove	<i>Columbina passerina</i>	
Eastern wood-pewee	<i>Contopus virens</i>	
Black vulture	<i>Coragyps atratus</i>	
Fish crow	<i>Corvus ossifragus</i>	
American crow	<i>Corvus brachyrhynchos</i>	
Blue jay	<i>Cyanocitta cristata</i>	
Pileated woodpecker	<i>Dryocopus pileatus</i>	
Gray catbird	<i>Dumetella carolinensis</i>	
Little blue heron	<i>Egretta caerulea</i>	ST
Snowy egret	<i>Egretta thula</i>	
Tricolored heron	<i>Egretta tricolor</i>	ST
Swallow-tailed kite	<i>Elanoides forficatus</i>	
Least flycatcher	<i>Empidonax minimus</i>	
Acadian flycatcher	<i>Empidonax vireescens</i>	
White ibis	<i>Eudocimus albus</i>	
Rusty blackbird	<i>Euphagus carolinus</i>	
Brewer's blackbird	<i>Euphagus cyanocephalus</i>	
Merlin	<i>Falco columbarius</i>	
Peregrine falcon	<i>Falco peregrinus</i>	
American kestrel	<i>Falco sparverius</i>	
American coot	<i>Fulica americana</i>	
Wilson's snipe	<i>Gallinago delicata</i>	
Common snipe	<i>Gallinago gallinago</i>	
Common gallinule	<i>Gallinula galeata</i>	
Common loon	<i>Gavia immer</i>	
Common yellowthroat	<i>Geothlypis trichas</i>	
House finch	<i>Haemorhous mexicanus</i>	
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGEPA
Worm-eating warbler	<i>Helmitheros vermivorum</i>	
Barn swallow	<i>Hirundo rustica</i>	
Caspian tern	<i>Hydroprogne caspia</i>	
Wood thrush	<i>Hylocichla mustelina</i>	
Yellow-breasted chat	<i>Icteria virens</i>	
Baltimore oriole	<i>Icterus galbula</i>	
Orchard oriole	<i>Icterus spurius</i>	
Mississippi kite	<i>Ictinia mississippiensis</i>	
Loggerhead shrike	<i>Lanius ludovicianus</i>	
Ring-billed gull	<i>Larus delawarensis</i>	
Great black-backed gull	<i>Larus marinus</i>	
Herring gull	<i>Larus smithsonianus</i>	
Hooded merganser	<i>Lophodytes cucullatus</i>	
Laughing gull	<i>Leucophaeus atricilla</i>	
Belted kingfisher	<i>Megaceryle alcyon</i>	

Common Name	Scientific Name	Status
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Eastern screech owl	<i>Megascops asio</i>	
Red-bellied woodpecker	<i>Melanerpes carolinus</i>	
Red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	
Swamp sparrow	<i>Melospiza georgiana</i>	
Song sparrow	<i>Melospiza melodi</i>	
Red-breasted merganser	<i>Mergus serrator</i>	
Northern mockingbird	<i>Mimus polyglottos</i>	
Black and white warbler	<i>Mniotilta varia</i>	
Brown-headed cowbird	<i>Molothrus ater</i>	
Great crested flycatcher	<i>Myiarchus crinitus</i>	
Orange-crowned warbler	<i>Oreothlypis celata</i>	
Tennessee warbler	<i>Oreothlypis peregrina</i>	
Osprey	<i>Pandion haliaetus</i>	
Savannah sparrow	<i>Passerculus sandwichensis</i>	
Blue grosbeak	<i>Passerina caerulea</i>	
Indigo bunting	<i>Passerina cyanea</i>	
Brown pelican	<i>Pelecanus occidentalis</i>	
American white pelican	<i>Pelicanus erythrorhynchos</i>	
Double-crested cormorant	<i>Phalacrocorax auritus</i>	
Rose-breasted grosbeak	<i>Pheucticus ludovicianus</i>	
Red-cockaded woodpecker	<i>Picoides borealis</i>	
Downy woodpecker	<i>Picoides pubescens</i>	
Hairy woodpecker	<i>Picoides villosus</i>	
Eastern towhee	<i>Pipilo erythrophthalmus</i>	
Scarlet tanager	<i>Piranga olivacea</i>	
Summer tanager	<i>Piranga rubra</i>	
Roseate spoonbill	<i>Platalea ajaja</i>	ST
Horned grebe	<i>Podiceps auritus</i>	
Pied-billed grebe	<i>Podilymbus podiceps</i>	
Carolina chickadee	<i>Poecle carolinensis</i>	
Blue-gray gnatcatcher	<i>Poliptila caerulea</i>	
Vesper sparrow	<i>Pooecetes gramineus</i>	
Sora	<i>Porzana carolina</i>	
Purple martin	<i>Progne subis</i>	
Prothonotary warbler	<i>Protonotaria citrea</i>	
Common grackle	<i>Quiscalus quiscula</i>	
Virginia rail	<i>Rallus limicola</i>	
Clapper rail	<i>Rallus longirostris</i>	
Ruby-crowned kinglet	<i>Regulus calendula</i>	
Golden-crowned kinglet	<i>Regulus satrapa</i>	
Bank swallow	<i>Riparia riparia</i>	
American woodcock	<i>Scolopax minor</i>	
Ovenbird	<i>Seiurus aurocapilla</i>	
Northern parula	<i>Setophaga americana</i>	
Bay breasted warbler	<i>Setophaga castanea</i>	
Black-throated blue warbler	<i>Setophaga caerulescens</i>	

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Hooded warbler	<i>Setophaga citrina</i>	
Yellow-rumped warbler	<i>Setophaga coronata coronata</i>	
Prairie warbler	<i>Setophaga discolor</i>	
Yellow-throated warbler	<i>Setophaga dominica</i>	
Blackburnian warbler	<i>Setophaga fusca</i>	
Magnolia warbler	<i>Setophaga magnolia</i>	
Palm warbler	<i>Setophaga palmarum</i>	
Yellow warbler	<i>Setophaga petechia</i>	
Chestnut-sided warbler	<i>Setophaga pensylvanica</i>	
Pine warbler	<i>Setophaga pinus</i>	
American redstart	<i>Setophaga ruticilla</i>	
Blackpoll warbler	<i>Setophaga striata</i>	
Cape May warbler	<i>Setophaga tigrina</i>	
Black-throated green warbler	<i>Setophaga virens</i>	
Eastern bluebird	<i>Sialia sialis</i>	
Red-breasted nuthatch	<i>Sitta canadensis</i>	
Brown-headed nuthatch	<i>Sitta pusilla</i>	
Yellow-bellied sapsucker	<i>Sphyrapicus varius</i>	
American goldfinch	<i>Spinus tristis</i>	
Chipping sparrow	<i>Spizella passerina</i>	
Field sparrow	<i>Spizella pusilla</i>	
Northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>	
Forster's tern	<i>Sterna forsteri</i>	
Common tern	<i>Sterna hirundo</i>	
Least tern	<i>Sterna antillarum</i>	ST
Barred owl	<i>Strix varia</i>	
Tree swallow	<i>Tachycineta bicolor</i>	
Royal tern	<i>Thalasseus maximus</i>	
Sandwich tern	<i>Thalasseus sandvicensis</i>	
Carolina wren	<i>Thryothorus ludovicianus</i>	
Brown thrasher	<i>Toxostoma rufum</i>	
Western willet	<i>Tringa semipalmata inornata</i>	
Eastern willet	<i>Tringa semipalmata semiplamata</i>	
House wren	<i>Troglodytes hiemalis</i>	
American robin	<i>Turdus migratorius</i>	
Eastern kingbird	<i>Tyrannus tyrannus</i>	
Golden-winged warbler	<i>Vermivora chrysoptera</i>	
Blue-winged warbler	<i>Vermivora cyanoptera</i>	
Yellow-throated vireo	<i>Vireo flavifrons</i>	
White-eyed vireo	<i>Vireo griseus</i>	
Red-eyed vireo	<i>Vireo olivaceus</i>	
Philadelphia vireo	<i>Vireo philadelphicus</i>	
Blue-headed vireo	<i>Vireo solitarius</i>	
Mourning dove	<i>Zenaidura macroura</i>	
White-throated sparrow	<i>Zonotrichia albicollis</i>	
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	

Common Name	Scientific Name	Status
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C = commercially exploited

Mammals		
North American beaver	<i>Castor canadensis</i>	
Coyote	<i>Canis latrans</i>	
Nine-banded armadillo	<i>Dasypus novemcinctus</i>	
Opposum	<i>Didelphis marsupialis</i>	
Bobcat	<i>Lynx rufus</i>	
Striped skunk	<i>Mephitis mephitis</i>	
White-tailed deer	<i>Odocoileus virginianus</i>	
Cotton mouse	<i>Peromyscus gossypinus</i>	
Raccoon	<i>Procyon lotor</i>	
Eastern mole	<i>Scalopus aquaticus</i>	
Eastern grey squirrel	<i>Sciurus carolinensis</i>	
Hispid cotton rat	<i>Sigmodon hispidus</i>	
Eastern cottontail	<i>Sylvilagus floridanus</i>	
Marsh rabbit	<i>Sylvilagus palustris</i>	
Florida manatee	<i>Trichechus manatus latirostris</i>	FT
Bottlenose dolphin	<i>Tursiops truncatus</i>	
Gray fox	<i>Urocyon cinereoargenteus</i>	
Florida black bear	<i>Ursus americanus floridanus</i>	

B.3.2 / Listed Species

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Plants		
Baltzell's sedge	<i>Carex baltzellii</i>	ST
Water sundew	<i>Drosera intermedia</i>	ST
Pondspice	<i>Litsea aestivalis</i>	SE
Gulf coast lupine	<i>Lupinus westianus</i>	ST
Large-leaved jointweed	<i>Polygonella macrophylla</i>	ST
Whitetop pitcherplant	<i>Sarracenia leucophylla</i>	SE
Parrot pitcherplant	<i>Sarracenia psittacina</i>	ST
Red-flower pitcherplant	<i>Sarracenia rubra</i>	ST
Fish		
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	FT
Okaloosa darter	<i>Etheostoma okalossae</i>	FT
Reptiles		
American alligator	<i>Alligator mississippiensis</i>	FT(S/A)
Gopher tortoise	<i>Gopherus polyphemus</i>	ST
Birds		
Little blue heron	<i>Egretta caerulea</i>	ST
Tricolored heron	<i>Egretta tricolor</i>	ST
Roseate spoonbill	<i>Platalea ajaja</i>	ST
Least tern	<i>Sternula antillarum</i>	ST
Mammals		
Florida manatee	<i>Trichechus manatus</i>	FT

B.3.3 / Invasive Non-native and/or Problem Species

Common Name	Species Name	Plants (FLEPPC* Category) Others (Invasive Status)
Plants		
Mimosa	<i>Albizia julibrissin</i>	I
Alligator weed	<i>Alternanthera philoxeroides</i>	II
Cogon grass	<i>Imperata cylindrica</i>	I
Lantana	<i>Lantana camara</i>	I
Japanese honeysuckle	<i>Lonicera japonica</i>	I
Common reed	<i>Phragmites australis</i>	
Torpedo grass	<i>Panicum repens</i>	I
Chinese tallow	<i>Sapium sebiferum</i>	I
Birds		
Rock dove	<i>Columba livia</i>	NN
House sparrow	<i>Passer domesticus</i>	NN
Eurasian collared dove	<i>Streptopelia decaocto</i>	NN
European starling	<i>Sturnus vulgaris</i>	NN
Mammals		
Nine-banded armadillo	<i>Dasyus novemcinctus</i>	P

*Florida Exotic Pest Plant Council (FLEPPC) categorizes invasive exotic plants as Category I (plants that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives) or Category II (plants that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species).

**Animals are listed as either non-native invasive (NN) or problem native (P) species.

B.4 / Arthropod Control Plan

Spatial data (e.g. shapefiles) for the boundaries of the aquatic preserve have been made accessible to the appropriate mosquito control district. The aquatic preserve is deemed highly productive and environmentally sensitive. By policy of DEP since 1987, aerial adulticiding is not allowed, but larviciding and ground adulticiding (truck spraying in public use areas) is typically allowed. Mosquito control plans temporarily may be set aside under declared threats to public or animal health, or during a Governor's Emergency Proclamation. Mosquito control plans are typically proposed by local mosquito control agencies when they desire to treat on public lands.

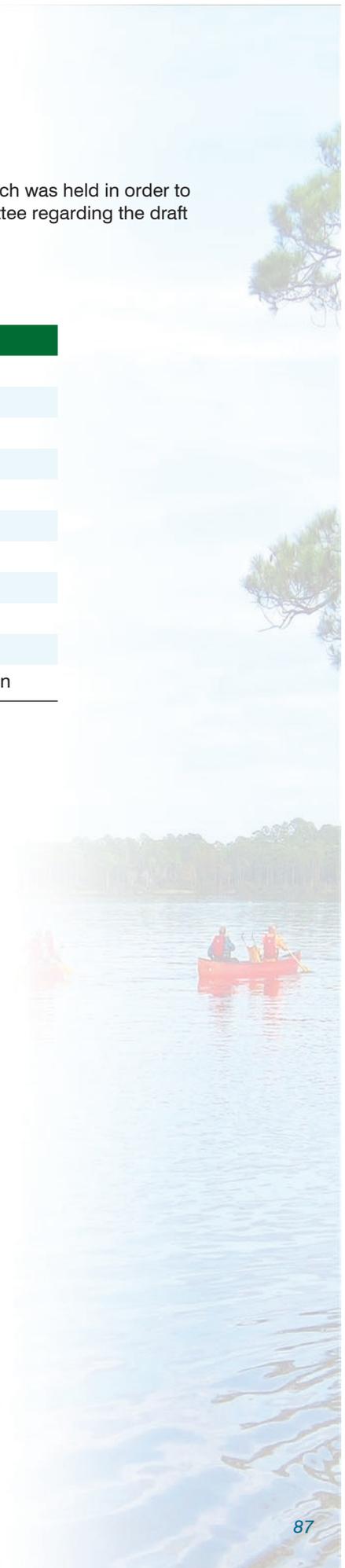
Public Involvement

C.1 / Advisory Committee

The following appendices contain information about the advisory committee meeting which was held in order to obtain input from the Rocky Bayou Aquatic Preserve Management Plan Advisory Committee regarding the draft management plan.

C.1.1 / List of members and their affiliations

Name	Affiliation
Laura Tiu	Okaloosa Sea Grant
David & Sandra Berquist	Local landowners
Linda Johnson	Yellow River Soil & Water Conservation District
Chris Hawthorne	Fred Gannon Rocky Bayou State Park
Kit Snyder	Fred Gannon Rocky Bayou State Park
Jennifer Manis	FWC
Alison McDowell	Choctawhatchee Basin Alliance
Darryl Boudreau	The Nature Conservancy
Kelly Windes	Okaloosa County Commission
Judy Boudreaux	Niceville City Council
Terry Hansen	DEP Division of Environmental Assessment and Restoration



GENERAL SUBJECT MATTER TO BE CONSIDERED: Regular monthly meeting to obtain feedback from interested persons on current pending permit applications. The agenda is available at www.watmatters.org/calendar/calendar.php/ A copy of the agenda may be obtained by contacting: Justin Eddy, (813)985-7481, ext. 2097.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 5 days before the workshop/meeting by contacting: SWFWMD, Human Resources Bureau Chief at 1(800)423-1476, ext. 4702; TDD (FL only) 1(800)231-6103 or email: ADACoordinator@swfwmd.state.fl.us. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

DEPARTMENT OF ENVIRONMENTAL PROTECTION
The Florida Department of Environmental Protection, Florida Coastal Office announces a public meeting to which all persons are invited.

DATE AND TIME: Tuesday, February 27, 2018, 6:00 p.m.
PLACE: Northwest Florida State College, Room 302, 100 E. College Blvd., Niceville, FL 32578

GENERAL SUBJECT MATTER TO BE CONSIDERED: A draft Rocky Bayou Aquatic Preserve Management Plan has been prepared by the Florida Coastal Office. The draft plan is available for viewing or download at <http://publicfiles.dep.state.fl.us/CAMA/plans/aquatic/Rocky-Bayou-AP-Management-Plan.pdf>. The Florida Coastal Office seeks public comment on the draft. Members of the Rocky Bayou Aquatic Preserve Advisory Committee have also been invited to attend and listen to comments.

A copy of the agenda may be obtained by contacting: Aquatic Preserve Manager, Beth Fugate at Beth.L.Fugate@dep.state.fl.us or (850)595-0683.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 48 hours before the workshop/meeting by contacting: Beth Fugate at (850)595-0683. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

DEPARTMENT OF ENVIRONMENTAL PROTECTION
The Florida Department of Environmental Protection, Florida Coastal Office announces a public meeting to which all persons are invited.

DATE AND TIME: Wednesday, February 28, 2018, 9:00 a.m.
PLACE: Northwest Florida State College, Room 308/309, 100 E. College Blvd., Niceville, FL 32578

GENERAL SUBJECT MATTER TO BE CONSIDERED: The Rocky Bayou Aquatic Preserve Management Plan Advisory Committee will meet to discuss possible revisions to the draft Rocky Bayou Aquatic Preserve Management Plan and comments received at the public meeting scheduled for February 27, 2018 and separately noticed. The draft plan is available for download at <http://publicfiles.dep.state.fl.us/CAMA/plans/aquatic/Rocky-Bayou-AP-Management-Plan.pdf>.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Recreation and Parks

The Florida Department of Environmental Protection, Division of Recreation and Parks, announces a public meeting to which all persons are invited.

DATE AND TIME: Tuesday, February 6, 2018, 5:30 p.m. – 7:30 p.m.; Presentation at 6:00 p.m.

PLACE: Highlands Hammock State Park – Recreation Hall, 5931 Hammock Road, Sebring, FL 33872

GENERAL SUBJECT MATTER TO BE CONSIDERED: An opportunity for the public to provide input on the ten-year management plan update for Highlands Hammock State Park.

A copy of the agenda may be obtained by contacting: V. Morgan Tyrone, Highlands Hammock State Park, 5931 Hammock Road, Sebring, FL 33872, PH#: (863)386-6094, FAX#: (863)386-6095 or email: Victor.Tyrone@dep.state.fl.us.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 48 hours before the workshop/meeting by contacting: V. Morgan Tyrone, as listed above. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Recreation and Parks

The Florida Department of Environmental Protection, Division of Recreation and Parks, announces a public meeting to which all persons are invited.



Florida Department of Environmental Protection

Northwest Florida Aquatic Preserves
160 Government Center
Pensacola, Florida 32502

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

Rocky Bayou Aquatic Preserve Draft Management Plan Advisory Committee Meeting

Tuesday, February 28, 2018
9:00 am

Northwest Florida State College
Room 308/309
100 E. College Blvd.
Niceville, FL 32578

Advisory Attendees: Linda S. Johnson, Alison McDowell, Darryl Boudreau, Kit Snyder

Staff: Stephen Durham, Beth Fugate, Pamela Grainger, Earl Pearson, Kim Wren, Zach Schang

Earl welcomed everyone and introductions were done around the room. A brief recap from the public meeting was given and comments from each station were read.

The floor was open for discussion regarding the identified issue and any other issues. Where applicable, the discussions have been summarized and categorized below under the five issues (water quality, habitat loss, lack of resource information, public awareness, and sustainable public use). When discussion overlapped categories, it was placed where it seemed to fit best.

Issue One: Water Quality

- Address sedimentation and depth changes-set a baseline.
 - Most sedimentation is coming from road construction.
 - Sedimentation is causing areas to shallow out, and appears to create water clarity issues.

- The public had lots of concern over the Turkey Creek Development for Eglin AFB. Be proactive about the development and work with the developers.
- Sedimentation is an issue for recreation and habitat loss.
- Is dredging allowed and how addressed.
- Analysis of septic/sewer status and the cost-benefits of conversion.
- Water quality sampling
 - Choctawhatchee Basin Alliance (CBA) has a monthly data dating back about twenty years for Total Phosphorus and Total Nitrogen.
 - Data from the Hydrolab stations will probably have about a six month lag time.
 - County comes out once a week and tests at the boat ramp.
 - Potential need for total suspended solid (TSS) sampling.

Issue Two: Habitat Loss

- Define metrics and timelines better.
- National Estuary Program will be good way to coordinate.
- *Phragmites* removal/control on RBAP shoreline.
 - Problem species, but can be useful for stabilizing the shoreline.
 - Probably can't be completely removed. If you take it completely out, root and all, it takes away too much of the shoreline.
- Ecosystem shifts with potential for mangrove intrusion.
 - Will address when/if needed.
 - Mangroves are preferable to *Phragmites* sp.
- Encourage homeowners to Natural Resources Conservation Service to assist with natural shorelines.

Issue Three: Lack of Resource Information

- Will add CBA monitoring data available.
- Better identify research needs, and existing research efforts.
- Historic maps are available via Eglin and others.
- Make data available to public.

Issue Four: Public Awareness

- Work with FWC to update the boaters guide for Choctawhatchee Bay.
- Work with existing apps to provide information about the aquatic preserve and its resources.
- Signs, pamphlets, mailers.
- Develop covenants for new developments in area. Work with developers to have better information about the aquatic preserve along with protections. The aquatic preserve is a selling point to prospective residents.

Issue Five: Sustainable Public Use

- Clarification from public meeting addressing the need for better coordination on local level.

- Clarification on “no motor zones”. It should be “no wake zones” instead.

Earl explained the next steps in the management plan process: revisions will be made to the plan before it goes to the Acquisition and Restoration Council for a public meeting in Tallahassee. The plan will go to the Governor and Cabinet for final approval. Comments can still be submitted on or before March 13th. The advisory committee members were thanked for their time and input.

The meeting was adjourned.

C.2 / Formal Public Meeting

The following appendices contain information about the Formal Public Meeting(s) which was held in order to obtain input from the public about the Rocky Bayou Preserve Draft Management Plan.

C.2.1 / Florida Administrative Register Posting

Florida Administrative Register

Volume 44, Number 18, January 26, 2018

GENERAL SUBJECT MATTER TO BE CONSIDERED: Regular monthly meeting to obtain feedback from interested persons on current pending permit applications. The agenda is available at www.watermatters.org/calendar/calendar.php/. A copy of the agenda may be obtained by contacting: Justin Eddy, (813)985-7481, ext. 2097.

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GENERAL SUBJECT MATTER TO BE CONSIDERED: The Rocky Bayou Aquatic Preserve Management Plan Advisory Committee will meet to discuss possible revisions to the draft Rocky Bayou Aquatic Preserve Management Plan and comments received at the public meeting scheduled for February 27, 2018 and separately noticed. The draft plan is available for download at <http://publicfiles.dep.state.fl.us/CAMA/plans/aquatic/Rocky-Bayou-AP-Management-Plan.pdf>.

A copy of the agenda may be obtained by contacting: Aquatic Preserve Manager, Beth Fugate at Beth.L.Fugate@dep.state.fl.us or (850)595-0683.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 48 hours before the workshop/meeting by contacting: Beth Fugate at (850)595-0683. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Recreation and Parks

The Florida Department of Environmental Protection, Division of Recreation and Parks, announces a public meeting to which all persons are invited.

DATE AND TIME: Tuesday, February 6, 2018, 5:30 p.m. – 7:30 p.m.; Presentation at 6:00 p.m.

PLACE: Highlands Hammock State Park – Recreation Hall, 5931 Hammock Road, Sebring, FL 33872

GENERAL SUBJECT MATTER TO BE CONSIDERED: An opportunity for the public to provide input on the ten-year management plan update for Highlands Hammock State Park.

A copy of the agenda may be obtained by contacting: V. Morgan Tyrone, Highlands Hammock State Park, 5931 Hammock Road, Sebring, FL 33872, PH#: (863)386-6094, FAX#: (863)386-6095 or email: Victor.Tyrone@dep.state.fl.us.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 48 hours before the workshop/meeting by contacting: V. Morgan Tyrone, as listed above. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Recreation and Parks

The Florida Department of Environmental Protection, Division of Recreation and Parks, announces a public meeting to which all persons are invited.

Florida Department of Environmental Protection • Florida Coastal Office



Rocky Bayou
Aquatic Preserve

Public Meeting

Tuesday, February 27, 2018
6:00 pm - 7:30 pm

Northwest Florida State College
Room 302
100 E. College Blvd.
Niceville, FL 32578

To view the draft plan, please visit:
www.aquaticpreserves.org

The Florida Department of Environmental Protection's Florida Coastal Office (FCO) is responsible for the management of Florida's 41 aquatic preserves, three National Estuarine Research Reserves, a National Marine Sanctuary, Florida Coastal Management Program, Outer Continental Shelf Program, and Coral Reef Conservation Program. These protected areas comprise more than 4 million acres of the most valuable submerged lands and select coastal uplands in Florida. FCO is updating these management plans, and is currently seeking input on the draft Rocky Bayou Aquatic Preserve management plan.

Meeting objectives:

1. Review purpose and process for revising the Rocky Bayou Aquatic Preserve management plan.
2. Present current draft plan with a focus on issues, goals, objectives and strategies.
3. Receive input on the draft management plan.

The information from the meeting will be compiled and used by FCO in the revision of the draft management plan.

Please contact Beth Fugate (850)595-0683, Beth.L.Fugate@dep.state.fl.us or visit our website at www.aquaticpreserves.org for more information or to request a written copy of the plan. Written comments are welcome and can be submitted by email to FloridaCoasts@dep.state.fl.us on or before **March 13, 2018**.

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 48 hours before the workshop/meeting by contacting Beth Fugate at (850)595-0683 or Beth.L.Fugate@dep.state.fl.us. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, (800) 955-8771 (TDD) or (800) 955-8770 (Voice).

This publication funded in part through a grant agreement from the Florida Department of Environmental Protection, Florida Coastal Management Program by a grant provided by the Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act of 1972, as amended, National Oceanic and Atmospheric Administration Award No. NA15NOS4190096(CM06M) and NA16NOS4190120(CM07M). The views, statements, finding, conclusions, and recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the State of Florida, National Oceanic and Atmospheric Administration, or any of its sub-agencies. January 2018.



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Ad Copy: The Florida Department of Environmental Protection, Florida Coastal Office announces a public meeting to receive comments on the Rocky Bayou Aquatic Preserve draft management plan. The meeting will be held in Okaloosa County on February 27th, 2018, 6:00-7:30 p.m. at Northwest Florida State College, SS302, 100 E. College Blvd., Niceville, FL 32578. A copy of the draft plan is posted at www.aquaticpreserves.com. For the agenda, contact the preserve Manager, Beth Fugate by e-mail: Beth.L.Fugate@dep.state.fl.us, by phone (850)595-0683, or by mail: 160 W. Government St., Pensacola, FL 32502.
Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this workshop/meeting is asked to advise the agency at least 48 hours before the workshop/meeting by contacting: Aquatic Preserve Manager Beth Fugate at (850)595-0683. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1(800)955-8771 (TDD) or 1(800)955-8770 (Voice).

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Florida Department of Environmental Protection

Northwest Florida Aquatic Preserves
160 Government Center
Pensacola, Florida 32502

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Lt. Governor

Noah Valenstein
Secretary

Rocky Bayou Aquatic Preserve Draft Management Plan Public Meeting

Tuesday, February 27, 2018
6:00pm-7:30pm

Northwest Florida State College
Room 302
100 E. College Blvd.
Niceville, FL 32578

Attendees: Kelly Windes, Linda S. Johnson, Alison McDowell, Nick Abbatiello, Scott Stevenson, Chrissie Kirila, Robert Armfield, Pete Senechal, Diana Seneschal, David Swan, Rip Coleman, Lori Cather, Mike Cather, Darryl Boudreau, George Hanks, Martha Rose

Staff: Stephen Durham, Beth Fugate, Pamela Grainger, Earl Pearson, Kim Wren, Zach Schang

Earl welcomed everyone, gave a brief introduction about the purpose of the meeting, and introduced staff from the aquatic preserve and Tallahassee.

Beth gave a PowerPoint presentation about the Rocky Bayou Aquatic Preserve, the management plan structure, and issues identified in the plan.

After the presentation, Earl explained the commenting process. The room was set up so that there were five stations – one for each of the five issues identified in the management plan. The attendees were split into two groups, and staff were stationed with each of the groups to provide background on the issues and record comments from the public.

Issue One: Water Quality

- Sedimentation impacts from construction, etc.
- Need for new sewer system.
- Need to monitor WQ/nutrients in aquatic preserve – inputs from adjacent creeks, culverts, (upstream inputs into bayou), stormwater concerns.
- Turkey Creek future developments w/ impacts to bayou.
- Look into comparing historical imagery with current imagery to determine changes.
- Restoration is an option in areas that are filling in due to sedimentation.
- Bioblitz.
- Community pride (recognition of the aquatic preserve so the locals have a sense of ownership).

Issue Two: Habitat Loss

- Clearly define timelines associated with research related activities, etc. (for any performance measures).
- Road or construction impact?
- Clearly define current habitat and wildlife condition to measure loss.
- Shoreline erosion is an issue; the aquatic preserve should work with local homeowners to explore options in these areas using natural methods (living shorelines).

Issue Three: Lack of Resource Information

- Military map cache. Satellite images (Jackson Guard).
- Partner on resource surveys (dive clubs, Mattie Kelly).
- Historical resource maps.
- Data needs to be available to the public.
- Need for multiple WQ sites (dataloggers) to better document current conditions.

Issue Four: Public Awareness

- Earth Day event/awareness.
- Local public education (on/near bayou).
- Direct mail info (aquatic preserve and boater safety).
- Signage!
- Utilize Bluewater Bay (Beacon).
- New development coming soon.
- Better coordination with Eglin and St. Pane to educate boat renters on shallow areas in bayou.
- Work with partners to use buoys to mark shallow areas of bayou to prevent further damage to resources/vessels.

Issue Five: Sustainable Public Use

- Need to identify what problems are and where they occur.
- Shoreline erosion due to boat wake.

- 
- No markings identifying where the aquatic preserve boundaries begin at Rocky Creek.
 - Boat grounding issues.
 - Flooding issues if creek is dammed (sediment transport).
 - What can homeowners do to remedy shoreline erosion (living shorelines, seawalls, etc.)?
 - Water quality status.
 - Concerns over sewer being incorporated.
 - Results of bypass being built – downstream effects.
 - Page 31 – no motor zones – concerns with impacts to homeowners – economic impact to residential.
 - Better coordination with Eglin Air Force Base.
 - Concern with county-city coordination.
 - Monitoring needs to be done in Turkey Creek area due to future development.
 - Any residential area draining into the aquatic preserve should be targeted for education.
 - Inform policy makers (local, state, federal) of info gained from research.
 - How often will surveys be conducted to determine if metrics are obtained?

After the comments were received, Earl explained the next steps in the management plan process: an advisory committee meeting, Acquisition and Restoration Council meeting (also a public meeting) in Tallahassee, and a Governor and Cabinet meeting. The public was reminded the comments could still be submitted on or before March 13, 2018. They were thanked for attending.

The meeting was adjourned.

Rocky Bayou Aquatic Preserve Management Plan Comments:

1. Page 9 – Many historical background references to Eglin that I cannot comment on. Would need a Cultural Resources rep to review
2. Page 11 – Says RBAP is home to the Okaloosa Darter but not darters exist within the boundaries of the RBAP as shown on the map on the same page
3. Page 12 – States a population projection for 2015 which obviously needs updating...at least in the tense of the sentence. Also I cannot comment on the accuracy of the JLUS mention
4. Page 18 – Shows the darter occurring within the RBAP again yet there are no Okaloosa Darters within the depicted boundary of the aquatic preserve. Should mention them as occurring adjacent to or near the RBAP....not within. Also darters is no longer “endangered”. Eglin carried out sufficient conservation for the species and the USFWS down-listed the species to threatened in 2011.
5. Page 19 – Mention of a “Ranger Station”. Is this in Fred Gannon State Park? Unless the Ranger Station is in the water then I think clarification of the relationship between Fred Gannon State Park and the RBAP needs to be elucidated.
6. Page 20 – mentions seepage streams. That is where Okaloosa darters live. Are there any within the depicted boundary of the AP or just adjacent to?
7. Page 22 – darter now threatened not endangered. Should fact check statement about 4th largest RCW population? We are at 462 potential breeding groups right now. I am not even sure what that makes us.
8. Page 25 – a good objective should contain a time component. When do you want to accomplish this action by? Suggest reading SMART objective literature. Specific, Measurable, Attainable, Relevant, and Time- bound.
9. Page 26-27 – Issues 3 and 4 are too generic. Not good objectives.
10. Page 28 – Issue 4, Goal 2, Objective 1 is an example of a bad objective. “Coordinate with local, state, and federal agencies as well as community”. Not specific or measurable. Could technically be accomplished in 4 phone calls.
11. Page 29 - Strategies for objective 2 are not specific either. So you are just going to track the numbers of presentations, meetings, and enhancement

projects? Why not state how many of each you want to accomplish? Goal 7 Objective 1, Objective 1, Performance Measure 1 – Propeller Scarring – assumes you know how much there is now but I haven't see any objective to quantify this.

12. Page 31 – Issue 4, Goal 1, Objective, 1, Strategy1, Performance Measure 2 - assumes you have a baseline yet I see no objective related to establishing a baseline.
13. Page 36 – Future needs 2nd paragraph – mentions a vehicle to tow and transport staff. Are you towing staff? Might want to clarify a vehicle to tow trailer/boats etc and to transport staff.
14. Page 40 – GCPEP MOU – suggest checking with Vernon Compton to ensure this is the latest version....unless you have already done this.
15. Page 56 – Species list. Many are upland species. Where do they have to occur to be considered part of the RBAP? In the adjacent state park?
16. Page 74 – Darter classified correctly “FT” yet does not occur in RBAP.
17. Page 77 – What type of funding if no category code is shown? Some are blank – No “F”, “S” or “O”.
18. Page 78 – Some amounts seem arbitrary. \$100 annually to make recommendations for additional strategies? \$175 to attend meetings – why only 2? And why so long from now (26-27 and 27-28)? How could you possibly know costs 10 years from now.
19. Page 81 – Major Accomplishments – 2nd one – “was addressed and will be restored”. How was it addressed if it hasn't been restored yet? How is this an accomplishment if it hasn't been done yet? 3rd one – just states what someone else does. How is this an accomplishment? Last one could be done is one 5 minute phone call – Major Accomplishment???
20. Page 85 – 3rd Project – Eglin is spelled wrong but delete the mention of this project as attributed to Eglin. We retracted this project or at least changed proponent to USFWS due to requests from DoD. Not wanting to be seen as competing with local municipalities or counties for BP oil spill funding.

Goals, Objectives, and Strategies

D.1 / Current Goals, Objectives and Strategies Table

The following table provides a cost estimate for conducting the management activities identified in this plan. The data is organized by year and Management Program with subtotals for each program and year. The following represents the actual budgetary needs for managing the resources of the aquatic preserve. This budget was developed using data from the Florida Coastal Office (FCO) and other cooperating entities, and is based on actual costs for management activities, equipment purchases and maintenance, and for development of fixed capital facilities. This budget assumes optimal staffing levels to accomplish these strategies, and includes the costs associated with staffing such as salary or benefits. Budget categories identified correlate with the FCO Management Program Areas. The Funding Source column depicts the source of funds with “S” designated for state, “F” for federal, and “O” for other funding sources (e.g. non-profit groups, etc.). Dollar figures in red font indicate funding and source not available at this time.

Large, beneficial projects, outside the current capacity of RBAP’s funding and staffing, are identified in Appendix D.4, in case opportunities become available to support those projects in the ten-year span of this management plan.

Goals, Objectives & Integrated Strategies	Mgmt. Program	Implement. Date (Planned)	Length of Initiative	Est. Avg. Yearly Cost	Funding	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Issue I: Water Quality															
Goal 1: Improve water quality in RBAP.															
Objective 1: Implement research, restoration, and enhancement projects throughout RBAP that focus on improving water quality and sedimentation.															
Strategy 1: Implement a continuous water quality monitoring program and add additional monitoring sites within RBAP, adding additional information such as rain events to determine how these affect water quality.	Ecosystem Science	2019	recurring	\$45,111.11			\$70,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000	\$42,000
Strategy 2: Promote research within RBAP by institutions of higher education to show how regional impacts affect RBAP.	Ecosystem Science	2018	recurring	\$750	S	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750	\$750
Strategy 3: Use lessons from successful habitat restoration and enhancement projects to expand on how projects increase beneficial habitat and the anticipated time for improved water quality.	Ecosystem Science	2019	5 years	\$130,000			\$370,000	\$70,000	\$70,000	\$70,000	\$70,000				
Strategy 4: Work with the city of Niceville and Okaloosa County to promote cost incentives and education/outreach to homeowners for septic to sewer conversion.	Ecosystem Science	2018	10 years	\$2,000	S	\$8,000	\$8,000	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Strategy 5: Promote regional based efforts to adapt stormwater infrastructure to accommodate larger rain events.	Ecosystem Science	2019	4 years	\$250	S		\$250	\$250	\$250	\$250					

Goals, Objectives & Integrated Strategies	Mgmt. Program	Implement. Date (Planned)	Length of Initiative	Est. Avg. Yearly Cost	Funding	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Strategy 6: Work with local developers to utilize best management practices on future development in vicinity to minimize water quality and sedimentation impacts to RBAP.	Ecosystem Science	2019	recurring	\$1,500			\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Issue II: Habitat Loss															
Goal 1: Slow or stop the gradual estuarine habitat loss within RBAP.															
Objective 1: Address national, state and local concerns about habitat decline.															
Strategy 1: Determine ideal locations and implement habitat restoration and enhancement projects and partnerships within RBAP.	Ecosystem Science	2019	recurring	\$60,000			\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Strategy 2: Map benthic habitats in RBAP.	Ecosystem Science	2020	1 year	\$100,000				\$100,000							
Strategy 3: In cooperation with FWC and Eglin AFB, develop an imperiled Fish and Wildlife Species Management Strategy to address imperiled fish and turtle species and associated management prescriptions for their habitats.	Ecosystem Science	2019	5 years	\$5,000			\$5,000	\$5,000	\$5,000	\$5,000	\$5,000				
Strategy 4: Facilitate education and outreach on importance of estuarine ecosystem and habitat, for environmental, recreational, and commercial importance.	Education & Outreach	2019	recurring	\$250	S		\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250
Issue III: Lack of resource information															
Goal 1: Maintain resource Inventories for the RBAP.															
Objective 1: To conduct and maintain a record of submerged and emergent resources.															
Strategy 1: Record and inventory submerged aquatic vegetation (SAV), attached algae, marsh grasses, other shoreline vegetation, as well as satellite imagery and aerial photographs.	Resource Mgmt.	2019	5 years	\$2,500			\$2,500	\$2,500	\$2,500	\$2,500	\$2,500				
Strategy 2: Collect data from inventories and mapping.	Resource Mgmt.	2019	5 years	Costs included in Strategy 1			\$0	\$0	\$0	\$0	\$0				
Strategy 3: Locate and identify unknown archaeological and historical resources.	Resource Mgmt.	2020	recurring	Costs included in other strategies	S		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Goals, Objectives & Integrated Strategies	Mgmt. Program	Implement. Date (Planned)	Length of Initiative	Est. Avg. Yearly Cost	Funding	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Strategy 4: Monitor existing archaeological and historical resources.	Resource Mgmt.	2020	recurring	\$250	S		\$500		\$500		\$500		\$500		\$500
Issue IV: Public Awareness															
Goal 1: Increase awareness on how upland management affects submerged resources.															
Objective 1: Work with local, state, and federal agencies when upland management affects submerged resources.															
Strategy 1: Attend state land management meetings.	Resource Mgmt.	2026	2 years	\$175	S									\$175	\$175
Strategy 2: Make recommendations for additional protective strategies.	Resource Mgmt.	2018	recurring	\$100	S	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100
Goal 2: Increase public awareness of FCO and NWFLAP.															
Objective 1: Coordinate with local, state, and federal agencies, as well as community.															
Strategy 1: Inform and educate agencies and public about NWFLAP's mission.	Education & Outreach	2018	recurring	\$5,000		\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Goal 3: Increase public awareness of RBAP and its significance.															
Objective 1: Coordinate with local, state, and federal agencies, as well as community.															
Strategy 1: Install signage at access points to help user groups understand aquatic preserve rules and boundaries.	Education & Outreach	2020	1 year	\$12,000				\$12,000							
Strategy 2: Attend public events to educate the public about RBAP.	Education & Outreach	ongoing	recurring	\$75	S	\$75	\$75	\$75	\$75	\$75	\$75	\$75	\$75	\$75	\$75
Goal 4: Inform user groups about coastal resiliency and how to implement coastal resilient features for lands and infrastructure.															
Objective 1: Inform public on future of environmental effects of climate change.															
Strategy 1: Utilize tools to show effects of sea level rise and its progression.	Education & Outreach	2020	4 years	\$3,375				\$12,000	\$500	\$500	\$500				
Objective 2: Inform coastal property owners of structural adaptation options available to improve coastal resilience.															
Strategy 1: Utilize tools to show effects of sea level rise in reference to properties.	Education & Outreach	2020	4 years	\$3,375				\$12,000	\$500	\$500	\$500				
Strategy 2: Hold public meetings for coastal property owners on potential infrastructure changes and practices.	Education & Outreach	2020	recurring	\$500	F			\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
Goal 5: Inform coastal property owners on proper land use.															
Objective 1: Share knowledge and tools with public on habitat preservation and improving water quality.															
Strategy 1: Promote Florida Friendly Yards (FFY).	Education & Outreach	ongoing	recurring	\$1,000	F	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000

Goals, Objectives & Integrated Strategies	Mgmt. Program	Implement. Date (Planned)	Length of Initiative	Est. Avg. Yearly Cost	Funding	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Strategy 2: Promote FFY recommendation of a minimum 10-foot vegetative buffer along coastal properties.	Education & Outreach	2019	recurring	\$80,000			\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
Strategy 3: Promote conversion of hardened shorelines to living shorelines.	Education & Outreach	2018	recurring	\$100,000		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Strategy 4: Promote use of native plants, rain gardens, and lawn control through collaboration with UF/IFAS Okaloosa Extension agents.	Education & Outreach	2018	recurring	\$20,000		\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Goal 6: Inform public concerning marine debris.															
Objective 1: Promote knowledge of marine debris impacts and effects to wildlife and the environment.															
Strategy 1: In collaboration with UF/IFAS Sea Grant, and FWC, educate public on marine debris, and its effects on wildlife and the environment.	Education & Outreach	2018	recurring	\$1,400		\$5,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Goal 7: Inform public concerning SAV and safe boating to ensure habitat protection.															
Objective 1: Increase knowledge of propeller scarring effects through sea grass beds.															
Strategy 1: Educate the public on propeller scarring and how to avoid further resource damage.	Education & Outreach	2018	recurring	\$1,720	S	\$10,000	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800	\$800
Issue V: Sustainable Public Use															
Goal 1: Identify locations of concern in RBAP.															
Objective 1: Address recreational safety for RBAP and state park patrons, as well as shoreline protection.															
Strategy 1: Work with FWC during times of concern to address safety.	Public Use	2019	recurring	\$1,000	S	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Strategy 2: Co-manage area with state park staff to possibly include "no motor zones" near the state park shoreline and to possibly include "No Wake Zones in other RBAP areas."	Public Use	2020	2 years	\$5,500				\$7,500					\$3,500		

D.2 / Budget Summary Table

The following table provides a summary of cost estimates for conducting the management activities identified in this plan.

Fiscal Year	Ecosystem Science	Resource Management	Education & Outreach	Public Use	Annual Total
2018-2019	\$8,750	\$100	\$141,075	\$1,000	\$150,925
2019-2020	\$515,500	\$3,100	\$208,125	\$1,000	\$727,725
2020-2021	\$280,000	\$2,600	\$244,625	\$8,500	\$535,725
2021-2022	\$180,000	\$3,100	\$209,625	\$1,000	\$393,725
2022-2023	\$180,000	\$2,600	\$209,625	\$1,000	\$393,225
2023-2024	\$179,750	\$3,100	\$209,625	\$1,000	\$393,475
2024-2025	\$104,750	\$100	\$208,625	\$1,000	\$314,475
2025-2026	\$104,750	\$600	\$208,625	\$4,500	\$318,475
2026-2027	\$104,750	\$275	\$208,625	\$1,000	\$314,650
2027-2028	\$104,750	\$775	\$208,625	\$1,000	\$315,150
Ten Year Totals	\$1,763,000	\$16,350	\$2,057,200	\$21,000	\$3,857,550

D.3 / Major Accomplishments Since the Approval of the Previous Plan

- Staff provided feedback in the restoration of Puddin Head Lake towards the steephead stream that comprised the original watercourse.
- An erosion problem occurring along low bluff area along the south side of the aquatic preserve was assessed and will be restored.
- Monitoring of designated species within RBAP is conducted with FWC and USFWS.
- Staff coordinated on implementation of a salt marsh habitat restoration project.
- Regular water quality monitoring is being conducted by Florida's Department of Health.
- Staff coordinated with local agencies to improve stormwater runoff treatment and decrease of sedimentation and siltation into basin.
- A long-term lease agreement was established for the state park.
- Provided feedback on the new bridge across Rocky Bayou.

D.4 | Gulf Restoration Priority Projects

Florida's expansive coastline and wealth of aquatic resources have defined it as a subtropical oasis, attracting millions of residents and visitors, and the businesses that serve them. Florida's submerged lands play important roles in maintaining good water quality and hosting a diversity of wildlife and habitats (including economically and ecologically valuable nursery areas). The following projects are proposed by the Florida Coastal Office as top priorities for the Rocky Bayou Aquatic Preserves in regards to creating and maintaining healthy ecosystems and economies.



NWFLAP PRIORITY RESTORATION PROJECTS

Living Shoreline on Rocky Bayou

Partners:
FDEP

Funding Required:
\$170,000

Location:
Okaloosa County

Project Timeline:
3 Years

Project Objectives:

Project is to restore approximately 2,000 feet of eroding shoreline which is protecting shell middens along Rocky Bayou State Park in Rocky Bayou Aquatic Preserve. Restoration to include Phragmites removal, oyster reef breakwaters and marsh habitat installation. The Living Shoreline will naturally protect the eroding shoreline and shell midden at Rocky Bayou State Park, as well as provide critical habitat for SAV, fish species, wading birds, threatened and endangered species and help protect historical Florida. Rocky Bayou Aquatic Preserve is an area that is often used for canoeing and kayaking, as well as other recreational activities.



Project Outcomes:

A living shoreline would be conducive to the growing interest in ecotourism as well as creating a natural display for park visitors and the Panhandle communities.

This project would create approximately 3 jobs and provide volunteer/intern opportunities that often create interest in our environment and fulfilling the goal to encourage students in these continually growing fields of study.

Location in RBAP Management Plan:

Issue I, Goal 1, Objective 1
Issue II, Goal 1, Objective 1
Issue IV, Goal 1, Objective 1
Issue IV, Goal 2, Objective 1
Issue IV, Goal 3, Objective 1
Issue IV, Goal 4, Objective 1
Issue IV, Goal 5, Objective 1
Issue V, Goal 1, Objective 1



NWFLAP PRIORITY RESTORATION PROJECTS

Promoting use of Shoreline Stabilization Techniques

Partners:

NWF AP, CPAP, ANERR,
Apalachicola
Riverkeepers, Sea Grant,
and FWS

Funding Required:

\$200,000

Location:

Franklin, Gulf, Bay,
Walton, Okaloosa, Santa
Rosa, Escambia

Project Timeline:

TBD

Project Objectives:

Strengthening Coastal Resilience in the Florida Panhandle by Restoring near-shore habitats utilizing living shorelines on identified public/private lands. This goal of this project is to return public and private coastal properties to functioning estuarine habitats by working with and educating local contractors and coastal property owners about the advantages and protection offered by non-hardened green stabilization techniques (living shorelines).

**Project Outcomes:**

Living shorelines buffer wave energy, stabilize shorelines, and provide habitat for nearly 200 different organisms.

The habitat and filtration for oysters and native saltmarsh vegetation will provide better recreation and cleaner water for public and private property owners.

This project will give contractors the tools to create additional jobs in addition to benefiting submerged resources in the Panhandle.

Location in RBAP Management Plan:

Issue I, Goal 1, Objective 1
Issue II, Goal 1, Objective 1
Issue IV, Goal 1, Objective 1
Issue IV, Goal 2, Objective 1
Issue IV, Goal 3, Objective 1
Issue IV, Goal 4, Objective 1



NWFLAP PRIORITY RESTORATION PROJECTS

Rocky Bayou Estates Sanitary Sewers

Partners:
City of Niceville

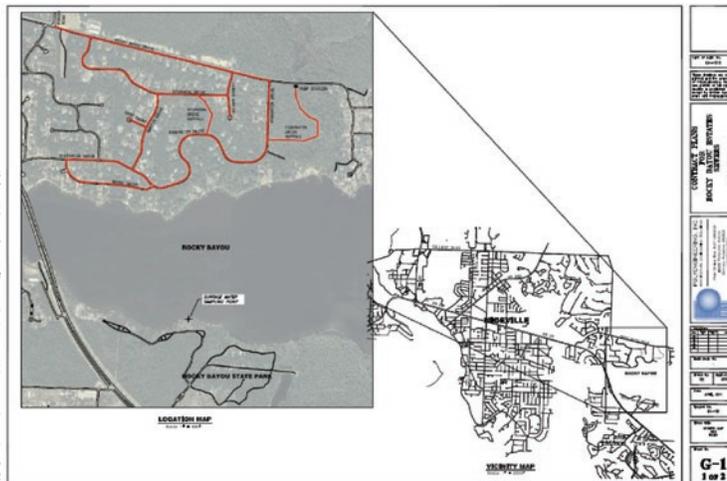
Funding Required:
\$2,600,000

Location:
Okaloosa County

Project Timeline:
TBD

Project Objectives:

The project will consist of the installation of sanitary sewer, including services, sewage pump station and force main in a low-lying coastal area, where all homes are currently served by septic tanks. The sanitary sewer upgrade will eliminate all septic tanks in this environmentally sensitive area. According to the Okaloosa County Health Department, Rocky Bayou has the second highest fecal coliform count of any surface waterbody in Okaloosa County. The fecal coliform count has exceeded 400 fecal coliforms per 100 ml after significant rainfall events. Sample results from Rocky Bayou State Park indicate that swim advisories were issued 22 times between 1/30/12 and 10/29/12. City and Health Department officials believe that the septic tanks in Rocky Bayou Estates are major contributors to this pollution.



Project Outcomes:

The actual construction project will create approximately 10 jobs for 12 months. Production of materials will create approximately 10 jobs for 2 months. Cleaning up Rocky Bayou will increase tourism and recreational water use, providing permanent economic enhancement.

Construction of the project will eliminate fecal contamination from the properties currently served by septic systems following heavy rain events, including hurricanes and tropical storms.

Location in RBAP Management Plan:

- Issue I, Goal 1, Objective 1
- Issue II, Goal 1, Objective 1
- Issue IV, Goal 1, Objective 1

The projects listed below have also been reviewed and are supported by Rocky Bayou Aquatic Preserves. For project details go to <https://floridadep.gov/wra/deepwater-horizon>.

Project Name	Amount	Partners	Location in RBAP mgmt plan
Restoration through Ecotourism: Increasing Public Awareness of Natural Resource Management through Interpretive Wilderness Experiences	\$6,854,262	DEP FCO	Issue IV, Goal 2, Objective 1; Issue IV, Goal 3, Objective 1; Issue V, Goal 1, Objective 1
Eglin AFB Range Road and Unpaved Stream Crossing Stabilization	\$150,000,000	USFWS	Issue I, Goal 1, Objective 1; Issue II, Goal 1, Objective 1; Issue IV, Goal 1, Objective 1
Unpaved Eglin Range Road Paving and Stabilization	\$80,000,000	USFWS	Issue I, Goal 1, Objective 1; Issue II, Goal 1, Objective 1; Issue IV, Goal 1, Objective 1
M-42 An Integrated Water Quality Monitoring Plan for Northwest Florida and Alabama Watersheds	\$300,000	The University of West Florida	Issue I, Goal 1, Objective 1; Issue II, Goal 1, Objective 1; Issue IV, Goal 1, Objective 1; Issue IV, Goal 2, Objective 1
Florida Panhandle Integrated Water Quality Monitoring Initiative	\$11,000,000	FWC, The University of West Florida	Issue I, Goal 1, Objective 1; Issue II, Goal 1, Objective 1; Issue IV, Goal 1, Objective 1; Issue IV, Goal 2, Objective 1
Repair damage to Panhandle river systems; restore damaged river banks, restore natural flow patterns, and reduce erosion and sedimentation	\$190,000,000	FWC	Issue I, Goal 1, Objective 1; Issue II, Goal 1, Objective 1; Issue IV, Goal 1, Objective 1; Issue IV, Goal 2, Objective 1
Monitoring and evaluation of juvenile Gulf of Mexico Sturgeon habitats, status, and trends from FL waters	\$724,061	FWC	Issue II, Goal 1, Objective 1; Issue IV, Goal 1, Objective 1
Pre- and Post-restoration Assessment of FL Gulf Coast River Ecosystems	\$3,592,230	FWC	Issue I, Goal 1, Objective 1; Issue II, Goal 1, Objective 1; Issue IV, Goal 1, Objective 1; Issue IV, Goal 2, Objective 1
Blackwater Hatchery Renovation and Expansion	NA	FWC	Issue II, Goal 1, Objective 1; Issue IV, Goal 1, Objective 1; Issue IV, Goal 2, Objective 1; Issue IV, Goal 3, Objective 1

Other Requirements

E.1 / Acquisition and Restoration Council Management Plan Compliance Checklist

Land Management Plan Compliance Checklist Required for State-owned conservation lands over 160 acres			
Item #	Requirement	Statute/Rule	Pg#/App
Section A: Acquisition Information Items			
1	The common name of the property.	18-2.018 & 18-2.021	Ex. Sum.
2	The land acquisition program, if any, under which the property was acquired.	18-2.018 & 18-2.021	p. 1
3	Degree of title interest held by the Board, including reservations and encumbrances such as leases.	18-2.021	p. 1, 6-8
4	The legal description and acreage of the property.	18-2.018 & 18-2.021	Ex. Sum & p. 11
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	p. 11
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	N/A
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	N/A
8	Identification of adjacent land uses that conflict with the planned use of the property, if any.	18-2.021	p. 22
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)	p. 6
10	Proximity of property to other significant State, local or federal land or water resources.	18-2.021	p. 14, 21-22
Section B: Use Items			
11	The designated single use or multiple use management for the property, including use by other managing entities.	18-2.018 & 18-2.021	p. 11
12	A description of past and existing uses, including any unauthorized uses of the property.	18-2.018 & 18-2.021	p. 9-10, 19, 32
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	N/A
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	p. 6-8, 23-31
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	p. 19, App. E.2
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	p. 26
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)	p. 30-31
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	p. 6-8
19	Letter of compliance from the local government stating that the LMP is in compliance with the Local Government Comprehensive Plan.	BOT requirement	App. E.3

**Land Management Plan Compliance Checklist
Required for State-owned conservation lands over 160 acres**

Item #	Requirement	Statute/Rule	Pg#/App
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	p. 12-14, 23-31
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	N/A
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	N/A
23	A statement regarding incompatible use in reference to Ch. 253.034(10).	253.034(10)	p. 30-31

*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

24	A statement concerning the extent of public involvement and local government participation in the development of the plan, if any.	18-2.021	App. C
25	The management prospectus required pursuant to paragraph (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	259.032(10)	N/A
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)	App. C
27	Summary of comments and concerns expressed by the advisory group for parcels over 160 acres	18-2.021	App. C
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)	App. C
29	The manager shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. Include manager's replies to the team's findings and recommendations.	259.036	N/A
30	Summary of comments and concerns expressed by the management review team, if required by Section 259.036, F.S.	18-2.021	N/A

**Land Management Plan Compliance Checklist
Required for State-owned conservation lands over 160 acres**

Item #	Requirement	Statute/Rule	Pg#/App
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	N/A
Section D: Natural Resources			
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	p. 12-14
33	Insert FNAI based natural community maps when available.	ARC consensus	p. 16
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	Ex. Sum
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	p. 14, 16-18, 20
36	Location and description of known and reasonably identifiable renewable and non-renewable resources of the property regarding beaches and dunes.	18-2.021	N/A
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	p. 12-14
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	p. 16-19, App. B.3.1
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	p. 16-19, App. B.3.2
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	p. 16-18
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)	p. 16-19, 31-40, App. E.2
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.	259.032(10) & 253.034(5)	p. 16-19, 23-31
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.	259.032(10) & 253.034(5)	App. D.1
42-C.	The associated measurable objectives to achieve the goals.	259.032(10) & 253.034(5)	p. 23-31, App. D.1
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.	259.032(10) & 253.034(5)	App. D.1
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.	259.032(10) & 253.034(5)	App. D.1
43	***Quantitative data description of the land regarding an inventory of forest and other natural resources and associated acreage. See footnote.	253.034(5)	Ex. Sum

**Land Management Plan Compliance Checklist
Required for State-owned conservation lands over 160 acres**

Item #	Requirement	Statute/Rule	Pg#/App
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).	18-2.021, 253.034(5) & 259.032(10)	N/A
44-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	18-2.021, 253.034(5) & 259.032(10)	N/A
44-C.	Measurable objectives (see requirement for #42-C).	18-2.021, 253.034(5) & 259.032(10)	N/A
44-D.	Related activities (see requirement for #42-D).	18-2.021, 253.034(5) & 259.032(10)	N/A
44-E.	Budgets (see requirement for #42-E).	18-2.021, 253.034(5) & 259.032(10)	N/A
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).	259.032(10) & 253.034(5)	p. 18-19, 25-27, 31
45-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	App. D.1
45-C.	Measurable objectives (see requirement for #42-C).	259.032(10) & 253.034(5)	p. 25-27, 31, App. D.1
45-D.	Related activities (see requirement for #42-D).	259.032(10) & 253.034(5)	App. D.1
45-E.	Budgets (see requirement for #42-E).	259.032(10) & 253.034(5)	App. D.1
46	***Quantitative data description of the land regarding an inventory of exotic and invasive plants and associated acreage. See footnote.	253.034(5)	p. 19, App. B.3.3
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	App. B.4
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).	259.032(10) & 253.034(5)	p. 19, 25-27, 31, App. D.1
48-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	p. 19, 25-27, 31, App. D.1
48-C.	Measurable objectives (see requirement for #42-C).	259.032(10) & 253.034(5)	p. 19, 25-27, 31, App. D.1
48-D.	Related activities (see requirement for #42-D).	259.032(10) & 253.034(5)	p. 19, 25-27, 31, App. D.1
48-E.	Budgets (see requirement for #42-E).	259.032(10) & 253.034(5)	App. D.1

Section E: Water Resources

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	p. 1-4
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**Land Management Plan Compliance Checklist
Required for State-owned conservation lands over 160 acres**

Item #	Requirement	Statute/Rule	Pg#/App
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	p. 1-4, 14
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	p. 16-18
52	***Quantitative description of the land regarding an inventory of hydrological features and associated acreage. See footnote.	253.034(5)	Ex. Sum
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).	259.032(10) & 253.034(5)	p. 23-31, App. D.1
53-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	p. 23-31, App. D.1
53-C.	Measurable objectives (see requirement for #42-C).	259.032(10) & 253.034(5)	p. 23-31, App. D.1
53-D.	Related activities (see requirement for #42-D).	259.032(10) & 253.034(5)	p. 23-31, App. D.1
53-E.	Budgets (see requirement for #42-E).	259.032(10) & 253.034(5)	App. D.1

Section F: Historical, Archaeological and Cultural Resources

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	Ex. Sum, p. 19
55	***Quantitative data description of the land regarding an inventory of significant land, cultural or historical features and associated acreage.	253.034(5)	Ex. Sum, p. 19
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	p. 19, 28, App. E.2
57	Cultural and Historical Resources	259.032(10) & 253.034(5)	p.19-21
57-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	259.032(10) & 253.034(5)	p. 19, App. E.2
57-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	p. 19, App. E.2
57-C.	Measurable objectives (see requirement for #42-C).	259.032(10) & 253.034(5)	p. 19, App. E.2
57-D.	Related activities (see requirement for #42-D).	259.032(10) & 253.034(5)	p. 19, App. E.2
57-E.	Budgets (see requirement for #42-E).	259.032(10) & 253.034(5)	App. D.1

**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)

58	***Quantitative data description of the land regarding an inventory of infrastructure and associated acreage. See footnote.	253.034(5)	p. 35-36
59	Capital Facilities and Infrastructure	259.032(10) & 253.034(5)	

**Land Management Plan Compliance Checklist
Required for State-owned conservation lands over 160 acres**

Item #	Requirement	Statute/Rule	Pg#/App
59-A.	Management needs, problems and a desired outcome (see requirement for # 42-A).	259.032(10) & 253.034(5)	p. 35-36, App. D.1
59-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	App. D.1
59-C.	Measurable objectives (see requirement for #42-C).	259.032(10) & 253.034(5)	App. D.1
59-D.	Related activities (see requirement for #42-D).	259.032(10) & 253.034(5)	App. D.1
59-E.	Budgets (see requirement for #42-E).	259.032(10) & 253.034(5)	App. D.1
60	*** Quantitative data description of the land regarding an inventory of recreational facilities and associated acreage.	253.034(5)	p. 29-31
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).	259.032(10) & 253.034(5)	p. 29-31, App. D.1
61-B.	Detailed description of both short and long-term management goals (see requirement for # 42-B).	259.032(10) & 253.034(5)	p. 29-31, App. D.1
61-C.	Measurable objectives (see requirement for #42-C).	259.032(10) & 253.034(5)	p. 29-31, App. D.1
61-D.	Related activities (see requirement for #42-D).	259.032(10) & 253.034(5)	p. 29-31, App. D.1
61-E.	Budgets (see requirement for #42-E).	259.032(10) & 253.034(5)	p. 29-31, App. D.1

Section H: Other/ Managing Agency Tools

62	Place this LMP Compliance Checklist at the front of the plan.	ARC and managing agency consensus	Front & App. E.1
63	Place the Executive Summary at the front of the LMP. Include a physical description of the land.	ARC and 253.034(5)	Ex. Sum
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	App. D.3
65	Key management activities necessary to achieve the desired outcomes regarding other appropriate resource management.	259.032(10)	p. 23-31
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)	App. D.1
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)	App. D.1
68	A statement of gross income generated, net income and expenses.	18-2.018	N/A

*** = 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.

E.2 / Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Lands (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: 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: 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



Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard, MS 235
Tallahassee, Florida 32399-3000

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

April 2018

Elliot Kampert, Director
Okaloosa County Department of Growth Management
1250 N. Eglin Parkway, Suite 301
Shalimar, FL 32579

Dear Mr. Kampert:

Attached is a copy of the draft Rocky Bayou Aquatic Preserve Management Plan. (The plan can also be found at <https://floridadep.gov/fco/fco/content/florida-coastal-office-site-management-plans>.) The plan was developed with input from the public and the Rocky Bayou Aquatic Preserve Management Plan Advisory Group. We anticipate the plan being reviewed by the Acquisition and Restoration Council at their August 2018 meeting in Tallahassee (<https://floridadep.gov/lands/environmental-services/content/acquisition-and-restoration-council-arc>). We respectfully request, within 30 days of receipt of this letter, your review of this aquatic preserve management plan for its compliance with the Okaloosa County Comprehensive Plan. Please reply to the physical address at the top of the letter (or e-mail address) regarding whether the Rocky Bayou Aquatic Preserve Management Plan is in compliance with the county's comprehensive plan. Thank you in advance for your time and effort in this matter.

If you have any questions, please don't hesitate to contact me at (850)245-2104 or Earl.Pearson@floridadep.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Earl P.", with a long horizontal flourish extending to the right.

Earl Pearson
Planning Manager
Florida Coastal Office



Growth Management Department
1250 N Eglin Parkway
Shalimar, FL 32579
Tel. 850-651-7180 7180 Fax 850-651-7706

July 24, 2018

Mr. Earl Pearson
Planning Manager/Florida Coastal Office
Florida Department of Environmental Protection
Marjory Stoneman Douglas Building
3900 Commonwealth Blvd MS 235
Tallahassee, FL 32399-3000

Re: Rocky Bayou Aquatic Preserve Management Plan

Dear Mr. Pearson,

Thank you for providing the opportunity to review the April 2018 Rocky Bayou Aquatic Preserve Management Plan (RBAPMP). I have reviewed the document, and I am pleased to advise you that it is consistent with the 2009 Okaloosa County Comprehensive Plan. Specifically, the plan as written addresses several of the Goals, Objectives, and Policies of the Comprehensive Plan including the Goal and Objectives 5 and 8 of the Future Land Use Element; the Goal, Objective 1.2, and Policy 1.2.7 of the Coastal Management Element; and the Goal, Objective 4, Policy 4.2, and Objective 7 of the Conservation Element.

Thank you again for this opportunity. Please let me know if I may be of any further assistance.

Sincerely,

Elliot L. Kampert, AICP
Growth Management Director

Page 1 of 1



FLORIDA DEPARTMENT OF Environmental Protection

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

Rick Scott
Governor
Carlos Lopez-Cantera
Lt. Governor
Noah Valenstein
Secretary

August 30, 2018

Mr. Earl Pearson
Florida Coastal Office
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, MS 235
Tallahassee, Florida 32399-3000

RE: Rocky Bayou Aquatic Preserve Management Plan

Dear Mr. Pearson:

On **August 24, 2018**, the Acquisition and Restoration Council recommended approval of the **Rocky Bayou Aquatic Preserve** management plan. Please advise Mr. James Parker of this office when the plan has been approved by the Board of Trustees.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ray Spaulding", is written over the typed name.

Raymond V. Spaulding
Chief, Office of Environmental Services
Division of State Lands
Department of Environmental Protection



**Rocky Bayou Aquatic Preserve
Management Plan**

**Florida Department of Environmental Protection
Florida Coastal Office**

3900 Commonwealth Blvd., MS #235
Tallahassee, FL 32399 • www.aquaticpreserves.org