FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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SECRETARY

April 21, 2014

Ms. Jennifer Carver
Planning Manager
Office of Park Planning, Division of Recreation and Parks
Department of Environmental Protection
3900 Commonwealth Boulevard, MS 525
Tallahassee, FL 32399-3000

Re: Anclote Key Preserve State Park – Lease # 2564

Dear Ms. Carver:

The Division of State Lands, Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund, hereby approves the Anclote Key Preserve State Park management plan. The next management plan update is due April 21, 2024.

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

Sincerely,

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

Anclote Key Preserve State Park

APPROVED

Unit Management Plan

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Recreation and Parks

April 2014

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INTRODUCTION

Anclote Key Preserve State Park is located in the Gulf of Mexico, three miles offshore near Tarpon Springs in western Pasco and Pinellas Counties (see Vicinity Map). It consists of several barrier islands of varying size and shape. Besides the island of Anclote Key, there is Three Rooker Island, about three miles south of Anclote Key. Three Rooker Island and the southern tip of Anclote Key are in Pinellas County, while the remainder of Anclote Key is in Pasco County. Access to the preserve is by boat only (see Reference Map). Development is restricted to the minimum necessary for user safety and natural resource interpretation.

The initial 102.00-acre property that became Anclote Key Preserve State Park was acquired on July 1, 1960. Anclote Key itself was acquired by trade with the U.S. Government for state land in the J.N. "Ding" Darling National Wildlife Refuge. Currently the park contains approximately 403 upland acres and 11,774 submerged acres. Due to the dynamic nature of these barrier islands, upland and submerged acreages are subject to frequent gain and loss by natural processes of accretion and erosion. On November 22, 1971, the Board of Trustees of the Internal Improvement Trust Fund (Trustees) conveyed its management authority of Anclote Key Preserve State Park to the DRP under Lease No. 2564. The Trustees lease stipulates that all the property be used for public outdoor recreation and related purposes. The lease is for a period of ninety-nine (99) years, and it will expire on November 22, 2070.

At Anclote Key Preserve State Park, public outdoor recreation is the designated single use of the property (see Addendum 1). There are no legislative or executive directives that constrain the use of this property.

PURPOSE AND SIGNIFICANCE OF THE PARK

Anclote Key Preserve State Park was acquired in order to preserve a representative example of the natural and cultural history of the State of Florida as well as to provide public outdoor recreation, and historic interpretation. The purpose of the acquisition was to preserve, a representative example of the natural and cultural history of the State of Florida. As well as to protect, develop, operate, and maintain the property for public outdoor recreation, conservation, historic interpretation, and related purposes to support the tourism industry of Florida.

Park Significance

- A relatively young barrier island at only 1,000 years old, Anclote Key remains largely undeveloped, located three miles offshore along the Gulf Coast of Florida.
- With over seven miles of undeveloped white sand beaches, the park is a critical destination for nesting sea turtles, nesting seabirds, wading birds, and shorebirds.

- The park boundary encompasses over 11,000 acres of submerged land surrounding Anclote Key, providing seagrass and hard bottom habitat for imperiled animal species, including the West Indian manatee, and critically imperiled Atlantic hawksbill (*Eretmochelys i. imbricate*) and Kemp's ridley (*Lepiodochelys kempii*) sea turtles.

- Anclote Key Lighthouse, a 110-foot cast iron plate sentry that stands watch over the Preserve was first constructed in 1887 and restored and relit in 2003. It still serves today as an aid to maritime navigation.

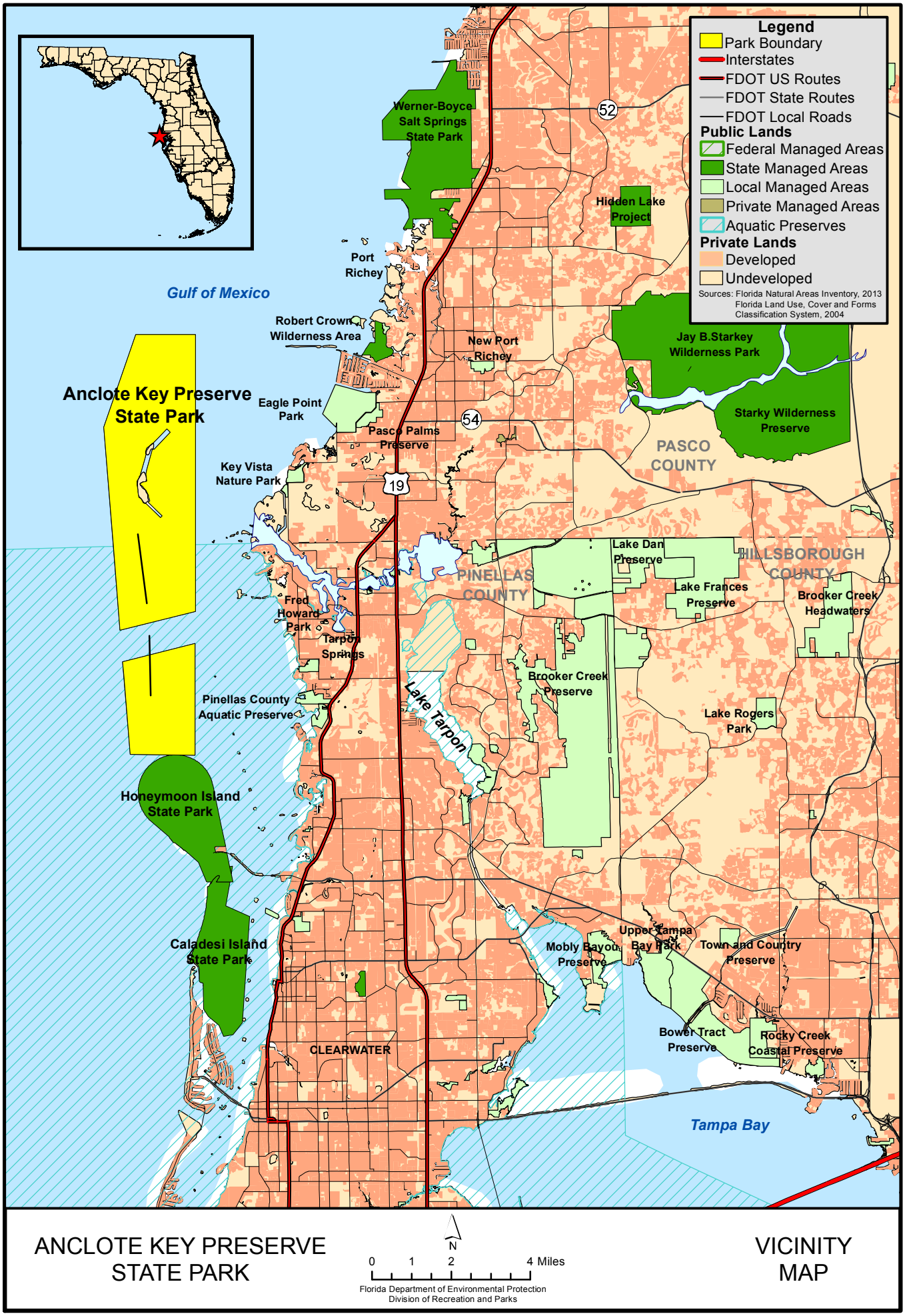
- The park provides valuable interpretive, educational, and outdoor recreational opportunities to over 170,000 of Florida's residents and visitors each year through public access facilities and interpretive programs at the Preserve.

Anclote Key Preserve State Park is classified as a State Preserve in the DRP's unit classification system. In the management of a preserve, preservation and enhancement of natural conditions is all important. Resource considerations are given priority over user considerations and development is restricted to the minimum necessary for ensuring its protection and maintenance, limited access, user safety and convenience, and appropriate interpretation. Permitted uses are primarily of a passive nature, related to the aesthetic, educational, and recreational enjoyment of the preserve, although other compatible uses are permitted in limited amounts. Program emphasis is placed on interpretation of the natural and cultural attributes of the preserve.

PURPOSE AND SCOPE OF THE PLAN

This plan serves as the basic statement of policy and direction for the management of Anclote Key Preserve State Park as a unit of Florida's state park system. It identifies the goals, objectives, actions, and criteria or standards that guide each aspect of park administration, and sets forth the specific measures that will be implemented to meet management objectives. The plan is intended to meet the requirements of Sections 253.034 and 259.032, Florida Statutes, Chapter 18-2, Florida Administrative Code, and is intended to be consistent with the State Lands Management Plan. With approval, this management plan will replace the 2001 approved plan.

The plan consists of three interrelated components: the Resource Management Component, the Land Use Component and the Implementation Component. The Resource Management Component provides a detailed inventory and assessment of the natural and cultural resources of the park. Resource management needs and issues are identified, and measurable management objectives are established for each of the park's management goals and resource types. This component provides guidance on the application of such measures as prescribed burning, exotic species removal, imperiled species management, cultural resource management, and restoration of natural conditions.


Legend
Park Boundary
Interstates
FDOT US Routes
FDOT State Routes
FDOT Local Roads
Public Lands
Federal Managed Areas
State Managed Areas
Local Managed Areas
Private Managed Areas
Aquatic Preserves
Private Lands
Developed
Undeveloped
Sources: Florida Natural Areas Inventory, 2013
Florida Land Use, Cover and Forms Classification System, 2004
Gulf of Mexico
Anclote Key Preserve State Park
Honeymoon Island State Park
Caladesi Island State Park
Pinellas County Aquatic Preserve
Werner-Boyce Salt Springs State Park
Port Richey
Robert Crown Wilderness Area
New Port Richey
Eagle Point Park
Pasco Palms Preserve
Key Vista Nature Park
Hidden Lake Project
Jay B.Starkey Wilderness Park
Starky Wilderness Preserve
PASCO COUNTY
PINELLAS COUNTY
HILLSBOROUGH COUNTY
Lake Dan Preserve
Lake Frances Preserve
Brooker Creek Headwaters
Brooker Creek Preserve
Fred Howard Park
Tarpon Springs
Lake Tarpon
Lake Rogers Park
Upper Tampa Bay Park
Mobly Bayou Preserve
Town and Country Preserve
Bower Tract Preserve
Rocky Creek Coastal Preserve
CLEARWATER
Tampa Bay
52
54
19
ANCLOTE KEY PRESERVE STATE PARK
N
0 1 2 4 Miles
Florida Department of Environmental Protection
Division of Recreation and Parks
VICINITY MAP

Legend

- Park Boundary
- Primitive Campsites
- Aquatic Preserve
- County Line

NORTH ANCLOTE BAR

NORTH KEY

DUTCHMAN KEY

ANCLOTE KEY

GULF OF MEXICO

ANCLOTE ANCHORAGE

PASCO COUNTY

PINELLAS COUNTY

LIGHTHOUSE

ANCLOTE RIVER

TARPON SPRINGS

HOWARD PARK

ST. JOSEPH SOUND

THREE ROOKER ISLAND

HONEYMOON ISLAND STATE PARK

ANCLOTE KEY PRESERVE STATE PARK

N

0 0.5 1 2 Miles

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF RECREATION AND PARKS
OFFICE OF PARK PLANNING

REFERENCE MAP

The Land Use Component is the recreational resource allocation plan for the park. Based on considerations such as access, population, adjacent land uses, the natural and cultural resources of the park, current public uses, and existing development, measurable objectives are set to achieve the desired allocation of the physical space of the park. These objectives locate use areas and propose the types of facilities and programs and the volume of public use to be provided.

The Implementation Component consolidates the measurable objectives and actions for each of the park's management goals. An implementation schedule and cost estimates are included for each objective and action. Included in this table are (1) measures that will be used to evaluate the DRP's implementation progress, (2) timeframes for completing actions and objectives, and (3) estimated costs to complete each action and objective.

All development and resource alteration proposed in this plan is subject to the granting of appropriate permits, easements, licenses, and other required legal instruments. Approval of the management plan does not constitute an exemption from complying with the appropriate local, state, or federal agencies.

In the development of this plan, the potential of the park to accommodate secondary management purposes was analyzed. These secondary purposes were considered within the context of the DRP's statutory responsibilities and the resource needs and values of the park. This analysis considered the park natural and cultural resources, management needs, aesthetic values, visitation, and visitor experiences. For this park, it was determined that no secondary purposes could be accommodated in a manner that would not interfere with the primary purpose of resource-based outdoor recreation and conservation. Uses such as water resource development projects, water supply projects, stormwater management projects, linear facilities, and sustainable agriculture and forestry (other than those forest management activities specifically identified in this plan) are not consistent with this plan.

The potential for generating revenue to enhance management was also analyzed. Special use permits and charges are the principal source of revenue generated by the park. It was determined that multiple-use management activities would not be appropriate as a means of generating revenues for land management. Instead, techniques such as entrance fees, concessions, and similar measures will be employed on a case-by-case basis as a means of supplementing park management funding.

The use of private land managers to facilitate restoration and management of this park was also analyzed. Decisions regarding this type of management (such as outsourcing, contracting with the private sector, use of volunteers, etc.) will be made on a case-by-case basis as necessity dictates.

MANAGEMENT PROGRAM OVERVIEW

Management Authority and Responsibility

In accordance with Chapter 258, Florida Statutes and Chapter 62D-2, Florida Administrative Code, the DRP is charged with the responsibility of developing and operating Florida's recreation and parks system. These are administered in accordance with the following policy:

> It shall be the policy of the Division of Recreation and Parks to promote the state park system for the use, enjoyment, and benefit of the people of Florida and visitors; to acquire typical portions of the original domain of the state which will be accessible to all of the people, and of such character as to emblemize the state's natural values; conserve these natural values for all time; administer the development, use and maintenance of these lands and render such public service in so doing, in such a manner as to enable the people of Florida and visitors to enjoy these values without depleting them; to contribute materially to the development of a strong mental, moral, and physical fiber in the people; to provide for perpetual preservation of historic sites and memorials of statewide significance and interpretation of their history to the people; to contribute to the tourist appeal of Florida.

The Trustees have granted management authority of certain sovereign submerged lands to the DRP under Management Agreement MA 68-086 (as amended January 19, 1988). The management area includes a 400-foot zone from the edge of mean high water where a park boundary borders sovereign submerged lands fronting beaches, bays, estuarine areas, rivers, or streams. Where emergent wetland vegetation exists, the zone extends waterward 400 feet beyond the vegetation. The agreement is intended to provide additional protection to resources of the park and nearshore areas and to provide authority to manage activities that could adversely affect public recreational uses.

Many operating procedures are standardized system-wide and are set by internal direction. These procedures are outlined in the DRP's Operations Manual (OM) that covers such areas as personnel management, uniforms and personal appearance, training, signs, communications, fiscal procedures, interpretation, concessions, public use regulations, resource management, law enforcement, protection, safety, and maintenance.

Park Management Goals

The following park goals express the DRP's long-term intent in managing the state park.

1. Provide administrative support for all park functions.

2. Protect water quality and quantity in the park, restore hydrology to the extent feasible, and maintain the restored condition.

3. Restore and maintain the natural communities/habitats of the park.

4. Maintain, improve, or restore imperiled species populations and habitats in the park.

5. Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.

6. Protect, preserve, and maintain the cultural resources of the park.

7. Provide public access and recreational opportunities in the park.

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

Management Coordination

The park is managed in accordance with all applicable laws and administrative rules. Agencies having a major or direct role in the management of the park are discussed in this plan.

The Florida Department of Agriculture and Consumer Services (FDACS), Florida Forest Service (FFS), assists DRP staff in the development of wildfire emergency plans and provides the authorization required for prescribed burning. The Florida Fish and Wildlife Conservation Commission (FFWCC), assists staff in the enforcement of state laws pertaining to wildlife, freshwater fish, and other aquatic life existing within the park. The Florida Department of State (FDOS), Division of Historical Resources (DHR) assists staff to ensure protection of archaeological and historical sites. The Florida Department of Environmental Protection (DEP), Florida Coastal Office (FCO) aids staff in aquatic preserves management programs. The DEP Bureau of Beaches and Coastal Systems aids staff in planning and construction activities seaward of the Coastal Construction Line. In addition, the Bureau of Beaches and Coastal Systems aids the staff in the development of erosion control projects.

Public Participation

The DRP provided an opportunity for public input by conducting a public workshop and an Advisory Group Meeting to present the draft management plan to the public. These meetings were held on Tuesday, November 5th, 2013 and Wednesday, November 6th, 2013, respectively. Meeting notices were published in the Florida Administrative Weekly, Monday, October 28th, Volume 29, Issue 211, included on the Department Internet Calendar, posted in clear view at the park, and promoted locally. The purpose of the Advisory Group meeting is to provide the Advisory Group members an opportunity to discuss the draft management plan (see Addendum 2).

Other Designations

Anclote Key Preserve State Park is not within and has not been designated as an area of critical State concern as defined in section 380.05, Florida Statutes. Currently it is not under study for such designation.

All waters within the unit have been designated as Outstanding Florida Waters, pursuant to Chapter 62-302 Florida Administrative Code. Surface waters in this unit are also classified as Class III by DEP. The portions of this unit in Pinellas County are adjacent to the Pinellas County Aquatic Preserve, as designated under provision of the Florida Aquatic Preserve Act of 1975 (section 258.35, Florida Statutes).

RESOURCE MANAGEMENT COMPONENT

INTRODUCTION

The Florida Department of Environmental Protection (DEP), Division of Recreation and Parks (DRP), in accordance with Chapter 258, Florida Statutes, has implemented resource management programs for preserving, for all time, the representative examples of natural and cultural resources of statewide significance under its administration. This component of the unit management plan describes the natural and cultural resources of the park and identifies the methods that will be used to manage them. Management measures expressed in this plan are consistent with DEP's overall mission in ecosystem management. Cited references are contained in Addendum 3.

DRP's philosophy of resource management is natural systems management. Primary emphasis is placed on restoring and maintaining, to the degree possible, the natural processes that shaped the structure, function, and species composition of Florida's diverse natural communities as they occurred in the original domain. Single species management for imperiled species is appropriate in state parks when the maintenance, recovery, or restoration of a species or population is complicated due to constraints associated with long-term restoration efforts, unnaturally high mortality, or insufficient habitat. Single species management should be compatible with the maintenance and restoration of natural processes, and should not imperil other native species or seriously compromise park values.

DRP's management goal for cultural resources is to preserve sites and objects that represent Florida's cultural periods and significant historic events or persons. This goal often entails active measures to stabilize, reconstruct or restore resources, or to rehabilitate them for appropriate public use.

Because park units are often components of larger ecosystems, their proper management can be affected by conditions and events that occur beyond park boundaries. Ecosystem management is implemented through a resource management evaluation program that assesses resource conditions, evaluates management activities, refines management actions, and reviews local comprehensive plans and development permit applications for park/ecosystem impacts.

The entire park is divided into management zones that delineate areas that are used to reference management activities (see Management Zones Map). The shape and size of each zone may be based on natural community type, burn zone, and the location of existing roads and natural fire breaks. It is important to note that all burn zones are management zones; however, not all management zones include fire-dependent natural communities. Table 1 reflects the management zones with the acreage.

Table 1: Anclote Key Preserve State Park Management Zones

Management Zone	Acreage	Managed with Prescribed Fire
AK-1	174.56	Yes
AK-2	57.59	No
AK-3	43.88	No

AK-4	53.47	No
AK-5	28.61	Yes
AK-6	47.20	No
AK-7	129.51	No
AK-8	8,709.37	No
AK-NB	75.35	No
AK-3RB_N	55.93	No
AK-3RB_S	149.19	No
AK-3RB_W	2,683.59	No

RESOURCE DESCRIPTION AND ASSESSMENT

Natural Resources

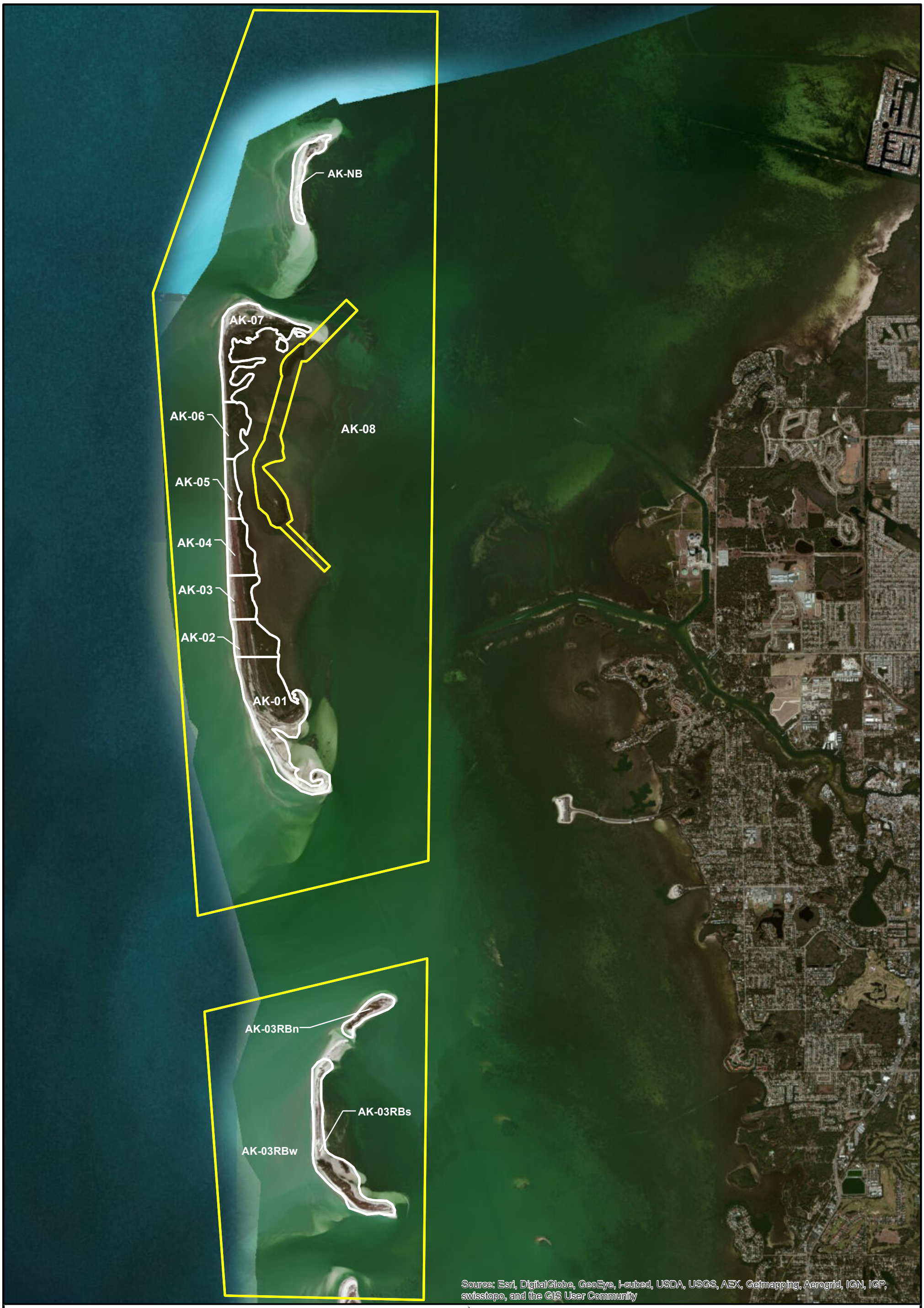
Topography

Anclote Key Preserve State Park is located in the Gulf Coastal Lagoons and Barrier Chain subzone of the Coastal Lowlands physiographic region. The elevation of the park ranges from mean sea level to about 6.5 feet (2 meters) on Anclote Key, and somewhat lower on Three Rooker Island, which currently includes North Island and South Island. The elevation of North Anclote Bar, north of Anclote Key, is also somewhat lower. Anclote Key has not suffered significant overwash since at least 1921, when a washout caused by a hurricane separated Honeymoon and Caladesi Islands, which are to the south. The highest elevations tend to be on berms, which have been deposited parallel to the shoreline and mark the landward extent of the beach dune community.

Geology

A Miocene limestone platform underlies Anclote Key and is covered by a few feet of muddy sand of the Pleistocene and Holocene strata. This underlying limestone was instrumental in stabilizing Anclote Key at its present position. In its current configuration, Anclote Key can be considered 1000 years old (Kuhn 1983). Extensive geological work conducted on Anclote Key suggests a possible sequence of events in the origin and evolution of this barrier island (Davis and Kuhn 1985). The Miocene bedrock ridge that underlies Anclote Key is a quartzone fossiliferous packstone of the Tampa formation. This base was exposed above water for an indeterminate amount of time after it was lithified. The origin of the bedrock configuration possibly developed during the Illinois glaciation when sea level was 300 feet (92 m) below its present position, and the shoreline of peninsular Florida was about 320 miles (515 km) west of its present position. During later ages, Anclote Key alternately submerged and emerged with the advance and retreat of the glaciers.

Radiometric dating of materials indicates an intertidal zone dominated by mangrove swamp and salt marsh communities was present from approximately 4000 years BP to 2000 years BP during the Holocene. Aeolian sedimentation eventually became an important part of the system. Accretion of sand accompanied by a rise in sea level from 2000 years BP to the present created the ancestral Anclote Key.



ANCLOTE KEY PRESERVE
STATE PARK

N

0 0.25 0.5 1 Mile

Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial; 2011

MANAGEMENT ZONES MAP

Longshore currents caused the longitudinal extension of the island. Global climate change and expected sea level rise will probably, in the future, significantly affect the islands and bars of Anclote Key Preserve State Park (Wanless 2003). Anclote Key is the northernmost of 29 barrier islands on the west peninsular coast of Florida (Randazzo and Jones 1997).

Major geomorphological changes in the length of Anclote Key have taken place within the last 40 years (Hine et al. 1987). The barrier island has grown by 3,600 feet (1100 meters) or by approximately 30 percent of its pre-1957 length. The loss of substantial seagrass beds, which existed in the shore face and inner shelf seaward of this island, apparently triggered the migration of sandbars toward the island. Nearshore sands were eventually carried to the surf zone and transported mostly to the north by the long-shore current system. A substantial spit has formed and reformed to the north in just the last 25 years. Within the past decade, the south end of the island has accreted as well to form a large spit curving southeast.

Similarly, loss of seagrass beds immediately seaward of Honeymoon Island may have resulted in the large amounts of sediment deposited between it and Anclote Key (Davis et al. 1985). A large shoal in this area emerged as Three Rooker Island over the last several decades. At times, Three Rooker is one long island. After storm events, the island has split into two to three separate islands. It exemplifies the dynamics of barrier island formation.

Soils

Anclote Key Preserve State Park occurs in two counties, Pinellas and Pasco, and information on soils is drawn from both County Soil surveys. Soil types are numbered in the Pasco County atlas, and they are given alphabetic designations in the Pinellas County atlas. Three soil types (see Soils Map) are found on Anclote Key Preserve State Park: Coastal beaches (Co) or Beaches (75); Tidal Swamp (Ts) or Bessie Muck (76); and St. Lucie fine sand with a shell substratum (Su). Coastal beaches (Co) or Beaches (75) soils are natural deposits of tide-washed permeable sand found along the western and northern edges of Anclote Key and Three Rooker Island. Tidal action and waves produce daily changes in beach shape while storm tide, high waves, and strong winds cause major changes in topography and geomorphology due to erosion and re-deposition of beach materials. Addendum 3 contains detailed descriptions of the soil types for this unit. Also included with beaches in soil maps of Anclote Key are the landward sections of the beaches, which are slightly more elevated and not covered by water except during times of high storm tides (Pasco and Pinellas Counties 2006).

Tidal Swamp or Bessie Muck (76) is the soil underlying mangrove swamps and tidal marshes at Anclote Key Preserve State Park. It is found mainly on the eastern side of the islands and is subject to daily tidal flooding. Storm tides entirely inundate the mapped area for this soil type.

St. Lucie fine sand with a shell substratum (Su) consists of nearly level to gently sloping, excessively drained sand soils that form in beds of nearly pure quartz marine sand. The lighthouse and adjacent areas on Anclote Key are located on this mature soil type. There are no soil conservation or soil erosion issues at this park.

Minerals

There are no known mineral resources at Anclote Key Preserve State Park.

Hydrology

There is no permanent surface water in the park. Ephemeral ponds ("cat's-eye ponds") are common in the accreting ridge and runnel systems on the north and south tips of Anclote Key. Where a primitive camping area was established near the lighthouse location, a well had been dug to supply potable water. For a short time, the well supplied water to the ranger residence. A reverse osmosis system has been installed and the well is no longer used. The preserve is not adversely affected by shoreline erosion. There are no hydrological concerns at the park.

Natural Communities

This section of the management plan describes and assesses each of the natural communities found in the state park. It also describes of the desired future condition (DFC) of each natural community and identifies the actions that will be required to bring the community to its desired future condition. Specific management objectives and actions for natural community management, exotic species management, and imperiled species management are discussed in the Resource Management Program section of this component.

The system of classifying natural communities employed in this plan was developed by the Florida Natural Areas Inventory (FNAI). The premise of this system is that physical factors such as climate, geology, soil, hydrology, and fire frequency generally determine the species composition of an area, and that areas that are similar with respect to those factors will tend to have natural communities with similar species compositions. Obvious differences in species composition can occur, however, despite similar physical conditions. In other instances, physical factors are substantially different, yet the species compositions are quite similar. For example, coastal strand and scrub--two communities with similar species compositions--generally have quite different climatic environments, and these necessitate different management programs. Some physical influences, such as fire frequency, may vary from FNAI's descriptions for certain natural communities in this plan.

When a natural community within a park reaches the desired future condition, it is considered to be in a "maintenance condition." Required actions for sustaining a community's maintenance condition may include, maintaining optimal fire return intervals for fire-dependent communities, ongoing control of non-native plant and animal species, maintaining natural hydrological functions (including historic water flows and water quality), preserving a community's biodiversity and vegetative structure, protecting viable populations of plant and animal species (including those that are imperiled or endemic), and preserving intact ecotones linking natural communities across the landscape.

The park contains eight distinct natural communities as well as developed areas (see Natural Communities Map). A list of known plants and animals occurring in the park is contained in Addendum 5.

ANCLOTE KEY PRESERVE
STATE PARK

N

0 0.25 0.5 1 Mile

Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial; 2011

SOILS MAP

BEACH DUNE

Desired Future Condition: A coastal mound or ridge of unconsolidated sediments will be found along shorelines with high-energy waves. Vegetation will consist of herbaceous, dune-forming grass species such as sea oats (*Uniola paniculata*) and saltmeadow cordgrass (*Spartina patens*). Other typical species may include sea rocket (*Cakile lanceolata*.), railroad vine (Ipomoea *pes-caprae*), seashore paspalum (*Paspalum vaginatum*), beach morning glory (*Ipomoea imperati*), and sand spur (*Cenchrus* spp.). Occasionally, shrubs such as seagrape (*Coccoloba uvifera*), may be scattered within the herbaceous vegetation.

Description and assessment: Comprised of wind-deposited foredune and wave-deposited upper beach, beach dune is one of the most dynamic communities recognized. It occupies the relatively high-energy western shoreline of Anclote Key and Three Rooker Island, and extends toward the mainland as sand spits at the north and south tips of these barrier islands. This community is characterized by the prevalence of pioneer species such as sea oats, saltmeadow cordgrass, bitter panicum (*Panicum amarum*), seashore paspalum (*Paspalum vaginatum*), beach elder (*Iva imbricata*), sea purslane (*Sesuvium portalacastrum*), and sea rocket In the recent past at Anclote Key, this community had been invaded by Australian pine (*Causarina equisetifolia*) to the extent that the exotic trees influenced the dynamics and succession of the beach dune community. Considering this extensive exotic invasion, the community was considered in fair condition. A major treatment in 2008 and several subsequent treatments have virtually eliminated Australian pine on the island. A persistent maintenance program has resulted in a manageable level of exotics. The native components have recovered rapidly and this community on Anclote Key is in excellent condition.

The beach dunes of North Anclote Bar and Three Rooker Island are often overwashed and, as a result, are less mature than the dunes found on Anclote Key.

General management measures: The dunes on Anclote Key are considered the most well-developed of the islands in the Park, because they receive less disturbance from overwash, which results in the establishment of successional vegetation that helps stabilize them. Maintenance control of exotic invasive vegetation should be continued and the level of infestation should diminish over time. The dunes of the other islands of the Park are less well-developed and provide essential nesting habitat for birds as they accrete after the winter. Minimizing human disturbance is an important management activity.

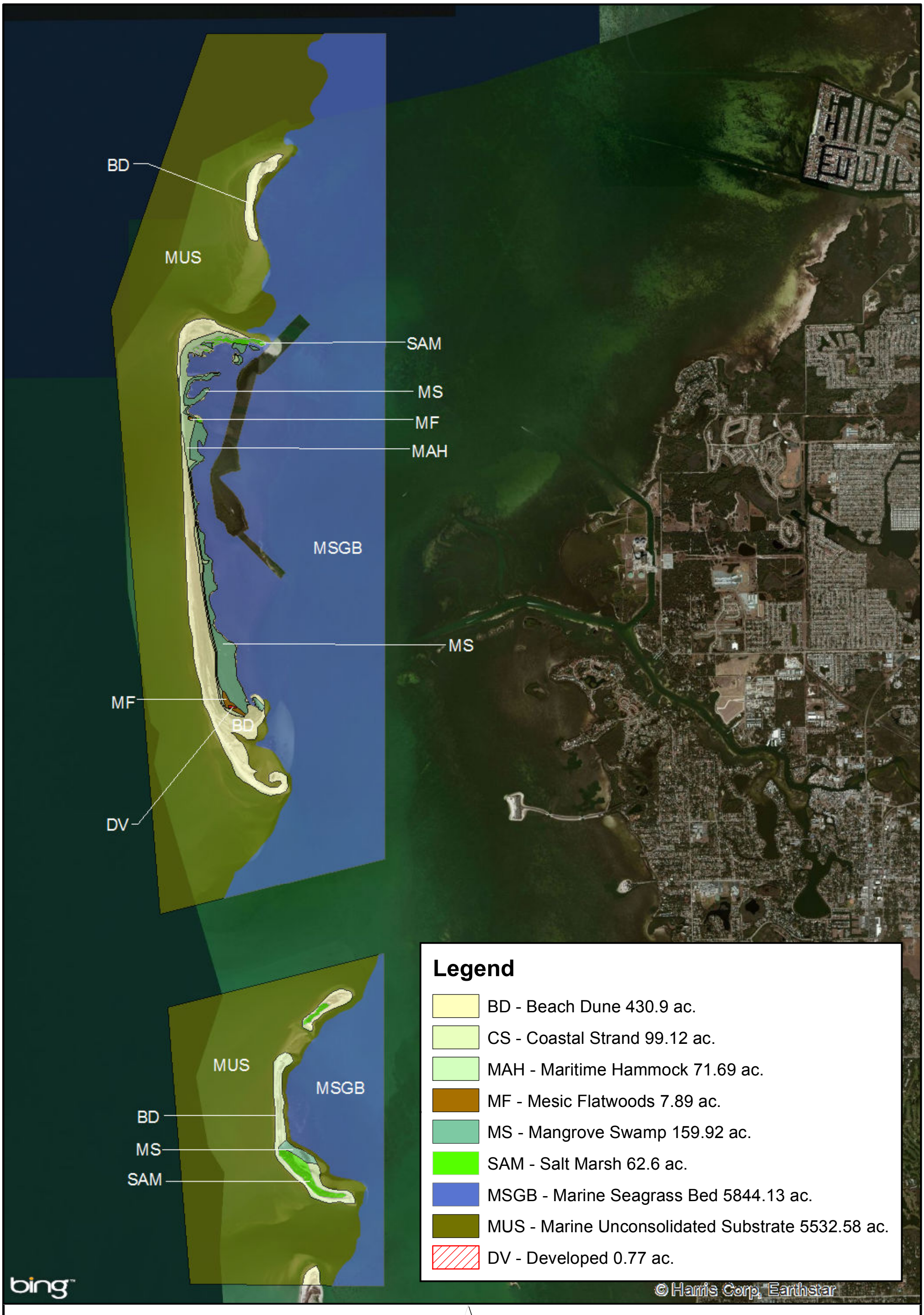
This community is very important for several imperiled shorebird species such as snowy plover (*Charadrius nivosus*), Wilson's plover (*Charadrius wilsonia*), and American oystercatcher (*Haematopus palliates*). Typically, recreational use should be excluded where nesting behavior is observed by posting signs and erecting barriers. This portion of the beach on Anclote Key is equally important to loggerhead (*Caretta caretta*) and Kemp's Ridley (*Lepidochelys kempii*) sea turtles for nesting. Daily nest surveys should continue to locate turtle nesting sites, and protective measures should be installed where needed to prevent raccoon predation. No documented sea turtle nesting has occurred on Three Rooker Island, though false crawls have been observed. The lack of nesting sea turtles is likely due to the very low profile of the island.

COASTAL STRAND

Desired Future Condition: Characterized by stabilized, wind-deposited coastal dunes that will be thickly vegetated with evergreen salt-tolerant shrubs. An ecotonal community generally lies between the beach dune and maritime hammock, scrub, or tidal swamp. Coastal strand dunes contain deep, well-drained sands that are generally quite stable but become susceptible to severe damage if the vegetation is significantly disturbed. Temperate plant species dominate including saw palmetto, (Serenoa repens), dwarfed cabbage palms, (*Sabal palmetto*), cocoplum (*Chrysobalanus icaco*), coinvine (*Dahlbergia ecastophyllum*), red cedar, (*Juniperus virginiana*), live oak, (*Quercus virginiana*), seagrape, myrsine (*Rapanea punctata*), snowberry (*Chiococca alba*), and numerous others. Smooth domed canopies develop as the taller vegetation is "pruned" by the windblown salt spray that kills the outer buds. This process is not as prevalent on the west coast of Florida or on the leeward side of islands due to prevailing easterly winds. Significant debate occurs about the relative frequency of natural fires on barrier islands compared to inland pyric communities. The Division of Recreation and Parks (DRP) Fire Management Standard estimates the appropriate fire return interval to be between 4 and 15 years. However, variability outside this range may occur based on site-specific conditions and management goals.

Description and assessment: At Anclote Key, this community occurs as a narrow linear zone of vegetation running the length of the island sandwiched between the beach dune community and maritime hammock. It is characterized by its placement along the highest ridge on the island, and by having some floristic components from the beach dune community and some from the maritime hammock community, as well as some unique salt-tolerant shrubs. Typical species include sea oats, cocoplum, cabbage palm, beach elder, sea grape, shell-mound prickly-pear (*Opuntia stricta*), poison ivy (*Toxicodendron radicans*), tall threeawn (*Aristida patula*), saffron plum (*Sideroxylon celastrinum*), coin vine, yellow necklace pod (*Sophora tomentosa var. truncata*), and strangler fig (*Ficus aurea*), as well as Brazilian pepper (*Schinus terebinthifolia*). Along most of its length, this community grades rapidly into beach dune on the seaward slope and maritime hammock on the opposite slope. At the island's narrowest sections, coastal strand grades directly to mangrove tidal swamp or unconsolidated substrate. In the recent past at Anclote Key, this community had also been invaded by Australian pine to the extent that the exotic influenced the dynamics and succession of the strand community. Considering this extensive exotic invasion, the community was considered in fair condition. A major treatment in 2008 and several subsequent treatments have virtually eliminated Australian pine on the island. A persistent maintenance program by the staff has reduced exotic species in this community to a minimum level. The native components have recovered rapidly and this community on Anclote Key is in excellent condition. Wildfires have occurred from escaped campfires in 2009 and 2010 in this community with no observed ill-effects. The re-growth of the coastal grasses and other vegetation appears healthy.

At Three Rooker Island, coastal strand is in an early stage of development and no maritime hammock is present. Instead, the developing coastal strand slopes rapidly to marine tidal swamp and marine unconsolidated substrate (mudflat) on its landward side. An even earlier stage in the development of barrier island vegetation along this part of the coast is present on North Anclote Bar.



ANCLOTE KEY PRESERVE
STATE PARK

N
0 0.25 0.5 1 Mile

Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial; 2011

NATURAL COMMUNITIES MAP

General management measures: The coastal strand on Anclote Key has been cleared of mature Australian pine. Persistent maintenance will again be very important in the lasting health of this natural community. As this community develops on the smaller islands of the Park, vigilance will be needed to exclude Australian pine and Brazilian pepper. Visitor impact to this community on Anclote Key should be controlled by restricting recreational use to designated campsites only.

MARITIME HAMMOCK

Desired Future Condition: A coastal evergreen hardwood forest will occur in narrow bands along stabilized coastal dunes. Canopy species will typically consist of live oak (*Quercus virginiana*), red bay (*Persea borbonia*), and cabbage palm. The canopy is typically dense and often pruned by salt-spray. Understory species may consist of yaupon holly (*Ilex vomitoria*), saw palmetto, and/or wax myrtle (*Myrica cerifera*). Very sparse or absent herbaceous groundcover will exist. Variation in species composition exists along the coast. Tropical species become more prevalent in the more southern extent of the island.

Description and assessment: At Anclote Key, this community type occupies a narrow band between coastal strand and mangrove swamp. It is dominated by more temperate species in the canopy and tropical species in the understory. In places, Brazilian pepper predominates in canopy. Cabbage palm and red cedar are also present. White stopper (*Eugenia axillaris*), poison ivy, saffron plum, strangler fig, snowberry, and wax myrtle are present in the understory. In some localities, the dense growth of Brazilian pepper in the understory makes travel very difficult. Repeated mechanical and chemical treatments have significantly reduced the Brazilian pepper population and several management zones are now in maintenance condition.This community is in good to excellent condition due to exotic plant removal.

General management measures: This community on Anclote Key has ideal conditions for exotic plant infestations. In places it is difficult to access, and as a result , receives the least attention for treatment. Persistent maintenance is necessary to control the growth of exotics. Successful removal of exotic species has been achieved by contracted companies and repeated staff workdays.

MESIC FLATWOODS

Desired Future Condition: In this region of the state, dominant pines will be south Florida slash pine (*Pinus elliottii*). Native herbaceous groundcover should occur over at least 50 percent of the area and be less than three feet in height. Saw palmetto will comprise no more than 50 percent of total shrub species cover, and are less than three feet in height. Shrubs are generally knee-high or less, and there are few if any large trunks of saw palmetto along the ground. The Optimal Fire Return Interval for this community is 2 to 5 years.

Description and assessment: Although this community harbors slash pine, it is not typical open-canopy forest with little or no understory that occurs on the mainland. Cabbage palm and shrubs are prevalent in this community type on Anclote Key. It occurs on several acres at the southern end of the island and a small area of less than two acres is developed at the north end. The understory is quite atypical for this community type and is dominated by strangler fig, wax

myrtle, and shrubs with tropical affinities. The shrub layer makes for a relatively dense understory. Osprey (*Pandion haliaetus*) use the dead pine snags for nest sites, and one Southern bald eagle (*Haliaeetus leucocephalus*) nest is present in a slash pine north of the lighthouse. Although there is evidence of past fire, such as charring on tree trunks, most of the mesic flatwoods contains heavy fuels. The question remains whether the presence of this community type is an artifact of human activities (Herwitz 1977). It is in fair condition.

General management measures: There is current debate on the use of fire in this community on Anclote Key. The understory has more tropical components than are expected in a fire-dependent area. The accumulated fuel load, however, has management concerned as this acreage lies adjacent to the ranger residence and other structural assets of the park. A substantial firebreak is maintained at the perimeter of the zone to protect the residence from wildfire resulting from lightning strikes and escaped campfires. In the past, the recommended strategy was to allow wildfires to run their course so that management may learn more about fire behavior in a barrier island flatwoods community. However, to protect the slash pine canopy and park structures, a prescribed fire program will be implemented at this park.

SALT MARSH

Desired Future Condition: A largely herbaceous community will occur in the portion of the coastal zone affected by tides and seawater and protected from large waves. Salt marsh typically has distinct zones of vegetation based on water depth and tidal fluctuations. Saltmarsh cordgrass (*Spartina alterniflora*) dominates the seaward edge, the areas most frequently inundated by tides. Needle rush (*Juncus roemerianus*) dominates the higher, less frequently flooded areas. Other characteristic species include Carolina sea lavender (*Limonium carolinianum*), perennial saltmarsh aster (*Symphyotrichum tenuifolium*), and shoreline seapurslane (*Sesuvium portulacastrum*). A landward border of salt-tolerant shrubs including groundsel tree (*Baccharis halimifolia*), saltwater falsewillow (*Baccharis angustifolia*), marshelder (*Iva frutescens*), and Christmasberry (*Lycium carolinianum*) may exist. Soil salinity and flooding are the two major environmental factors that influence salt marsh vegetation. While there is little data on natural fire frequency in salt marshes, fire probably occurred sporadically in a mosaic pattern, given the patchiness of the fuels intermixed with creeks, salt flats, and other features.

Description and assessment: This community occurs in close association with mangrove swamp at Anclote Key, and on Three Rooker Island in close association with marine unconsolidated substrate. It occurs within and around stands of mangrove forest along the landward side of Anclote Key and around mud flats along the landward side of South Three Rooker Island. It is in good condition and is dominated by saltmarsh cordgrass, saltmeadow cordgrass, salicornia (*Salicornia bigelovii*), saltwort (*Batis maritima*), seashore paspalum, sea blight (*Sueda linearis*), and saltgrass (*Distichlis spicata*). Anclote Key Preserve State Park is at the latitude where the mangrove dominated intertidal zone begins to be replaced by non-woody marsh vegetation (Montague and Wiegert 1990). Both are present at Anclote Key.

General management measures: Management measures for this community are minimal. It probably benefits from periodic fire, and any natural fires should be allowed to burn the marsh if feasible. There are very few visitor impacts. The elevated salt levels help to exclude invasive plants. The areas are in good to excellent condition.

MANGROVE SWAMP

Desired Future Condition: Typically, a dense forest will occur along relatively flat, low wave energy, marine and estuarine shorelines. The dominant overstory includes red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemosa*), and buttonwood (*Conocarpus erectus*). These four species can occur either in mixed stands or often in differentiated, monospecific zones based on varying degrees of tidal influence, levels of salinity, and types of substrate. Red mangroves typically dominate the deepest water, followed by black mangrove in the intermediate zone, and white mangroves and buttonwood in the highest, least tidally influenced zone. Mangroves typically occur in dense stands (with little to no understory) but may be sparse, particularly in the upper tidal reaches where salt marsh species predominate. When present, shrub species can include seaside oxeye (*Borrichia. frutescens*), and vines including gray nicker (*Caesalpinia bonduc*), coinvine, and herbaceous species such as saltwort shoregrass (*Monanthocloe littoralis*), perennial glasswort (*Sarcocornia perennis*), and giant leather fern (*Acrostichum danaeifolium*). Soils are generally anaerobic and are saturated with brackish water at all times, becoming inundated at high tides. Mangrove swamps occur on a wide variety of soils, ranging from sands and mud to solid limestone rock. Soils in South Florida are primarily calcareous marl muds or calcareous sands and along Central Florida coastlines, siliceous sands. In older mangrove swamps containing red mangroves, a layer of peat can build up over the soil from decaying plant material (primarily red and black mangrove roots).

Description and assessment: This community, dominated by mangrove trees, occurs mainly along the relatively flat, low wave energy eastern shoreline of Anclote Key. It intergrades with salt marsh. Although black mangrove is predominant, red mangrove and white mangrove are also present, as is buttonwood. Glasswort and saltwort are the predominant herbaceous components. Three Rooker Island has early stages of this community type. Mangrove propagules have settled on fertile ground there, and red and black mangroves occur as scattered shrubs and small trees. This community is in good to excellent condition.

General management measures: The ecotone that occurs on the inland front of this community is susceptible to invasion by Brazilian pepper. Maintenance of exotic plant control there is very important. Otherwise, this community requires little management action.

MARINE SEAGRASS BEDS

Desired Future Condition: Marine seagrass beds are typically characterized as expansive stands of vascular plants and are one of the most productive communities in the world. Seagrass beds will occur in clear, coastal waters where wave energy is moderate. The three most common species of seagrasses in Florida are turtle grass, (*Thalassia testudinum*), manatee grass, (*Syringodium filiforme*), and shoal grass (*Halodule wrightii*). Other seagrasses of the genus Halophila may be intermingled with the other seagrasses, but species of this genus are considerably less common. Seagrass beds require unconsolidated substrate in order to establish their underground biomass root structure. They will typically be found in waters ranging from 20° to 30°C (68° to 86°F) and require clear water for photosynthesis. Seagrass beds will not thrive where nutrient levels are high because of increased turbidity and competition of undesirable algal species.

Description and assessment: Seagrass beds provide important habitat for a host of commercially and recreationally important species. Most of these species spend part or all of their life cycle in the seagrass, which provides food, oxygen, and shelter. Seagrass blades trap suspended sediment in the water allowing clear water to be transported to the offshore coral reefs during tidal movement. The submerged acreage east of each of the islands of the Preserve is populated with healthy grassbeds. The seagrass beds are in excellent condition, with areas of exception. The shallow beds nearest to the areas of highest recreational use are scarred from boat motor propellers. The majority of these impacts have been identified on the eastern shorelines of Three Rooker Island, North Anclote Bar, and the north tip of Anclote Key. The keel and propeller gouges are visible in the shallowest beds, while deeper spots are punctuated by evidence of repeated anchorages.

General management measures: Protection efforts for this community type require routine monitoring of potential causes of impacts. Recreational boaters are advised to raise their boat motors and navigate over seagrass beds by drifting or poling. Local boating guidebooks and signs at marinas or boat ramps inform boaters of the locations of seagrass beds and boating practices necessary to reduce impacts to this community type.

MARINE UNCONSOLIDATED SUBSTRATE

Desired Future Condition: The community will consist of expansive unvegetated, open areas of mineral-based substrate composed of shell, coral, marl, mud, or sand (sand beaches). Desired conditions include avoidance of soil compaction, absence of dredging activities, and absence of disturbances such as accumulated pollutants.

Description and assessment: The acreage of this very dynamic community fluctuates from year to year. Large patches of mud flat are present behind the landward extensions of the barrier islands at the north and south ends. Three Rooker Island and Anclote Key have mud flat communities at those locations. This community type also includes the subtidal, intertidal, and supratidal beach habitat below the beach dune community. This is a zone of sparse vegetation but, similar to mud flats, it is a rich feeding zone for wading birds and shorebirds, which are able to probe below the surface for infaunal organisms that include isopods, amphipods, polychaetes, mollusks, and crustaceans. These feeding grounds support the very significant resting and nesting shorebird colonies on Three Rooker Island. This community is in good condition.

General management measures: Maintaining a balance between the needs of the visiting public and the needs of imperiled species comprises much of the management effort. Areas of historic beach nesting bird use should be pre-posted to establish minimum setback distances between nesting birds and human disturbance. New bird nesting areas should be documented, monitored, and posted during nesting season. It may be necessary to close portions of this habitat to visitation seasonally where setback distances cannot be established. Sea turtle nesting should be monitored during season and nest sites protected from predation. Partnerships have been developed with Pinellas County marine law enforcement, FWC law enforcement, Clearwater Audubon, and others to provide support to management measures on the beaches of the Preserve. These partnerships should be maintained.

DEVELOPED

Desired Future Condition: The developed areas within the park will be managed to minimize the effect of the developed areas on adjacent natural areas. Priority invasive plant species (EPPC Category I and II species) will be removed from all developed areas. Other management measures include proper stormwater management and development guidelines that are compatible with prescribed fire management in adjacent natural areas.

Description and assessment: A small lot beneath the lighthouse on Anclote Key is the former site of two homes and several smaller structures including an oil house. This locale is considered developed, and was the site of an archeological investigation (Dr. Brent R. Weisman, Arch. Res. Permit Application, 9 May 1997).

Environmental investigations beginning in 1994 found soil contamination around the lighthouse and ranger residence compound on Anclote Key. In 2003 DRP and USCG began efforts to remove battery waste and contaminated soil from the island. Additional soil and groundwater sampling continue. Restoration of the site is an ongoing process. A restoration completion date has not been determined.

General Management Measures: All significant archaeological sites, historic structures, and objects within the park that represent Florida's cultural periods and significant historic events or persons are preserved in perpetuity, protected from physical threats, and interpreted to the public.

Maintenance of exotic species, except where they are part of the cultural landscape on the island will be necessary in order to achieve the desired future condition of the developed areas of the park.

In 2009 in an effort to decrease the cost to supply electricity to the residence on Anclote Key, DRP installed a photovoltaic panel on the island to supplement the generator as a source of power on the remote barrier island. This has significantly reduced the amount of diesel fuel required to supply electricity to the residence.

Imperiled Species

Imperiled species are those that are (1) tracked by FNAI as critically imperiled (G1, S1) or imperiled (G2, S2); or (2) listed by the U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC) or the Florida Department of Agriculture and Consumer Services (FDACS) as endangered, threatened, or of special concern.

Three Rooker Island is a very important nesting site for shorebirds (herein defined to include larids, i.e., gulls, terns, and skimmers), ranking among the top three sites in the state, giving it global significance as a result (Douglass 2010). In addition to 5000 laughing gull (*Larus atricilla*) nests, listed species that nest on the islands include American oystercatcher, black skimmer (*Rynchops niger*), least tern (*Sterna antillarum*), royal tern (*Thalasseus maxima*), Caspian tern (*Hydroprogne caspia*), Sandwich tern (*Thalasseus sandvicensis*), white ibis (*Eudocimus albus*), and reddish egret (*Egretta rufescens*). Snowy and Wilson's plover nests have been recorded on the

island (Burney 2009). Three Rooker Island is an important wintering site as well, and is used by piping plovers (*Charadrius melodus*), red knots (*Calidris canutus*), and a myriad of other species. In addition to the listed species mentioned above, more than 20 other designated avian species have been documented in the park. The beach dune and marine unconsolidated substrate (beach and mudflats) natural communities were designated by the USFWS in 2001 as critical wintering habitat for the piping plover (USFWS 2001). This habitat designation begins at mean lower low water (MLLW) and includes the north, west, and south portions of Anclote Key, North Anclote Bar, and Three Rooker Island. This is significant since piping plover spend greater than 50 percent of their yearly cycle at wintering grounds (USFWS 1996).

Though no longer listed as imperiled, Southern bald eagle are noted here because of the FWC guidelines for activities near eagle nests during the October 1 through May 15 nesting season (FWC 2008). Special precautions are taken near active bald eagle nests, including buffers, to prevent disturbance. Special precautions are also taken to protect osprey nests that can be found in pine snags at the park. Prescribed fires will include plans to protect nesting eagles and osprey and the trees or snags being used for nesting.

Sea turtle nesting and stranding events on the Anclote Key Preserve have been actively monitored by the Florida Park Service since 2005. Data collection is permitted by and coordinated by FWC. Nesting of loggerhead sea turtles has been documented on Anclote Key since monitoring began. A Kemp's ridley sea turtle nest was documented on Anclote Key in 2007. Sea turtle nests found during surveys are protected from predation with self-releasing cages. Raccoons (*Procyon lotor*) are the primary terrestrial predators on Anclote Key. Juvenile green sea turtle (*Chelonia mydas*) and Atlantic hawksbill sea turtle (*Eretmochelys i. imbricata*) have been found during cold stun events over the last several winters. Gopher tortoises (*Gopherus polyphemus*) are present on Anclote Key, and a formal population survey is planned.

Table 2 contains a list of all known imperiled species within the park and identifies their status as defined by various entities. It also identifies the types of management actions that are currently being taken by DRP staff or others, and identifies the current level of monitoring effort. The codes used under the column headings for management actions and monitoring level are defined following the table. Explanations for federal and state status as well as FNAI global and state rank are provided in Addendum 6.

Table 2: Imperiled Species Inventory

Common and Scientific Name	**Imperiled Species Status**				**Management Actions**	**Monitoring Level**
	FWC	**USFWS**	**FDACS**	**FNAI**		
PLANTS						
Shell-mound prickly-pear *Opuntia stricta*			LT		2, 10	Tier 1

Table 2: Imperiled Species Inventory						
Common and Scientific Name	**Imperiled Species Status**				**Management Actions**	**Monitoring Level**
	FWC	**USFWS**	**FDACS**	**FNAI**		
Inkberry *Scaevola plumieri*			LT		2, 10	Tier 1
REPTILES						
Loggerhead sea turtle *Caretta caretta*	FT	LT		G3, S3	2,5,8, 10,13	Tier 3
Green sea turtle *Chelonia mydas*	FE	LE		G3, S2	2,5,8, 10,13	Tier 3
Atlantic hawksbill sea turtle *Eretmochelys i. imbricata*	FE	LE		G3, S1	10	Tier 1
Kemp's ridley sea turtle *Lepiodochelys kempii*	FE	LE		G1, S1	2,5,8, 10,13	Tier 3
Gopher tortoise *Gopherus polyphemus*	ST			G3, S3	2,8,10	Tier 1
BIRDS						
Brown noddy *Anous stolidus*				G5, S1	10	Tier 1
Piping plover *Charadrius melodus*	FT	LT		G3, S2	2,8, 10,13	Tier 4
Snowy plover *Charardus nivosus*	ST			G4, S1	2,8, 10,13	Tier 4
Wilson's plover *Charadrius wilsonia*				G5, S2	2,8,10, 13	Tier 4
Little blue heron *Egretta caerulea*	SSC			G5, S4	2,8, 10,13	Tier 1
Reddish egret *Egretta rufescens*	SSC			G4, S2	2,8, 10,13	Tier 1
Snowy egret *Egretta thula*	SSC			G5, S3	2,8, 10,13	Tier 1
Tricolored heron *Egretta tricolor*	SSC			G5, S4	2,8, 10,13	Tier 1
White ibis *Eudocimus albus*	SSC			G5, S4	2,8, 10,13	Tier 1
Peregrine falcon *Falco peregrinus*				G4, S2	13	Tier 1
Magnificent frigatebird *Fregata magnificens*				G5, S1		Tier 1
American oystercatcher *Haematopus palliatus*	SSC			G5, S3	2,8, 10,13	Tier 4

Table 2: Imperiled Species Inventory						
Common and Scientific Name	**Imperiled Species Status**				**Management Actions**	**Monitoring Level**
	FWC	**USFWS**	**FDACS**	**FNAI**		
Caspian tern *Hydroprogne caspia*				G5, S2	2,8,10, 13	Tier 4
Wood stork *Mycteria americana*	FE	LE		G4, S2	2,8, 10,13	Tier 1
Eastern brown pelican *Pelecanus occidentalis*	SSC			G4, S3	2,8, 10,13	Tier 1
Roseate spoonbill *Platalea ajaja*	SSC			G5, S2, S3	2,8, 10,13	Tier 1
Black Skimmer *Rynchops niger*	SSC			G5, S3	2,8,10 11,13	Tier 4
Least tern *Sterna antillarum*	ST			G4, S3	2,8,10 11,13	Tier 4
Sandwich tern *Thalasseus sandvicensis*				G4, S2	2,8,10, 13	Tier 4
MAMMALS						
West Indian manatee *Trichechus manatus latirostris*	FE	LE/CH		G2, S2	10,13	Tier 1

Management Actions:

1 Prescribed Fire
2 Exotic Plant Removal
3 Population Translocation/Augmentation/Restocking
4 Hydrological Maintenance/Restoration
5 Nest Boxes/Artificial Cavities
6 Hardwood Removal
7 Mechanical Treatment
8 Predator Control
9 Erosion Control
10 Protection from visitor impacts (establish buffers)/law enforcement
11 Decoys (shorebirds)
12 Vegetation planting
13 Outreach and Education

Monitoring Level:

Tier 1. Non-Targeted Observation/Documentation: includes documentation of species presence through casual/passive observation during routine park activities (i.e. not conducting species-specific searches). Documentation may be in the form of Wildlife Observation Forms, or

other district specific methods used to communicate observations.
Tier 2. Targeted Presence/Absence: includes monitoring methods/activities that are specifically intended to document presence/absence of a particular species or suite of species.
Tier 3. Population Estimate/Index: an approximation of the true population size or population index based on a widely accepted method of sampling.
Tier 4. Population Census: A complete count of an entire population with demographic analysis, including mortality, reproduction, emigration, and immigration.
Tier 5. Other: may include habitat assessments for a particular species or suite of species or any other specific methods used as indicators to gather information about a particular species.

Detailed management goals, objectives, and actions for imperiled species in this park are discussed in the Resource Management Program section of this component and the Implementation Component of this plan.

Exotic and Nuisance Species

Exotic species are plants or animals not native to Florida. Invasive exotic species are able to out-compete, displace or destroy native species and their habitats, often because they have been released from the natural controls of their native range, such as diseases, predatory insects, etc. If left unchecked, invasive exotic plants and animals alter the character, productivity, and conservation values of the natural areas they invade.

Exotic plant infestation had become prominent at Anclote Key Preserve State Park. Dense stands of mature Australian pine dominated over 100 acres of beach dune community on the island. Brazilian pepper grew in thick stands in more than 50 acres of maritime hammock on Anclote Key.

AmeriCorps teams treated dense thickets of Brazilian pepper near the lighthouse in the 1990s. Contracted projects in 2007, 2008 and 2009 continued the work, resulting in the treatment of the majority of dense stands of Australian pine and Brazilian pepper. A landscape of native plants is emerging from the former monoculture of exotic trees. The seed bed, contaminated by these past invaders, will remain a source of active re-growth of exotics for many years to come. Constant attention to controlling re-infestations is now the focus of park staff and volunteers. Staff also monitors the islands for new invaders. Several invasive plants such as Cogon grass (*Imperata cylindrica*) and rosary pea (*Abrus precatorius*) are treated when found. Funding should be sought for a retreatment by a contractor within the next few years.

The smaller islands of the preserve are in relatively good condition. Brazilian pepper and Australian pine, and beach naupaka (*Scaevola taccada*) are occasionally found on Three Rooker Island as single plants, and are treated when found.

Table 3 contains a list of the Florida Exotic Pest Plant Council (FLEPPC) Category I and II invasive, exotic plant species found within the park (FLEPPC 2011). The table also identifies relative distribution for each species and the management zones in which they are known to occur. An explanation of the codes is provided following the table. For an inventory of all exotic species found within the park, see Addendum 5.

Table 3: Inventory of FLEPPC Category I and II Exotic Plant Species			
Common and Scientific Name	FLEPPC Category	Distribution	Management Zone (s)
PLANTS			
Rosary pea *Abrus precatorius*	I	0	AK-1, AK-2
Australian pine *Casuarina equisetifolia*	I	3	AK-1 – AK-7
Carrotwood *Cupaniopsis anacardioides*	I	0	AK-2, AK-3, AK-7
Crowfoot grass *Dactyloctenium aegyptium*	II	2	AK-1, AK-2, AK-7
Cogon grass *Imperata cylindrica*	I	2	AK-1
Beach Napauka *Scaevola taccada*	I	0	AK-7
Brazilian pepper *Schinus terebinthifolius*	I	3	AK-1 – AK-7

Distribution Categories:

1. No current infestation: All known sites have been treated and no plants are currently evident.
2. Single plant or clump: One individual plant or one small clump of a single species.
3. Scattered plants or clumps: Multiple individual plants or small clumps of a single species scattered within the gross area infested.
4. Scattered dense patches: Dense patches of a single species scattered within the gross area infested.
5. Dominant cover: Multiple plants or clumps of a single species that occupy a majority of the gross area infested.
6. Dense monoculture: Generally, a dense stand of a single dominant species that not only occupies more than a majority of the gross area infested, but also covers/excludes other plants.
7. Linearly scattered: Plants or clumps of a single species generally scattered along a linear feature, such as a road, trail, property line, ditch, ridge, slough, etc. within the gross area infested.

Exotic animal species include non-native wildlife species, free ranging domesticated pets or livestock, and feral animals. Because of the negative impacts to natural systems attributed to exotic animals, DRP actively removes exotic animals from state parks, with priority being given to those species causing the greatest ecological damage.

In some cases, native wildlife may also pose management problems or nuisances within state parks. A nuisance animal is an individual native animal whose presence or activities create

special management problems. Examples of animal species from which nuisance cases may arise include raccoons and alligators (*Alligator mississippiensis*)that are in public areas. Nuisance animals are dealt with on a case-by-case basis in accordance with DRP's Nuisance and Exotic Animal Removal Standard. Exotic or non-indigenous and nuisance animals are removed as necessary to protect the integrity of natural communities and native wildlife populations. Nine-banded armadillo (*Dasypus novemcinctus*) are non-indigenous and seen occasionally on Anclote Key. Raccoons are an abundant native species that severely impact sea turtle conservation through nest depredation. A grant-funded USDA project removed 66 raccoons from the south end of Anclote Key in 2007 in an attempt to improve nesting productivity on the island. Park staff continues to monitor sea turtle and shorebird nesting for evidence of disturbance from terrestrial predators.

Detailed management goals, objectives, and actions for management of invasive exotic plants and exotic and nuisance animals are discussed in the Resource Management Program section of this component.

Special Natural Features

Anclote Key is frequently mentioned in the scientific literature as being the northern-most of a chain of barrier islands that parallel the southwestern coast of Florida. This gives it a unique transitional character in the coastal environment. As might be expected, the park occurs in a very dynamic setting. Anclote Key has accreted by about 30 percent of its total length in about two percent of its age (Hine et al. 1987). The isolated sandbars that are continually emerging around the islands provide some of the most significant habitat for nesting and resting shorebirds in all of Florida (Paul 1997).

As implied above, Three Rooker Island are a very special natural feature given their statewide, and even global, significance as a nesting site for shorebirds (including larids). Along with Anclote Key and North Anclote Bar, the islands are designated critical habitat for wintering piping plovers.

Cultural Resources

This section addresses the cultural resources present in the park that may include archaeological sites, historic buildings and structures, cultural landscapes, and collections. The Florida Department of State (FDOS) maintains the master inventory of such resources through the Florida Master Site File (FMSF). State law requires that all state agencies locate, inventory and evaluate cultural resources that appear to be eligible for listing in the National Register of Historic Places. Addendum 7 contains the FDOS, Division of Historical Resources (DHR) management procedures for archaeological and historical sites and properties on state-owned or controlled properties; the criteria used for evaluating eligibility for listing in the National Register of Historic Places, and the Secretary of Interior's definitions for the various preservation treatments (restoration, rehabilitation, stabilization, and preservation). For the purposes of this plan, significant archaeological site, significant structure, and significant landscape means those cultural resources listed or eligible for listing in the National Register of Historic Places. The terms archaeological site, historic structure or historic landscape refer to all resources that will become 50 years old during the term of this plan.

Condition Assessment

Evaluating the condition of cultural resources is accomplished using a three-part evaluation scale, expressed as good, fair and poor. These terms describe the present condition, rather than comparing what exists to the ideal condition. Good describes a condition of structural stability and physical wholeness, where no obvious deterioration other than normal occurs. Fair describes a condition in which there is a discernible decline in condition between inspections, and the wholeness or physical integrity is and continues to be threatened by factors other than normal wear. A fair assessment is usually a cause for concern. Poor describes an unstable condition where there is palpable, accelerating decline, and physical integrity is being compromised quickly. A resource in poor condition suffers obvious declines in physical integrity from year to year. A poor condition suggests immediate action is needed to reestablish physical stability.

Level of Significance

Applying the criteria for listing in the National Register of Historic Places involves the use of contexts as well as an evaluation of integrity of the site. A cultural resource's significance derives from its historical, architectural, ethnographic or archaeological context. Evaluation of cultural resources will result in a designation of NRL (National Register or National Landmark Listed or located in an NR district), NR (National Register eligible), NE (not evaluated), or NS (not significant) as indicated in the table at the end of this section.

There are no criteria for use in determining the significance of collections or archival material. Usually, significance of a collection is based on what or whom it may represent. For instance, a collection of furniture from a single family and a particular era in connection with a significant historic site would be considered highly significant. In the same way, a high quality collection of artifacts from a significant archaeological site would be of important significance. A large herbarium collected from a specific park over many decades could be valuable to resource management efforts. Archival records are most significant as a research source. Any records depicting critical events in the park's history, including construction and resource management efforts, would all be significant.

The following is a summary of the FMSF inventory. In addition, this inventory contains the evaluation of significance.

Prehistoric and Historic Archaeological Sites

Desired future condition: All significant archaeological sites within the park that represent Florida's cultural periods or significant historic events or persons are preserved in good condition in perpetuity, protected from physical threats, and interpreted to the public.

Description: There are two historic archaeological sites in the park which are recorded in the FMSF. The Anclote Key Light Station Site (8PI10611) is a dense surface scatter of 19th and 20th century building remains and artifacts associated with former structures located in the vicinity of the Anclote Key Lighthouse (8PI08566). These remains date from three periods of use of the area: the Lighthouse-Light Keeper period (1888-1939), the Coast Guard occupation (1939-1952), and the modern era (1952- present). (Weisman et al. 1998) The Anclote Key Light Station Site (8PI10611) includes the area surrounding the standing lighthouse and contains the remains of

the light keeper's and assistant light keeper's residences, two privies, a brick oil house, several cisterns and other structures associated with the lighthouse complex and its former occupants. A new roof and door were added to the remaining standing walls of the brick oil house; it is now interpreted as a historic structure in conjunction with the Anclote Key Lighthouse (8PI08566) and is discussed in the Historic Structures section of this plan.

The Anclote Key Boat House (8PI11691) consists of the limited remains of a late 19th, early 20th century boat house and dock. The site contains only a few asbestos shingles from the boat house and the several wooden dock piers (Driscoll, 2008). A large winch, believed to be associated with the boat house, was removed from the site and is currently on display in the park. Additional discussion of the winch is included in the Collections section of this plan.

Condition Assessment: The foundations and environs of the light keeper's residences are in poor condition. The wooden structures were burnt to the brick foundations, and then a majority of the bricks have been removed by looters. The ground immediately surrounding the base of the light tower has been found to contain levels of lead contamination and will be continued to be monitored.

Level of Significance: The Anclote Key Light Station Site (8PI10611) is considered potentially eligible for the National Register of Historic Places as the archaeological deposits located at the site document changes in consumer behavior and patterns for the Lighthouse Keeper era circa 1887 to the 1930s and the subsequent Coast Guard Occupation. The evaluation of significance is made on the site's potential inclusion within a mixed archaeological and historic district which would include the Anclote Key Lighthouse (8PI08566) and associated domestic and work areas.

The Anclote Key Boat House (8PI11691) is considered ineligible for the National Register as the site contains a very limited amount of building remains which are not likely to contribute any additional information to the archaeological record.

General management measures: A program of soil monitoring has been implemented at this site. The entire site is currently within a compound enclosed by an eight-foot barbed-wire fence and manned by DRP staff to prevent any further vandalism. The constant encroachment by native and exotic plants is also held in check by DRP staff. The largest threat to the historic site would be the return of the vegetative overgrowth and vandals in the absence of a staff presence at the site.

Historic Structures

Desired future condition: All significant historic structures and landscapes that represent Florida's cultural periods or significant historic events or persons are preserved in good condition in perpetuity, protected from physical threats, and interpreted to the public.

Description: The Anclote Key Lighthouse (8PI08566), a 110-foot, skeletal, cast-iron plate sentinel constructed in 1887, is historically significant for its pivotal role in the growth of the City of Tarpon Springs, Florida (Stroughton 1975). The station was operated first by the U.S. Lighthouse Service, and then the Coast Guard from 1939 to 1985. The light was finally extinguished in 1984 as the tower became redundant as an aid to navigation; then, a period of

erosion, vandalism, and arson began. This was followed by years of effort and $1.5 million in federal, state, and local funding to restore the Anclote Key Lighthouse. The Anclote Key Lighthouse was restored over a course of approximately 18 months. A re-lighting ceremony was held in September 2003.

Condition Assessment: The current condition of the light tower and associated oil house is good.

Level of Significance: The Anclote Key Lighthouse (8PI08566) is listed on the National Register of Historic Places. The National Register nomination includes the lighthouse, oil house, concrete cistern, foundation remains from two keepers' quarters and the concrete walkway. The Anclote Key Lighthouse (8PI08566) is considered significant under National Register Criterion A, Event, for its importance in maritime history and transportation as one of a chain of navigational aids built along the Gulf Coast in the 1880s. It is also considered significant under National Register Criterion C, Design/Construction, as a distinctive example of engineering design and construction.

General management measures: The current condition of the lighthouse is good, and management measures should include monitoring for any signs of deterioration. These should be corrected as soon as they are found.

Collections

Desired future condition: All historic, natural history, and archaeological objects within the park that represent Florida's cultural periods, significant historic events or persons, or natural history specimens are preserved in good condition in perpetuity, protected from physical threats, and interpreted to the public.

Description: A large iron mechanical winch was rediscovered 100 meters southeast of the light tower during an exotic plant treatment project in 2007. The location and condition was documented and reported to the DHR, Bureau of Archaeological Research (BAR) and the DRP, Bureau of Natural and Cultural Resources (BNCR). The winch was part of a larger wooden boathouse that stood at the site. The artifact was removed, transported to the BAR Collections and Conservation facility in Tallahassee, and treated with a protective coating to preserve it from further deterioration. The winch was returned to the park and has been reinstalled at the location where it was discovered. It is now used to interpret the history of the island. Period photographs used for interpretation are all reproductions obtained from archived collections.

Condition Assessment: A condition assessment report prepared for the DEP documents the pre-restoration condition of the site. A collection of newspaper articles reporting the progress and completion of the tower restoration is maintained. These documents are housed in the State's archives, and in good condition. Other artifacts include medicine bottles, discarded building materials, a cast iron bathtub, and a wheat penny. Many of the physical artifacts were discovered in the vegetation surrounding the site and documented. These items are stored onsite and are in fair condition.

Level of Significance: The majority of the collection items in the park are historic artifacts that have been collected either in connection with archaeological investigations or as random surface

finds. Their significance lies in their connection to the historic occupancy of the island and their potential to reveal information in regard to former occupants and former uses of the island. The reproduced historic photographs are useful in the development of programs to interpret changes in the park over time.

General management measures: A Scope of Collection Statement should be completed for the park, as well as a collection management assessment.
Detailed management goals, objectives, and actions for the management of cultural resources in this park are discussed in the Cultural Resource Management Program section of this component. **Table 4** contains the name, reference number, culture or period, and brief description of all the cultural sites within the park that are listed in the Florida Master Site File. The table also summarizes each site's level of significance, existing condition, and recommended management treatment. An explanation of the codes is provided following the table.

Table 4: Cultural Sites Listed in the Florida Master Site File

Site Name and FMSF #	Culture/Period	Description	Significance	Condition	Treatment	Management Zone
Anclote Key Lighthouse 8PI08566	1887	Historic Structure	NR L	G	RS	AK-08
Anclote Key Light Station Site 8PI10611	American 19th century 1821-1899, American 20th century, 1877-Present	Archaeological Site	NR	P	ST	AK-08
Anclote Key Boat House 8PI11691	American 19th century 1821-1899, American 20th century	Archaeological Site	NS			AK-08

Significance:

NRL National Register listed
NR National Register eligible
NE not evaluated
NS not significant

Condition

G Good
F Fair
P Poor

NA Not accessible
NE Not evaluated

Recommended Treatment

RS Restoration
RH Rehabilitation
ST Stabilization
P Preservation
R Removal
N/A Not applicable

RESOURCE MANAGEMENT PROGRAM

Management Goals, Objectives, and Actions

Measurable objectives and actions have been identified for each of DRP's management goals for Anclote Key Preserve State Park. Please refer to the Implementation Schedule and Cost Estimates in the Implementation Component of this plan for a consolidated spreadsheet of the recommended actions, measures of progress, target year for completion, and estimated costs to fulfill the management goals and objectives of this park.

While DRP utilizes the ten-year management plan to serve as the basic statement of policy and future direction for each park, a number of annual work plans provide more specific guidance for DRP staff to accomplish many of the resource management goals and objectives of the park. Where such detailed planning is appropriate to the character and scale of the park's natural resources, annual work plans are developed for prescribed fire management, exotic plant management, and imperiled species management. Annual or longer-term work plans are developed for natural community restoration and hydrological restoration. The work plans provide DRP with crucial flexibility in its efforts to generate and implement adaptive resource management practices in the state park system.

The work plans are reviewed and updated annually. Through this process, DRP's resource management strategies are systematically evaluated to determine their effectiveness. The process and the information collected is used to refine techniques, methodologies, and strategies, and ensures that each park's prescribed management actions are monitored and reported as required by Sections 253.034 and 259.037, Florida Statutes.

The goals, objectives, and actions identified in this management plan will serve as the basis for developing annual work plans for the park. The ten-year management plan is based on conditions that exist at the time the plan is developed, and the annual work provide the flexibility needed to adapt to future conditions as they change during the ten-year management planning cycle. As the park's annual work plans are implemented through the ten-year cycle, it may become necessary to adjust the management plan's priority schedules and cost estimates to reflect these changing conditions.

Natural Resource Management

Hydrological Management

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

The natural hydrology of most state parks has been impaired prior to acquisition to one degree or another. Florida's native habitats are precisely adapted to natural drainage patterns and seasonal water level fluctuations, and variations in these factors frequently determine the types of natural communities that occur on a particular site. Even minor changes to natural hydrology can result in the loss of plant and animal species from a landscape. Restoring state park lands to original natural conditions often depends on returning natural hydrological processes and conditions to the park. This is done primarily by filling or plugging ditches, removing obstructions to surface water "sheet flow", installing culverts or low-water crossings on roads, and installing water control structures to manage water levels.

There is no permanent surface water at the Anclote Key Preserve State Park, and no description of conservation measures is applicable. A well previously dug for potable water is no longer used. There is also no soil erosion problem at the preserve. The dynamic movement of sandbars and spits reflects the forces of natural phenomena, and does not constitute adverse impacts implied by the concept of soil erosion.

Natural Communities Management

Goal: Restore and maintain the natural communities/habitats of the park.

As discussed above, DRP practices natural systems management. In most cases, this entails returning fire to its natural role in fire-dependent natural communities. Other methods to implement this goal include large-scale restoration projects as well as smaller scale natural communities improvements. Following are the natural community management objectives and actions recommended for the state park.

Prescribed Fire Management: Prescribed fire is used to mimic natural lightning-set fires, which are one of the primary natural forces that shaped Florida's ecosystem. Prescribed burning increases the abundance and health of many wildlife species. A large number of Florida's imperiled species of plants and animals are dependent on periodic fire for their continued existence. Fire-dependent natural communities gradually accumulate flammable vegetation; therefore, prescribed fire reduces wildfire hazards by reducing these wild land fuels.

All prescribed burns in the Florida state park system are conducted with authorization from the FDACS, Florida Forest Service (FFS). Wildfire suppression activities in the park are coordinated with the FFS.

Wildfire suppression activities in the park are coordinated with FFS. About eight acres of mesic flatwoods occur on Anclote Key in a band around and north of the lighthouse. Living, dead, and dying slash pine are present, but saw palmetto is not. For a mesic flatwoods, fuel loading is high. Fire presents a hazard to osprey nests and a bald eagle nest. Whether these flatwoods

originated naturally or were the result of human intervention while living on the island (Herwitz 1977) is not known. Therefore, it is questionable whether burning is appropriate over this small area enclosed by tidal swamp, coastal strand, and maritime hammock. To protect the natural, historic, and developed resources from catastrophic wildfires, a prescribed fire program will be implemented to reduce hazardous fuels and the risk they pose. Initially, prescribed fires should be planned in the non-growing season (winter) to lower the risk to the canopy trees and using firing techniques to reduce fire intensity. Once fuels have been reduced, growing season fires can then be conducted.

Objective: Within 10 years, have 8 acres of the park maintained within the optimum fire return interval.

Table 5 contains a list of all fire-dependent natural communities found within the park, their associated acreage and optimal fire return interval, and the annual average target for acres to be burned.

Table 5: Prescribed Fire Management

Natural Community	Acres	Optimal Fire Return Interval (Years)
Mesic Flatwoods	8	1-4
Annual Target Acreage[1]	2-8	

[1]Annual Target Acreage Range is based on the fire return interval assigned to each burn zone. Each burn zone may include multiple natural communities.

The park is partitioned into management zones including those designated as burn zones (see Management Zones Table and Map). Prescribed fire is planned for each burn zone on the appropriate interval. The park's burn plan is updated annually because fire management is a dynamic process. To provide adaptive responses to changing conditions, fire management requires careful planning based on annual and very specific burn objectives. Each annual burn plan is developed to support and implement the broader objectives and actions outlined in this ten-year management plan.

Escaped campfires have burned more than 40 acres of dune, coastal strand, and maritime hammock on Anclote Key over the last five years. Limited staff and resources have struggled to exclude these fires from the developed assets and cultural resources near the Anclote light station when threatened. A substantial firebreak surrounding the ranger residence and light station offers the best protection from these unpredictable fires. In May of 2011, a nine-person team from the South AmeriCorps division established a 20-meter wide firebreak around the north perimeter of the residence compound on Anclote Key. Maintenance of the firebreak by park staff will be required.

In order to track fire management activities, DRP maintains a statewide burn database. The database allows staff to track various aspects of each park's fire management program including individual burn zone histories and fire return intervals, staff training/experience,

backlog, if burn objectives have been met, etc. The database is also used for annual burn planning which allows DRP to document fire management goals and objectives on an annual basis. Each quarter the database is updated and reports are produced that track progress towards meeting annual burn objectives.

Imperiled Species Management

Goal: Maintain, improve, or restore imperiled species populations and habitats in the park.

DRP strives to maintain and restore viable populations of imperiled plant and animal species primarily by implementing effective management of natural systems. Single species management is appropriate in state parks when the maintenance, recovery, or restoration of a species or population is complicated due to constraints associated with long-term restoration efforts, unnaturally high mortality, or insufficient habitat. Single species management should be compatible with the maintenance and restoration of natural processes, and should not imperil other native species or seriously compromise park values.

In the preparation of this management plan, DRP staff consulted with staff of the FWC's Imperiled Species Management or that agency's Regional Biologist and other appropriate federal, state, and local agencies for assistance in developing imperiled animal species management objectives and actions. Likewise, for imperiled plant species, DRP staff consulted with FDACS. Data collected by the USFWS, FWC, FDACS, and FNAI as part of their ongoing research and monitoring programs will be reviewed by park staff periodically to inform management of decisions that may have an impact on imperiled species at the park. Ongoing inventory and monitoring of imperiled species in the state park system is necessary to meet DRP's mission. Long-term monitoring is also essential to ensure the effectiveness of resource management programs. Monitoring efforts must be prioritized so that the data collected provides information that can be used to improve or confirm the effectiveness of management actions on conservation priorities. Monitoring intensity must at least be at a level that provides the minimum data needed to make informed decisions to meet conservation goals. Not all imperiled species require intensive monitoring efforts on regular intervals. Priority must be given to those species that can provide valuable data to guide adaptive management practices. Those species selected for specific management action and those that will provide management guidance through regular monitoring are addressed in the objectives below.

Objective: Update baseline imperiled species occurrence inventory lists for plants and animals.

There are currently two imperiled plant species and 25 imperiled animal species known to occur within the park. Surveys for sea turtle nesting, shorebird nesting, osprey nesting, and invasive plants allow the opportunity for detailed observations in the field. Staff is trained to document imperiled species occurrence as well as record characteristics of unfamiliar species for identification. Collected data are communicated to the DRP District 4 Biology office, FDACS, FNAI, and FWC.

Objective: Monitor and document 13 selected imperiled animal species in the park.

DRP staff coordinates targeted surveys of eleven of the imperiled species known to occur in the Park, in cooperation with Audubon Society of Florida, Florida Shorebird Alliance, and FWC. Monitoring and reporting protocols have been established for each of these species by FWC. Population, nesting occurrence and nesting productivity data are collected from May 1 to October 31, for green, loggerhead, and Kemp's ridley sea turtles. Sea turtle stress and mortality data are collected year round using standard FWC stranding reports. American oystercatcher, Wilson's plover, snowy plover, least tern, Caspian tern, Sandwich tern, reddish egret, and black skimmer population, nesting occurrence, and nest productivity data are collected during six statewide surveys coordinated by FWC from March to August. Though no longer imperiled, osprey and bald eagle nesting occurrence and productivity data are collected during spring nesting season in cooperation with Audubon of Florida and FWC. Piping plover population and migration information is collected during two statewide surveys in the winter. A gopher tortoise survey is also planned.

Objective: Provide protection, where appropriate, to imperiled species within the Preserve.

The two designated plant species found at Anclote Key, inkberry and shell-mound prickly-pear, probably need no special protection measures. The designated animal species, on the other hand, do require them. These include three species of turtles and twenty-five species of birds. Sea turtles nests are protected with self-releasing cages to discourage terrestrial nest predation. Levels of terrestrial predator presence near nest sites should be monitored to assess if further protective action is required. Most of the remaining designated species are wading birds, seabirds, and shorebirds.

The DRP will seek a balanced approach to minimize visitor impacts to shorebirds and the park's sensitive coastal habitats, while managing resource based recreational activities. In collaboration with FWC, other government agencies, local non-governmental organizations, and volunteers, park staff will identify and delineate habitats and educate the public about shorebird protection.

Management decisions will be informed by analysis of data on habitat use in the park during prior nesting seasons. This analysis will suggest areas of importance where focused management actions are needed. These actions will typically include:

- Demarcating potential shorebird habitat by enclosing the perimeter of the habitat and buffer area with appropriate fencing and signage.
- Monitoring during the nesting season to identify and protect new breeding sites.
- Providing interpretive and educational outreach to the public prior to and during the nesting season to encourage visitor use that protects shorebirds and their habitat.
- When the same breeding sites are used year after year, posting the protected area will occur prior to the season (pre-posting).
- When new breeding sites are indicated, appropriate measures will be implemented, including demarcating new protected areas and expanding or initiating interpretive programs.
- Coordinating with FWC and local law enforcement agencies to ensure compliance with park rules and shorebird protection, as needed.

When it is necessary to limit recreational activities or visitor access to protect nesting habitat, park staff or volunteers will provide onsite interpretation to educate visitors about the management of imperiled shorebird habitat. These outreach programs will commence prior to nesting seasons and prior to placing limits on access to recreational areas. Pre-posting the identified habitat areas, combined with early public notification regarding the park's shorebird protection program, will improve visitor compliance with park rules and promote broad-based public stewardship of shorebird nesting, resting, and foraging habitats in the park.

Some shorebirds nest on Anclote Key proper, but very large concentrations occur at Three Rooker Island. Nesting species include the American oystercatcher, snowy plover, Wilson's plover, least tern, Sandwich tern, Caspian tern, and the black skimmer. In order to protect these designated species, and other shorebirds (including larids) nesting with them, special protection measures are required. Shorebird management will comply with DRP's shorebird standards. Nesting is monitored in order to protect preferred nesting areas from disturbance, and to determine if nesting has been successful. The nesting habitat is posted and barriers are placed around nesting sites to discourage disturbance. These posts, signs, and barriers are maintained throughout the season. Nesting sites are patrolled as necessary. Recent studies of the effects of human activity on breeding bird colonies in Florida have quantified setback distances for different species. Human approach closer than these distances is ill advised and should be avoided because it forces birds to expend energy required for successful reproduction. A similar situation exists for wintering shorebirds. In this case, human disturbance causes expenditure of critical energy reserves required for migration or the next nesting season (Helmers 1992). Sites where wintering and migrating shorebirds congregate are seasonally posted to reduce such impacts.

Additional protective measures can be gained through education and interpretation. Informational leaflets have been prepared for distribution, an educational kiosk has been maintained, and the media have been involved to communicate the significance of the park and to explain how it is being managed. In addition, a group of dedicated volunteers has been organized to assist with monitoring and to help educate visitors. Interior portions of the island are posted throughout the year to provide resting sites during migration and wintering. Monitoring and protection measures have been implemented with assistance from the FWC and the Clearwater Audubon Society.

Other designated species found at the Anclote Key Preserve State Park include the peregrine falcon, the piping plover, and several species of wading birds. These species are all well served by management practices in the park.

Objective: Monitor impacts on shorebird and sea turtle nesting by terrestrial nuisance species in the park.

Predation critically threatens many rare species (Hecht and Nickerson 1999), with the deleterious impacts of predation losses compounded by habitat loss (Reynolds and Tapper, 1996). In Florida, nesting beaches have been substantially altered by urbanization and development, leaving few beaches isolated from development, thereby severely reducing the amount of habitat suitable for successful nesting by sea turtles and shorebirds (Rogers et al. 1995). At the same time, predators abound along many beaches where nesting could otherwise succeed. Nest predation can have severe impacts on reproductive success for sea turtles and

shorebirds (Ellis et al. 2007; Engeman et al. 2010; Engeman and Smith 2007; Kadlec 1971; Wilcox and Donlan 2007).

Current protocols for nesting surveys include data collection on the presence of terrestrial predators. Staff and volunteers are trained to observe and document predator tracks near shorebird nesting habitat, shorebird nest sites, and sea turtle nest sites and false crawls. Self-releasing cages are installed over sea turtle nests by park staff on Anclote Key to discourage predation by nuisance species.

Visitors' dogs on the islands create an even more significant and challenging impact on shorebird nesting. The remoteness of the islands prevents the level of oversight of visitor activities afforded at other parks. The protocol that staff and volunteers use to document the presence of nuisance species near nesting areas also documents the presence of dogs. Evidence of dogs is typically observed at every sea turtle and shorebird nesting survey conducted on the islands of the Preserve. Signage on all of the islands clearly describes the policy on pets at the Park, but there is evidence of continued non-compliance. The current approach to reducing this impact to shorebird nesting depends on multiple partners. Park staff maintains signage and educates visitors on policies when dogs are encountered. State administrative code 62D includes enforceable language on the presence of pets in restricted areas. This code is enforced by Pinellas County Sheriff's deputies, Pasco County Sheriff's deputies, and FWC Law Enforcement. Where shorebird nesting occurs closest to very high recreational use, a Nest Steward program is staffed by the Clearwater Audubon Society and Park volunteers. Monitoring will continue to evaluate the effectiveness of the current approach, but to date dogs continue to threaten the nesting success of several imperiled species found in the Park including American oystercatcher, black skimmer, least tern, Sandwich tern, snowy plover, and Wilson's plover.

Exotic Species Management

Goal: Remove exotic and invasive plants and animals from the park and conduct needed maintenance control.

DRP actively removes invasive exotic species from state parks, with priority being given to those causing the ecological damage. Removal techniques may include mechanical treatment, herbicides, or bio-control agents.

Objective: Annually retreat 4 acres of exotic plant species in the park.

Beginning in 2001, a large-scale restoration effort was planned and implemented on roughly 75 acres of beach dune, coastal strand, and maritime hammock on Anclote Key. Monocultures of Australian pine and Brazilian pepper infested a majority of these natural communities throughout the island. Much effort and energy went into a successful treatment program that lasted for more than three years. Now, the restoration efforts have moved into a maintenance phase of follow-up treatment of seedling exotics. This will need to continue for many years.

Since there is only one staff person assigned to the Park, teams of volunteers and park rangers from neighboring parks have assisted with follow-up treatments on Anclote Key, walking the length of the island with backpack sprayers. The rate of re-growth annually averages one to five

percent of the total acreage between the fore dune and the mangrove edge on the opposite shoreline. The total acreage changes almost daily, but averages five hundred acres on Anclote Key and one hundred acres on Three Rooker Island. A minimum of four acres retreated annually would be required to maintain current low infestation levels. Optimally, funding should be sought for re-treatment by a contractor every three years to avoid a renewed proliferation of exotics. In the meantime, an annual plan that includes surveying the historic infestation sites and treating all exotics found is now implemented to the extent possible, given the level of available staffing and funding.

North Anclote Bar and Three Rooker Island will require monitoring for emergent infestations as well. Programs of monitoring and re-treatment are currently ongoing by park staff. Source funding for contractor re-treatment should be sought to supplement this effort.

Invasive plant surveys on the smaller islands of the Park are done less frequently because of lower occurrence of exotics. Biannual treatment days have been sufficient to maintain minimum levels of infestation on Three Rooker Island and North Anclote Bar. Invasive plant infestation levels on Three Rooker Island should be monitored and work plans adjusted if the islands continue to accrete at current rates.

Special Management Considerations

Timber Management Analysis

Chapters 253 and 259, Florida Statutes, require an assessment of the feasibility of managing timber in land management plans for parcels greater than 1,000 acres if the lead agency determines that timber management is not in conflict with the primary management objectives of the land. The feasibility of harvesting timber at this park during the period covered by this plan was considered in context of DRP's statutory responsibilities and an analysis of the park's resource needs and values. The long-term management goal for forest communities in the state park system is to maintain or re-establish old-growth characteristics to the degree practicable, with the exception of those communities specifically managed as early successional.

A timber management analysis was not conducted for this park since its total upland acreage is below the 1,000-acre threshold established by statute. Timber management will be re-evaluated during the next revision of this management plan.

Coastal/Beach Management

DRP manages over 100 miles of sandy beach, which represents one-eighth of Florida's total sandy beach shoreline. Approximately one-quarter of Florida's state parks are beach-oriented parks and account for more than 60 percent of statewide park visitation. The management and maintenance of beaches and their associated systems and processes is complicated by the presence of inlets and various structures (jetties, groins, breakwaters, etc.) all along the coast. As a result, beach restoration and nourishment have become increasingly necessary and costly procedures for protecting valuable infrastructure. All of these practices affect beaches for long distances on either side of a particular project. DRP staff needs to be aware of and participate in the planning, design and implementation of these projects to ensure that park resources and recreational use are adequately considered and protected.

The islands of Anclote Key Preserve State Park have more than seven miles of white sand beach that has never been nourished. The remoteness that makes them attractive to visitors, sea turtles, and shorebirds has also served to exclude them from plans for improvement or stabilization. Erosion and accretion are a constant natural process for these highly changeable barrier islands, which play an important role in coastline dynamics. The thin stretch of land that occurs above the high tide line along the middle of Anclote Key is potentially vulnerable to impacts from major storm events due to the configuration of the island. The effects of sea level rise on all the islands of the Park are yet to be known. There are no current plans to alter the beaches of the Preserve in the future. Honeymoon Island State Park, however, is adjacent to the boundary of the Preserve to the south, and several major beach restoration projects are planned in the coming years. The near shore current flows from south to north along this barrier island coastline. It is not known how these future projects will impact the beaches of Anclote Key Preserve State Park.

The list of documented imperiled species (Table 2) that occur annually on the beaches of these islands include sixteen avian, five reptilian, one mammalian, and two plant species. Nesting is documented for loggerhead and Kemp's Ridley sea turtles, snowy and Wilson's plover, American oystercatchers, least tern, and black skimmer. Piping plover return to these islands each year to pass the winter. The frequency and density of so many imperiled species on these islands have prompted their nomination to the list of globally important habitats (Douglas 2010).

One of the primary challenges for management here is balancing the availability of prime nesting and resting habitat with recreational use. Almost a quarter-million visitors were recorded at the Park in 2009. A majority of these reached the beaches of the Park by private boat. Propeller scars have damaged the seagrass beds near popular landing sites. Dog footprints are often found near historic shorebird nesting areas. Debris from fireworks litters the shoreline following holiday weekends. The current approach to fortifying the available staff is to form partnerships with local community agencies and groups sympathetic to the needs of the Park. As with many parks, Anclote Key Preserve has a support group that assists in park management. Grants from Clearwater Audubon Society (CAS) have allowed the purchase of supplies for many nesting seasons. The members of the CAS also organize and provide crews working as "Bird Stewards" to help educate visitors during nesting season. Park management works closely with the Pinellas County Sheriff's office and FWC law enforcement to patrol the outlying islands where coverage by staff is difficult. FWC is also developing a local working group of the Coastal Wildlife Conservation Initiative to address many of these issues, and park staff is participating.

Sea Level Rise

Potential sea level rise is now under study and will be addressed by Florida's residents and governments in the future. The DRP will stay current on existing research and predictive models, in coordination with other DEP programs and federal, state, and local agencies. The DRP will continue to observe and document the changes that occur to the park's shorelines, natural features, imperiled species populations, and cultural resources. This ongoing data collection and analysis will inform the DRP's adaptive management response to future conditions, including the effects of sea level rise, as they develop.

Arthropod Control Plan

All DRP lands are designated as "environmentally sensitive and biologically highly productive" in accordance with Ch. 388 and Ch. 388.4111 Florida Statutes. If a local mosquito control district proposes a treatment plan, DRP responds within the allotted time and reaches consensus with the mosquito control district. 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. DRP does not authorize new physical alterations of marshes through ditching or water control structures. Mosquito control plans may be temporarily set aside under declared threats to public or animal health, or during a Governor's Emergency Proclamation.

Cultural Resource Management

Cultural Resource Management

Cultural resources are individually unique, and collectively, very challenging for the public land manager whose goal is to preserve and protect them in perpetuity. DRP is implementing the following goals, objectives, and actions, as funding becomes available, to preserve the cultural resources found in Anclote Key Preserve State Park.

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

The management of cultural resources is often complicated because these resources are irreplaceable and extremely vulnerable to disturbances. The advice of historical and archaeological experts is required in this effort. All activities related to land clearing, ground disturbing activities, major repairs, or additions to historic structures listed or eligible for listing in the National Register of Historic Places must be submitted to the FDOS, Division of Historical Resources (DHR) for review and comment prior to undertaking the proposed project. Recommendations may include, but are not limited to concurrence with the project as submitted, pre-testing of the project site by a certified archaeological monitor, cultural resource assessment survey by a qualified professional archaeologist, or modifications to the proposed project to avoid or mitigate potential adverse effect. In addition, any demolition or substantial alteration to any historic structure or resource must be submitted to DHR for consultation and DRP must demonstrate that there is no feasible alternative to removal and must provide a strategy for documentation or salvage of the resource. Florida law further requires that DRP consider the reuse of historic buildings in the park in lieu of new construction and must undertake a cost comparison of new development versus rehabilitation of a building before electing to construct a new or replacement building. This comparative analysis must be accomplished with the assistance of DHR.

Objective: Assess and evaluate 1 of 3 recorded cultural resource in the park.

The recorded cultural site at the park, the Anclote Key Light Station Site (8PI10611), includes one historic structure, as well as an adjacent cultural site that was formerly the site of two light keeper's residences. The wooden structures were burnt to the brick foundations, and then a majority of the bricks removed by looters. The foundations and environs of the light keeper's residences are in poor condition.

The entire site currently has limited access, as it is enclosed by an eight-foot wire fence, and

manned by DRP staff to prevent any further vandalism. A wide firebreak has been constructed north of the site to prevent wildfires from reaching the area. Constant encroachment by native and exotic plants is also held in check by DRP staff. The largest threat to the historic site would be the return of the vegetative overgrowth and vandals in the absence of a staff presence at the site. The condition of the site will be recorded annually via the establishment of photo points.

Objective: Continue to maintain 1 of 3 recorded cultural resource in good condition.

The Anclote Key Lighthouse was restored in 2003. The current condition of the light tower and associated oil house is good. An assessment of this structure will be conducted on an annual basis.

Resource Management Schedule

A priority schedule for conducting all management activities that is based on the purposes for which these lands were acquired, and to enhance the resource values, is located in the Implementation Component of this management plan.

Land Management Review

Section 259.036, Florida Statutes, established land management review teams to determine whether conservation, preservation, and recreation lands titled in the name of the Board of Trustees are being managed for the purposes for which they were acquired and in accordance with their approved land management plans. DRP considered recommendations of the land management review team and updated this plan accordingly.

Anclote Key Preserve State Park was subject to a land management review on September 16 and 17, 2010. The review team made the following determinations:

- The land is being managed for the purpose for which it was acquired.
- The actual management practices, including public access, complied with the management plan for this site.

LAND USE COMPONENT

INTRODUCTION

Land use planning and park development decisions for the state park system are based on the dual responsibilities of the Florida Department of Environmental Protection (DEP), Division of Recreation and Parks (DRP). These responsibilities are to preserve representative examples of original natural Florida and its cultural resources, and to provide outdoor recreation opportunities for Florida's citizens and visitors.

The general planning and design process begins with an analysis of the natural and cultural resources of the unit, and then proceeds through the creation of a conceptual land use plan that culminates in the actual design and construction of park facilities. Experts in environmental sciences, cultural resources, park operations, and management through public workshops and environmental groups provide input to the plan. With this approach, DRP objective is to provide quality development for resource-based recreation throughout the state with a high level of sensitivity to the natural and cultural resources at each park.

This component of the unit plan includes a brief inventory of the external conditions and the recreational potential of the unit. Existing uses, facilities, special conditions on use, and specific areas within the park that will be given special protection, are identified. The land use component then summarizes the current conceptual land use plan for the park, identifying the existing or proposed activities suited to the resource base of the park. Any new facilities needed to support the proposed activities are described and located in general terms.

EXTERNAL CONDITIONS

An assessment of the conditions that exist beyond the boundaries of the unit can identify any special development problems or opportunities that exist because of the unit's unique setting or environment. This also provides an opportunity to deal systematically with various planning issues such as location, regional demographics, adjacent land uses, and park interaction with other facilities.

Anclote Key Preserve State Park is located within Pinellas and Pasco counties, approximately 3 miles offshore from Tarpon Springs in the southwest part of the state. The 11,000 acre preserve includes three islands: Anclote Key, North Anclote Bar, and Three Rooker Island.

Significant resource-based recreation opportunities located near the park include Honeymoon Island State Park and Caladesi Island State Park, directly south of the Preserve. These parks offer numerous water-based recreation opportunities which include boating, camping, kayaking/canoeing, fishing, hiking, interpretive programs, picnicking, swimming, surfing, and wildlife viewing. North of the Preserve is Werner-Boyce Salt Springs State Park, which offers resource based recreation opportunities that include boating, fishing, hiking, and picnicking. Local parks within the vicinity of the park include Key Vista Nature Park and Eagle Point Park, managed by Pasco County, and War Veterans Memorial Park managed by Pinellas County. These parks offer kayaking, canoeing,

boating, fishing, hiking trails, interpretive facilities, playgrounds, picnic areas, restroom facilities, and an observation tower.

Existing Use of Adjacent Lands

Anclote Key Preserve State Park is located in western Pinellas and Pasco Counties, approximately three miles offshore from the town of Tarpon Springs. The Preserve includes three islands: Anclote Key, North Anclote Bar, and Three Rooker Island.

The adjacent islands, North Key and Dutchman Key, are privately owned and currently undeveloped. The nearby mainland is the second most populated metropolitan area in Florida, with over 3 million people living within 30 miles of the Preserve. Since the last update of the park's unit management plan, the Greater Tampa Bay Region has experienced a combined growth rate of 14.8 percent, reaching 4 million residents in April 2007.

The primary effects of adjacent uses on the Preserve derive from the heavy and essentially unregulated recreational use of the surrounding waters for boating, fishing, jet skiing, kayaking, and canoeing.

Planned Use of Adjacent Lands

Just three miles away on shore of mainland southwest Florida, zoning and land uses range from conservation onshore to single-family residential, up to nine units per acre. As residential and commercial growth continues in the region, there will be increasing popularity of offshore recreational opportunities near Anclote Key Preserve State Park.

Recreational boating and water sports around the preserve will continue to increase in proportion to the surrounding region's population. The impacts from the anticipated increased demand for recreation include congestion and user safety concerns in surrounding waterways, and the potential disturbances to the wildlife and natural systems in the submerged lands and shorelines of the Preserve.

PROPERTY ANALYSIS

Effective planning requires a thorough understanding of the unit's natural and cultural resources. This section describes the resource characteristics and existing uses of the property. The unit's recreation resource elements are examined to identify the opportunities and constraints they present for recreational development. Past and present uses are assessed for their effects on the property, compatibility with the site, and relation to the unit's classification.

Recreation Resource Elements

This section assesses the unit's recreation resource elements those physical qualities that, either singly or in certain combinations, supports the various resource-based recreation activities. Breaking down the property into such elements provides a means for measuring the property's capability to support individual recreation activities. This process also analyzes the existing spatial factors that either favor or limit the provision of each activity.

Land Area

As one of the last remnants of the barrier island system in the Tampa Bay area, Anclote Key Preserve State Park is a significant plant and animal habitat. Anclote Key is the largest of three islands of Anclote Key Preserve State Park. It is a long and narrow island, with a natural sandy beach along the high-energy gulf front shoreline. Three Rooker Island is one of the state's top shorebird nesting sites. In this state preserve, eight distinct biological communities provide habitat for dozens of avian species. The upland natural communities of the preserve include beach dune, coastal strand, maritime hammock, and mesic flatwoods. The marine communities include marine seagrass beds, mangrove swamp, salt marsh, and marine unconsolidated substrate.

Water Area

With over 11,000 acres of submerged land within the boundary of the Anclote Key Preserve, the water area is an extremely popular location for numerous activities including boating, kayaking/canoeing, fishing, swimming, and snorkeling. The popularity for water-based recreation opportunities and balance of sensitive submerged natural communities and rare imperiled species poses a challenge to DRP Staff to manage, but also presents an opportunity for community outreach and education about the delicate natural systems that exist and why they should be protected for future generations to enjoy.

Shoreline

The white sandy beaches of Anclote Key Preserve State Park provide some of the last remaining largely undeveloped shorelines in the Tampa Bay Area. The remote location of the island 3 miles offshore and its limited accessibility by boat makes it a premier destination for day-use visitors or individuals pursuing an overnight primitive beach camping experience.

Natural Scenery

Anclote Key Preserve State Park provides users with scenic views of the white sand beaches of the barrier island and the blue-green waters of the Gulf of Mexico.

Significant Wildlife Habitat

The preserve contains over 5,000 acres of highly productive marine seagrass beds, which are home to a significant number of marine flora and fauna, providing critical habitat to numerous species during various life cycle phases. Imperiled species found in the marine seagrass beds include West Indian manatees, wading birds, and sea turtles.

The preserve also contains over 400 acres of beach dune communities, which are important to nesting shorebirds and sea turtles. The largely uninhabited beach dunes within Anclote Key Preserve State Park are critical to the survival of imperiled species found within the preserve, and should be protected where possible.

The significant wildlife habitat at Anclote Key Preserve State Park provides excellent interpretive opportunities for visitors regarding the sensitive natural communities found within the preserve, and why they should be protected. It also provides visitors the opportunity for nature study and wildlife observation.

Natural Features

Anclote Key is frequently mentioned as being the northern-most of a chain of barrier islands that parallel the southwestern coast of Florida. This gives it a unique transitional character in the coastal environment. Aside from its significant wildlife habitat, the park occurs in a very dynamic setting and its land area has accreted by about 30 percent of its total length in about two percent of its age (Hine et al. 1987).

Archaeological and Historical Features

The park is home to the Anclote Key lighthouse, a 101-foot tall sentinel that was completed in 1887, and served as an aid to maritime navigation until its decommission in 1984. Located at the southern end of Anclote Key, the light house was fully restored by park staff and local supporters after almost a full decade of hard work. It was relit in September 2003, and serves again to this day as a sentry over the waters of southwest Florida.

Adjacent to the lighthouse is the remains of the historical complex that served the island and lighthouse, which includes the remains of oil house, sheds, cisterns, foundation piers from the keeper's quarters, and one known archaeological site. These structures provide an important interpretive opportunity to give visitors a glimpse into the past of lighthouses in the State of Florida, and the culture of the individuals of the coast guard that lived on the island for 65 years until it was automated in 1952.

Assessment of Use

All legal boundaries, significant natural features, structures, facilities, roads, and trails existing in the unit are delineated on the base map (see Base Map). Specific uses made of the unit are briefly described in the following sections.

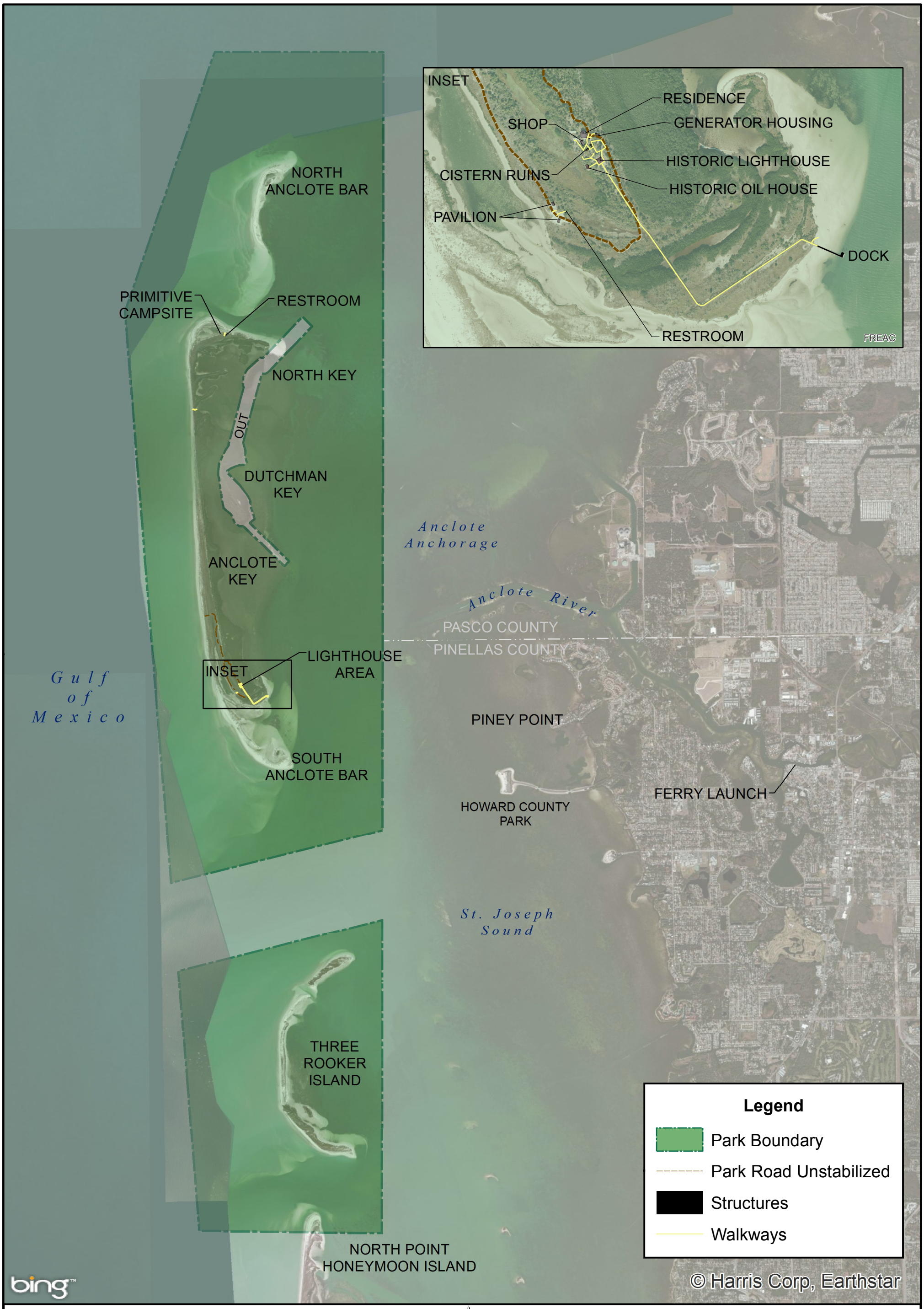
Past Uses

The U.S Government built the Anclote Key lighthouse in 1887. The last lighthouse keeper retired in 1952. The automated lighthouse functioned until it was decommissioned in 1984.

Future Land Use and Zoning

DRP works with local governments to establish designations that provide both consistency between comprehensive plans and zoning codes and permit typical state park uses and facilities necessary for the provision of resource-based recreation opportunities.

Within the Pasco and Pinellas County Future Land Use and Zoning Maps, Anclote Key Proper and the surrounding upland barrier islands are zoned as conservation areas. This designation limits development to the lowest impact possible, preserving the natural character of the island.



ANCLOTE KEY PRESERVE STATE PARK

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0 0.25 0.5 1 Mile

Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial; 2011

BASE MAP

Current Recreational Use and Visitor Programs

Beach use, saltwater swimming, fishing, picnicking, primitive camping, hiking, bird-watching, and nature study are the recreational activities available at the preserve.

Offshore fishing and boating (including a large amount of personal watercraft use) are popular activities in the waters surrounding the preserve. On their eastern sides, Anclote Key, North Anclote Bar, and Three Rooker Island offer anchorage that is sheltered from prevailing winds and wave action.

Anclote Key Preserve State Park recorded 150,125 visitors in Fiscal Year (FY) 2011-2012. By DRP estimates, the FY 2011-2012 visitors contributed $6.5 million in direct economic impact and the equivalent of 131 jobs to the local economy (Florida Department of Environmental Protection 2012).

Other Uses

The Anclote Key Lighthouse was relit in 2003, and still functions as an active aid to maritime navigation along Florida's southwest Gulf Coast.

Protected Zones

A protected zone is an area of high sensitivity or outstanding character from which most types of development are excluded as a protective measure. Generally, facilities requiring extensive land alteration or resulting in intensive resource use, such as parking lots, camping areas, shops, or maintenance areas, are not permitted in protected zones. Facilities with minimal resource impacts, such as trails, interpretive signs, and boardwalks are generally allowed. All decisions involving the use of protected zones are made on a case-by-case basis after careful site planning and analysis.

At Anclote Key Preserve State Park, due to the relative remoteness and sensitive nature of the island ecology, the entirety of the park's marine sea grass beds and upland natural communities have been designated as protected zones as delineated on the Conceptual Land Use Plan. Any future development at the park will be conducted sensitively and sustainably to minimize any impact to the resources at the Preserve. As noted in the Resource Component section, during the nesting season, areas with nesting and wintering birds will also be designated as no trespassing zones.

Existing Facilities

There are two main use areas at the park, found on the north and south ends of Anclote Key. On the north end of the island is a designated primitive camping area, and composting restroom. On the south end of the island is a day use area which includes two picnic pavilions and a composting restroom.

Support facilities on the barrier island are located near the existing historic lighthouse, and include a staff residence, shop, photovoltaic panel array, and backup diesel generator. Supplies and equipment are delivered to the island via a dock on the south end of the island.

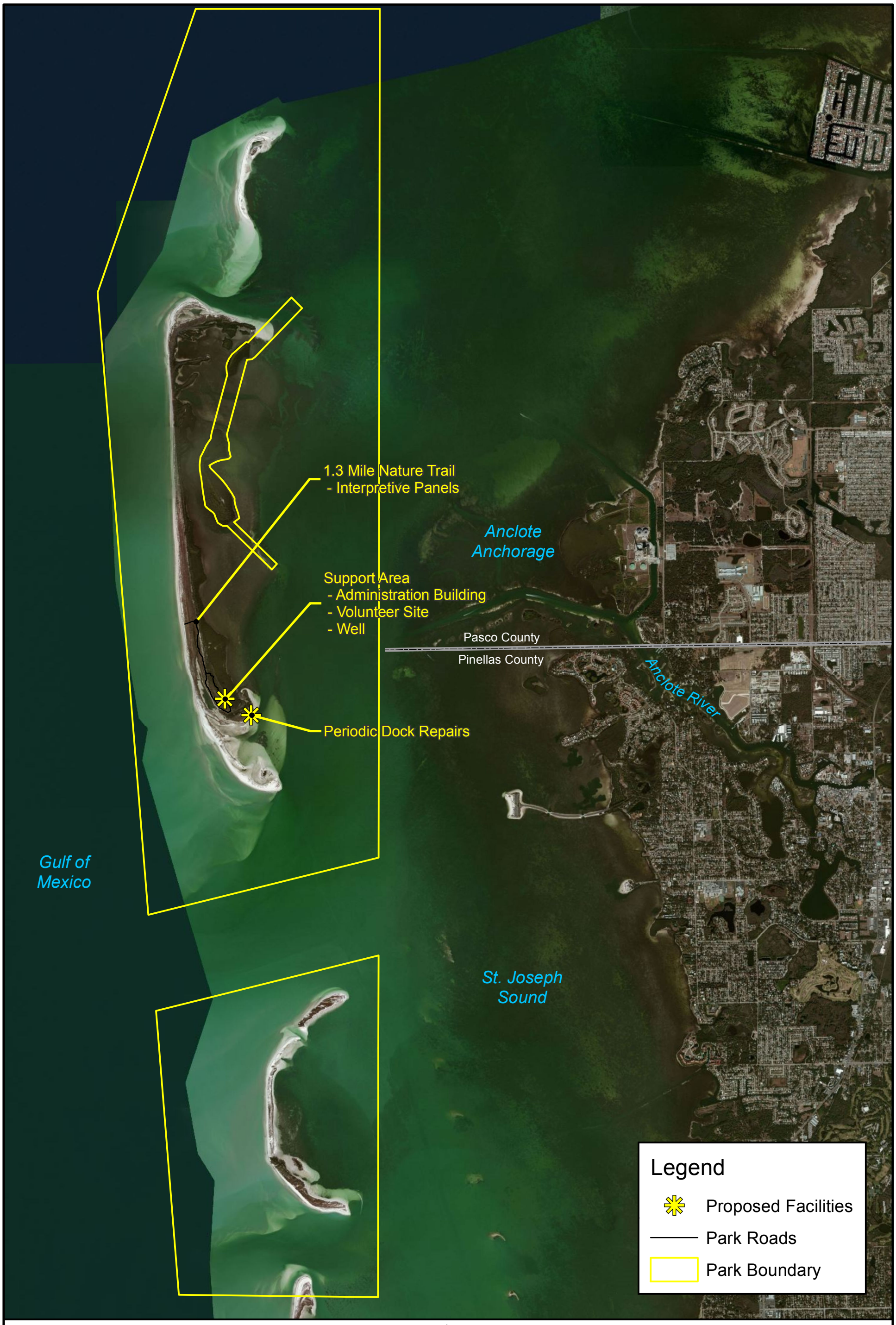
Recreation Facilities
Picnic Pavilions (2)
Composting Restroom (2)
Primitive Camping Area (Up to 10 Sites)

Support Facilities
Ranger Residence
Dock
Shop
Photovoltaic Panel Array
Backup Diesel Generators

CONCEPTUAL LAND USE PLAN

The following narrative represents the current conceptual land use proposal for this park. The conceptual land use plan is the long-term, optimal development plan for the park, based on current conditions and knowledge of the park's resources, landscape and social setting (see Conceptual Land Use Plan). The conceptual land use plan will be reassessed during the next update of the park management plan. As new information is provided regarding the environment of the park, cultural resources, recreational use, and as new land is acquired, the conceptual land use plan may be amended to address the new conditions as needed. A detailed development plan for the park and a site plan for specific facilities will be developed based on this conceptual land use plan, as funding becomes available.

During the development of the conceptual land use plan, DRP assessed the potential impacts of proposed uses or development on the park resources and applied that analysis to decisions for the future physical plan of the park as well as the scale and character of proposed development. Potential impacts are more thoroughly identified and assessed as part of the site planning process once funding is available for facility development. At that stage, design elements (such as existing topography and vegetation, sewage disposal, and stormwater management) and design constraints (such as imperiled species or cultural site locations) are more thoroughly investigated. Municipal sewer connections, advanced wastewater treatment, or best available technology systems are applied for on-site sewage disposal. Stormwater management systems are designed to minimize impervious surfaces to the greatest extent feasible, and all facilities are designed and constructed using best management practices to limit and avoid resource impacts. Federal, state, and local permit and regulatory requirements are addressed during facility development. This includes the design of all new park facilities consistent with the universal access requirements of the Americans with Disabilities Act (ADA). After new facilities are constructed, the park staff monitors conditions to ensure that impacts remain within acceptable levels.



ANCLOTE KEY PRESERVE
STATE PARK

CONCEPTUAL LAND USE PLAN

Potential Uses

Public Access and Recreational Opportunities

Goal: Provide public access and recreational opportunities in the park.

The existing recreational activities and programs of this state park are appropriate to the natural and cultural resources contained in the park and should be continued. New activities and programs are also recommended and discussed below.

Objective: Maintain the park's current recreational carrying capacity of 2,632 users per day.

At Anclote Key Preserve State Park, the primary emphasis is placed on protection and maintenance of the unique natural and cultural resources located at the park, while allowing the public an opportunity to experience these features. The park provides visitors with the opportunity to enjoy, reflect, and interpret the natural and historic features of the park through kayaking, canoeing, boating, beach use, saltwater swimming, fishing, picnicking, primitive camping, hiking, bird-watching, nature study, nature trails, and picnicking facilities.

Objective: Expand the park's current recreational carrying capacity by 40 users per day.

With the addition of the interpretive nature trail at the park, the recreational carrying capacity could expand by 40 users per day.

Objective: Continue to provide the current repertoire of 4 interpretive, educational, and recreational programs on a regular basis.

Managed by the administration at Honeymoon Island State Park, Anclote Key Preserve State Park is able to offer the same interpretive programs upon request. These programs include ranger lead walks, hands-on activities, and outreach programs that help explain the unique features located at the parks and why it is important to protect them.

The most popular program at the park is the semi-annual lighthouse tour, which is offered by the Park's Citizen Support Organization (CSO).

Objective: Develop 3 new interpretive, educational, and recreational programs.

Public outreach and interpretation is extremely critical to educating and protecting the unique features found at state parks. The submerged lands found within Anclote Key Preserve State park contain over 5,800 acres of marine seagrass beds. With such a high visitation level, it is critical to educate the public regarding the importance of using marked channels to reduce damage to the seagrass beds. This program should be promoted concurrently with responsible use programs, which include "pack-in, pack-out" primitive camping on the island and responsible boating to protect the park's resources.

In a larger context, interpretation of the important natural and cultural resources on Anclote Key should be available to visitors to enjoy. Due to the remote location of the park and accessibility only by boat, it is recommended to establish an interpretive master plan

for the park. This would include a long-term plan for establishing a self-guided interpretive tour of the park from the land and water, potentially utilizing personal electronic devices that have the ability to scan reference codes and display interpretive information to users.

Proposed Facilities

Capital Facilities and Infrastructure

Goal: Develop and maintain the capital facilities and infrastructure necessary to implement the recommendations of the management plan.

Anclote Key Preserve State Park is a part of a larger complex of barrier island parks along Florida's southwest gulf coast. It is only accessible by boat, and is primitive in its available facilities. The development concept for the park proposes to continue to maintain the primitive nature of the park, focusing on the enjoyment of the natural and cultural resources available for visitors.

The existing facilities of this state park are appropriate to the natural and cultural resources contained in the park and should be maintained. New construction, as discussed further below, is recommended to improve the quality and safety of the recreational opportunities, to improve the protection of park resources, and to streamline the efficiency of park operations. The following is a summary of improved and new facilities needed to implement the conceptual land use plan for Anclote Key Preserve State Park:

Objective: Maintain all public and support facilities in the park.

All capital facilities, trails, and roads within the park will be kept in proper condition through the daily or regular work of park staff and/or contracted help.

Objective: Improve/repair 1 existing facility at the park, as needed.

Major repair projects for park facilities may be accomplished within the ten-year term of this management plan, if funding is made available. These include the modification of existing park facilities to bring them into compliance with the Americans with Disabilities Act (a top priority for all facilities maintained by DRP). The following discussion of other recommended improvements and repairs are organized by use area within the park.

The existing dock on Anclote Key is an important facility that provides all support and supplies to the staff persons on the island. Following any major storm event, periodic repairs will be necessary to be able to maintain this important structure on the island.

Objective: Construct 3 new facilities and 1.3 miles of trail.

The proposed development concept at Anclote Key Preserve State Park remains primitive in nature, maintaining the undeveloped character that makes the barrier island so popular on Florida's southwest coast. The only new recreation facility proposed on the island is to improve an existing service road with signage to be used as an interpretive nature trail. The trail would extend between the beach area and mangrove swamp through the maritime hammock of the park. Interpretive signs along the trail provide opportunity to feature information about barrier island geography, native plants found in the harsh environment, and unique animals found on the island.

New support facilities are proposed at the park to assist with park operations and maintenance, which is a constant responsibility of staff on the barrier island. The current ranger residence on the island is supported by an array of photovoltaic panels, with a diesel generator backup. Fresh water is provided via a reverse osmosis setup which is found on the service dock, it is recommended to replace the reverse osmosis system with a more permanent well for long term park operations and to support future development.

As the sole support and administrative structure on the island, the current ranger residence is home to the only resident staff member. For future management and support responsibilities, it is recommended to add an administrative building in the residence compound to provide additional support, storage, and administrative space for park operations. This structure can also be manned by volunteers and serve as a meeting point for interpretive programs.

Volunteers at Anclote Key Preserve State Park continue to provide a critical service. Considering the island's remote location and harsh environment, it is recommended to add a bunkhouse in the compound area to provide overnight accommodation for small groups of volunteers. The bunkhouse would additionally be available to AmeriCorps staff and visiting researchers. The building will include a small office space and sleeping area with bunk beds to accommodate up to four volunteers overnight. It is recommended that the building be between 300 and 400 square feet and include a composting toilet or be connected to the existing disposal system that currently serves the ranger residence.

Recognizing the sensitivity of the barrier island environment, the new facilities will be designed according to lowest impact and best management practices.

Facilities Development

Preliminary cost estimates for these recommended facilities and improvements are provided in the Ten-Year Implementation Schedule and Cost Estimates (Table 7) located in the Implementation Component of this plan. These cost estimates are based on the most cost-effective construction standards available at this time. The preliminary estimates are provided to assist DRP in budgeting future park improvements, and may be revised as more information is collected through the planning and design processes. New facilities and improvements to existing facilities recommended by the plan include:

Recreation

1.3 Mile Nature Trail

Support

Well
Administration Building
Volunteer Bunkhouse

Recreational Carrying Capacity

Carrying capacity is an estimate of the number of users a recreation resource or facility can accommodate and still provide a high quality recreational experience and preserve the natural values of the site. The carrying capacity of a unit is determined by identifying the land and water requirements for each recreation activity at the unit, and then applying these requirements to the unit's land and water base. Next, guidelines are applied which estimate the physical capacity of the unit's natural communities to withstand recreational uses without significant degradation. This analysis identifies a range within which the carrying capacity most appropriate to the specific activity, the activity site, and the unit's classification is selected (see Table 6).

The recreational carrying capacity for this park is a preliminary estimate of the number of users the unit could accommodate after the current conceptual development program has been implemented. When developed, the proposed new facilities would increase the unit's carrying capacity approximately as shown in Table 6.

Table 6
Existing Use And Optimum Carrying Capacity

	Existing Capacity		Proposed Additional Capacity		Estimated Optimum Capacity	
Activity/Facility	**One Time**	**Daily**	**One Time**	**Daily**	**One Time**	**Daily**
Anclote Key						
Lighthouse Area			10	40	10	40
Beach Use/Picnicking	120	240			120	240
Camping	60	60			60	60
Three-Rooker Island						
Beach Use/Boating/Swimming	541	1082			541	1082
North Anclote Bar						
Beach Use/Boating/Swimming	625	1250			625	1250
TOTAL	**1346**	**2632**	**10**	**40**	**1356**	**2672**

Optimum Boundary

The optimum boundary map reflects lands that have been identified as desirable for direct management by DRP as part of the state park. These parcels may include public as well as privately owned lands that improve the continuity of existing parklands, provide the most efficient boundary configuration, improve access to the park, provide additional natural and cultural resource protection, or allow for future expansion of recreational activities. The map also identifies lands that are potentially surplus to the management needs of DRP. As additional needs are identified through park use, development, or research, and changes to land use on adjacent private property occurs, modification of the park's optimum boundary may be necessary.

Identification of parcels on the optimum boundary map is intended solely for planning purposes. It is not to be used in connection with any regulatory purposes. Any party or governmental entity should not use a property's identification on the optimum boundary map to reduce or restrict the lawful rights of private landowners. Identification on the map does not empower or suggest that any government entity should impose additional or more restrictive environmental land use or zoning regulations. Identification should not be used as the basis for permit denial or the imposition of permit conditions.

The properties identified in the Optimum Boundary Map include the outparcels within the boundary of Anclote Key Preserve State Park. The boundary of these properties includes the uplands of the North Key and Dutchman Key, and the submerged boundaries surrounding them. The acquisition of these properties would allow for the further protection of critical marine seagrass bed communities and barrier island habitat for shorebird nesting.

Dutchman Key is a private inholding located closely adjacent to the north end of Anclote Key. It consists primarily of mangrove swamp and has uniquely intact seagrass beds that along its shore. A small area of upland sand has accreted to Dutchman Key where a stand of approximately 20 mature Australian Pines have grown. Acquisition of Dutchman Key would promote resource management, seagrass protection, and park operations.

ANCLOTE KEY PRESERVE
STATE PARK

N

0 0.25 0.5 1 Mile

Florida Department of Environmental Protection
Division of Recreation and Parks
Date of aerial; 2011

OPTIMUM BOUNDARY MAP

IMPLEMENTATION COMPONENT

The resource management and land use components of this management plan provide a thorough inventory of the park's natural, cultural, and recreational resources. They outline the park's management needs and problems, and recommend both short and long-term objectives and actions to meet those needs. The implementation component addresses the administrative goal for the park and reports on the Division of Recreation and Parks (DRP) progress toward achieving resource management, operational, and capital improvement goals and objectives since approval of the previous management plan for this park. This component also compiles the management goals, objectives, and actions expressed in the separate parts of this management plan for easy review. Estimated costs for the ten-year period of this plan are provided for each action and objective, and the costs are summarized under standard categories of land management activities.

MANAGEMENT PROGRESS

Since the approval of the last management plan for Anclote Key Preserve State Park in 2001, significant work has been accomplished and progress made towards meeting the DRP's management objectives for the park. These accomplishments fall within three of the five general categories that encompass the mission of the park and the DRP.

Acquisition

There have not been any acquisitions at Anclote Key Preserve State Park since 2001.

Resource Management

Natural Resources

- Established a monitoring and treatment program that has successfully removed 288 acres of exotic plants in the preserve since 2001 resulting in a 99 percent reduction of Australian Pines.
- Established firebreak on Anclote Key to protect residence compound from naturally occurring fires on the island.
- Established species monitoring programs in cooperation with FWC for shorebirds, eagles, osprey, and sea turtles on the preserve's 7 miles of beaches.
- Developed a mammalian predator monitoring and removal program that has removed 66 nuisance animals near areas of high importance for nesting shorebirds and sea turtles.
- Through partnerships with Clearwater Audubon, FWC, Pinellas County Sheriff's Office, Florida Shorebird Alliance, and the Florida Park Service we have increased protection of nesting shorebirds and their habitat on Three Rooker Island.

Cultural Resources

- Completed an archeological survey of the entire island of Anclote Key.
- Restored 19th century winch and constructed a covered structure to protect it.
- Erected fencing around areas within the lighthouse compound to protect the historical ruins.

Recreation and Visitor Services

- Continued to serve over 175,000 visitors annually at the preserve since 2001.
- Continue to host semi-annual Anclote Key Lighthouse interpretive program.
- Developed an interpretive plan for the lighthouse area.
- Established contracts with ferry services to Anclote Key enabling more visitors to enjoy the island and generate a revenue stream for the park. Anclote Key Preserve State Park operated at a profit in FY 2010-2011 for the first time.
- Installation of interpretive panels along boardwalk and brick path to the lighthouse.

Park Facilities

- Established interpretive boardwalk from service dock to lighthouse compound on Anclote Key.
- Restored lighthouse.
- Constructed Ranger Residence.
- Constructed storage and shop building.
- Reconstructed oil house.
- Installed photovoltaic array and solar energy system reducing consumption of diesel fuel and the related emissions by 66%.

MANAGEMENT PLAN IMPLEMENTATION

This management plan is written for a timeframe of ten years, as required by Section 253.034 Florida Statutes. The Ten-Year Implementation Schedule and Cost Estimates (Table 7) summarizes the management goals, objectives, and actions that are recommended for implementation over this period, and beyond. Measures are identified for assessing progress toward completing each objective and action. A time frame for completing each objective and action is provided. Preliminary cost estimates for each action are provided and the estimated total costs to complete each objective are computed. Finally, all costs are consolidated under the following five standard land management categories: Resource Management, Administration and Support, Capital Improvements, Recreation Visitor Services, and Law Enforcement.

Many of the actions identified in the plan can be implemented using existing staff and funding. However, a number of continuing activities and new activities with measurable quantity targets and projected completion dates are identified that cannot be completed during the life of this plan unless additional resources for these purposes are provided. The plan's recommended actions, time frames, and cost estimates will guide the DRP's planning and budgeting activities over the period of this plan. It must be noted that these recommendations are based on the information that exists at the time the plan was prepared. A high degree of adaptability and flexibility must be built into this process to ensure that the DRP can adjust to changes in the availability of funds, improved understanding of the park's natural and cultural resources, and changes in statewide land management issues, priorities, and policies.

Statewide priorities for all aspects of land management are evaluated each year as part of the process for developing the DRP's annual legislative budget requests. When preparing these annual requests, the DRP considers the needs and priorities of the entire state park system and the projected availability of funding from all sources during the upcoming fiscal year. In addition to annual legislative appropriations, the DRP pursues supplemental sources of funds and staff resources wherever possible, including grants, volunteers, and partnerships with other entities. The DRP's ability to accomplish the specific actions identified in the plan will be determined largely by the availability of funds and staff for these purposes, which may vary from year to year. Consequently, the target schedules and estimated costs identified in Table 7 may need to be adjusted during the ten-year management planning cycle.

Table 7
Anclote Key Preserve State Park Ten-Year Implementation Schedule and Cost Estimates

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.

Goal I: Provide administrative support for all park functions.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Continue day-to-day administrative support at current levels.**	Administrative support ongoing	C	**$69,400**
Objective B	**Expand administrative support as new lands are acquired, new facilities are developed, or as other needs arise.**	Administrative support expanded	UFN	**$1,050**
Goal II: Protect water quality and quantity in the park, restore hydrology to the extent feasible, and maintain the restored condition.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
	Anclote Key Preserve State park does not have any hydrological issues to be managed.			
Goal III: Restore and maintain the natural communities/habitats of the park.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Within 10 years have 8 acres of the park maintained within optimal fire return interval.**	# Acres within fire return interval target	LT	**$18,500**
Action 1	Allow naturally occuring fires to run their course on the island.	#Acres Burned	LT	$8,500
Action 2	Continue to monitor mesic flatwoods for fuel loading, and monitor current research for prescribed burning on barrier islands.	Monitoring Complete	LT	$10,000

* 2012 Dollars
ST = actions within 2 years
LT = actions within 10 years
C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.

Goal IV: Maintain, improve or restore imperiled species populations and habitats in the park.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Update baseline imperiled species occurrence inventory lists for plants and animals, as needed.**	List updated	C	**$1,000**
Objective B	**Monitor and document 13 selected imperiled animal species in the park.**	# Species monitored	C	**$22,700**
Action 1	Implement monitoring protocols for 13 imperiled animal species including gopher tortoises, green sea turtles, loggerhead sea turtles, Kemp's ridley sea turtles, American oystercatcher, Wilson's plover, Snowy plover, Least tern, Black skimmer, Piping plover, Caspian tern, and Sandwich tern, reddish egret.	# Species monitored	C	$22,700
Objective C	**Provide protection, where appropriate, to imperiled species within the Preserve.**	# Species monitored	C	**$22,900**
Action 1	Implement monitoring protocols for the inkberry and shell-mound prickly-pear, where needed.	# Species monitored	C	$400
Action 2	Monitor shorebird nests at the Three-Rooker islands, and implement special protection measures where required.	# Nests monitored	C	$22,500

Goal V: Remove exotic and invasive plants and animals from the park and conduct needed maintenance-control.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Annually treat 4 acres of exotic plant species in the park.**	# Acres treated	C	**$101,500**
Action 1	Annually develop/update exotic plant management work plan.	Plan developed/updated	C	$16,000
Action 2	Implement annual work plan by treating 4 acres in the park, annually, and continuing maintenance and follow-up treatments, as needed.	Plan implemented	C	$85,500

Goal VI: Protect, preserve and maintain the cultural resources of the park.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Assess and evaluate 1 of 3 recorded cultural resources in the park.**	Documentation complete	LT	**$80**
Objective B	**Continue to maintain 1 of 3 recorded cultural resources in good condition.**	# Sites in good condition	LT	**$31,180**
Action 1	Continue to implement regular monitoring program for the 1 cultural site.	# Sites monitored	C	$31,180

* 2012 Dollars
ST = actions within 2 years
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C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.

Goal VII: Provide public access and recreational opportunities in the park.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Maintain the park's current recreational carrying capacity of 2,632 users per day.**	# Recreation/visitor	C	**$120,000**
Objective B	**Expand the park's recreational carrying capacity by 40 users per day.**	# Recreation/visitor	LT	**$1,800**
Action 1	Develop 1 new recreational opportunity at the park through an interpretive natural trail.	# Recreation/visitor opportunities per day	LT	$1,800
Objective C	**Continue to provide the current repertoire of 4 interpretive, educational, and recreational programs on a regular basis.**	# Interpretive/education programs	C	**$8,000**
Objective D	**Develop 3 new interpretive, educational, and recreational programs.**	# Interpretive/education programs	LT	**$24,649**
Action 1	Update and implement the park's Statement for Interpretation.	Document completed/implemented	ST	$1,600
Action 2	Develop and implement Interpretive Master Plan.	Plan implemented	UFN	$22,449
Action 3	Develop 3 new interpretive programs.	Programs developed	LT	$600
Goal VIII: Develop and maintain the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.		**Measure**	**Planning Period**	**Estimated Manpower and Expense Cost* (10-years)**
Objective A	**Maintain all public and support facilities in the park.**	Facilities maintained	C	**$161,000**
Objective B	**Continue to implement the park's transition plan to ensure facilities are accessible in accordance with the American with Disabilities Act of 1990.**	Plan implemented	LT	**$2,000**
Objective C	**Improve and/or repair 1 existing facilites, as needed, as identified in the Land Use Component.**	# Facilities	UFN	**$60,000**
Action 1	Conduct periodic repairs on service dock, following major storm events on the island.	Repairs completed	UFN	$60,000
Objective D	**Construct 3 new facilites and 1.3 miles of trail as identified in the Land Use Component.**	# Facilities/Miles of Trail	UFN	**$767,200**
Objective E	**Expand maintenance activities as existing facilities are improved and new facilities are developed.**	Facilities maintained	UFN	**$2,500**

* 2012 Dollars
ST = actions within 2 years
LT = actions within 10 years
C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

NOTE: THE DIVISION'S ABILITY TO COMPLETE THE OBJECTIVES OUTLINED BY THE MANAGEMENT PLAN IS CONTINGENT ON THE AVAILABILITY OF FUNDING AND OTHER RESOURCES FOR THESE PURPOSES.

Summary of Estimated Costs

Management Categories		Total Estimated Manpower and Expense Cost* (10-years)
Resource Management		$179,360
Administration and Support		$70,450
Capital Improvements		$829,200
Recreation Visitor Services		$154,449
Law Enforcement Activities[1]		$0
	[1]Law enforcement activities in Florida State Parks are conducted by FWC Division of Law Enforcement and by local law enforcement agencies.	

* 2012 Dollars
ST = actions within 2 years
LT = actions within 10 years
C = long term or short term actions that are continuous or cyclical
UFN = currently unfunded need

Addendum 1 — Acquisition History

Purpose of Acquisition

The State of Florida acquired Anclote Key Preserve State Park to develop, operate, maintain and preserve said property for outdoor recreational, park, conservation and related purposes.

Sequence of Acquisition

The initial 102.00-acre property that became Anclote Key Preserve State Park was acquired on July 1, 1960. The property was assigned to the Florida Department of Environmental Protection (DEP), Division of Recreation and Parks (DRP) by the United States of America through a special use permit. Between August 6, 1971 and March 13, 1996, the Board of Trustees of the Internal Improvement Trust Fund (Trustees) acquired, through patent and exchange, additional land that was incorporated to Anclote Key Preserve State Park. Currently the park contains approximately 403 upland acres and 11,774 submerged acres.

On November 22, 1971, the Trustees conveyed its management authority of Anclote Key Preserve State Park to the DRP under Lease No. 2564. The lease is for a period of ninety-nine (99) years, and it will expire on November 22, 2070.

Title Interest

The Trustees hold fee simple to Anclote Key Preserve State Park.

Special Conditions on Use

The Trustees leases stipulates that all the property be utilized for public outdoor recreation and related purposes. The park is designated single-use to provide public outdoor recreation and other park related uses. Uses such as water resource development projects, water supply projects, storm-water management projects, and linear facilities and sustainable agriculture and forestry other than those forest management activities specifically identified in the management plan of the park are not consistent with this plan.

Outstanding Reservations

Following is a listing of outstanding rights, reservations and encumbrances, which apply to Anclote Key Preserve State Park.

Instrument: .....Special Use Permit
Instrument Holder: .....U. S. Department of Interior
Beginning Date:.....July 1, 1960
Ending Date:.....Not given
Outstanding Rights, Uses, Etc.: .....The United State can revoke the permit for noncompliance with the terms of the permit.

Instrument: .....Patent
Instrument Holder: .....The United States of America
Beginning Date:.....March 13, 1996
Ending Date:.....Not given
Outstanding Rights, Uses, Etc.: .....The subject land shall revert to the United States if the patentee attempts to give title or control to a third party, if subject land is used other than the purpose for which it was conveyed, or if subject land is not used for the purpose for which it was conveyed for a 5-year period.

Addendum 2—Advisory Group Members and Report

Department of Environmental Protection
Division of Recreation and Parks

Anclote Key Preserve State Park
Unit Management Plan
Advisory Group
November 6th, 2013

Local Government Representatives

Kathryn Starkey, Commissioner District 3
Pasco County Board of County Commissioners
8731 Citizens Drive
New Port Richey, Florida 34654

Susan Latvala, Commissioner District 4
Pinellas Board of County Commissioners
315 Court Street
Clearwater, Florida 33756

Tourism Development

Ed Caum, Communications Manager
Visit Pasco County
8731 Citizens Drive
New Port Richey, Florida 34654

David Downing, Deputy Director
St. Petersburg /Clearwater Area
Convention & Visitors Bureau
13805 58th Street North, Suite 2-200
Clearwater, Florida 33760

Agency Representatives

Peter Krulder, Park Manager
Honeymoon Island Administration
1 Causeway Boulevard
Dunedin, Florida 34698

Randy Runnels, Manager
Pinellas County Aquatic Preserve
130 77th Street East
Terra Ceia, Florida 34250

Traci Castellon, Regional Wildlife Biologist
Species Conservation Planning
Florida Fish & Wildlife Conservation Commission
3900 Drane Field Road
Lakeland, Florida 33811

Dave Butcher, Forestry Resource Administrator
Florida Forest Service
Florida Department of Agriculture and Consumer Services
851 County Road 630 East
Frostproof, Florida 33843

Environmental Groups

Ann Paul, Regional Coordinator
Audubon of Florida (Tampa Bay Area)
Florida Coastal Islands Sanctuaries
410 South Ware Boulevard Suite 702
Tampa, Florida 33619

Peter Clark, President
Tampa Bay Watch
3000 Pinellas Bayway South
Tierra Verde, Florida 33715

Recreational User Groups

Jim Greenhalgh, President
Tampa Bay Sea Kayakers
Post Office Box 355
Safety Harbor, Florida 34695

Kathleen St. Martin, President
Save Our Sandbar
Post Office Box 331
Elfers, Florida 34680

Adjacent Landowner

Steve Spencer
Post Office Box 306
Indian Rocks Beach, Florida 33785

Citizen Support Organization

Ginger Phillips, President
Friends of Anclote Key State Park and Lighthouse
1114 East Boyer Street
Tarpon Springs, Florida 34689

Anclote Key Preserve State Park Advisory Group Staff Report

The Advisory Group meeting to review the proposed land management plan for Anclote Key Preserve State Park was held at the Honeymoon Island State Park Environmental Education Center/Rotary Centennial Nature Center in Dunedin, Florida on Wednesday, November 6th, 2013, at 9:00 AM.

Lisa Baltus represented Pinellas County Commissioner, Susan Latvala. Lucille Paterno represented Pasco County Commissioner, Kathryn Starkey. Doug Metko represented Kathleen St. Martin. Audrey Howe represented Ed Caum. Cristina Esposito represented Pasco County Environmental Lands Division. Pat Keogh, Forest Area Supervisor for Pinellas and Hillsborough counties was in attendance with Dave Butcher. David Downing, Peter Clark, Jim Greenlaugh, and Ginger Phillips were not in attendance. All other appointed Advisory Group members were present. Additionally, Doug Metko and Ginger Phillips provided written comments.

Attending Division of Recreation and Parks staff members were Peter Krulder, Dan Larremore, Chris Berner, Michael Lang, Ezell Givens, Chris Becker, Lew Scruggs, and Daniel Alsentzer.

Mr. Alsentzer began the meeting by explaining the purpose of the Advisory Group and reviewing the meeting agenda. He provided a brief overview of the Division of Recreation and Parks' (DRP) planning process. Mr. Alsentzer summarized public comments received during the previous evening's public workshop. Mr. Alsentzer then asked each member of the Advisory Group to express his or her comments on the draft plan.

Summary of Advisory Group Comments

Dave Butcher (Florida Forest Service (FFS)) noted that language in the resource management component of the draft plan appears to confuse Brazilian pepper with endemic species on the islands. As an exotic species that the management plan prioritizes for removal, Brazilian pepper should be clearly distinct from native vegetation. Among other exotic vegetation to be prioritized for removal, FFS concurs that Australian pine should be cut or treated with herbicide. Its shallow root structures are not significant for mitigating shoreline erosion.

Doug Metko (Save Our Sandbar) proposed removing or amending specific language in the draft plan that could be used to limit public access to the park islands:

Mr. Metko stated that motor exclusion zones would cause undue difficulty for boaters navigating from Tarpon Springs to the islands and recommends removing reference to such zones from the draft plan. He attributes the majority of impacts to seagrass beds to commercial shrimping that occurs in the bay and recommends that the Park Service and Florida Fish & Wildlife Conservation Commission (FWC) address this issue prior to closing areas of the bay to boat motors.

The 590-foot protective buffers that are recommended to be posted around identified shorebird nests are excessive and would impose undue limitations on recreational use of the beaches on each of the three park islands. Many of the sites with the highest probability of repeat shorebird nesting activity are within less than 590 feet of the mean high water line, such that the buffer would necessitate full closures of long segments of the beaches.

Mooring buoys are not applicable to the conditions or types of recreation that occur around the park islands. Mr. Metko stated that requiring boaters to utilize mooring buoys instead of beaching or anchoring boats, would be impractical and reduce ease of access to the beaches.

Educational programs at North Anclote Bar, especially in relation to proper dog etiquette, would be beneficial to the community's stewardship and enjoyment of the beach. Mr. Metko pledged that the Save Our Sandbar organization will work to educate park visitors on this issue.

Mr. Metko identified text in introduction of the plan that could be interpreted to mean that the park's principle source of revenue is from fees and charges to individual recreational visitors. It is understood that special use permits for commercial operations, tours, or concessions in the park require access fees. Mr. Metko objects to charging individuals who visit the park for recreational purposes.

Lisa Baltus (Pinellas County Board of Commissioners staff) inquired about some of the features on the vicinity and reference maps. Additionally, she noticed that not all municipal or county parks were identified in the descriptions of adjacent lands, recommending that Fred Howard Park be depicted and added to the list.

Lucille Paterno (Pasco County Board of Commissioners staff) commented that the general public has not been well-informed about the park rules. Given that the islands are such popular destinations for recreation, it will be necessary to reach out to the populations of the nearby cities to effectively enhance volunteer stewardship of the park. Ms. Paterno suggests further combining efforts between Audubon, the Tampa Bay Sea Kayakers, FWC, local sheriff's departments, and schools.

Ann Paul (Audubon of Florida/Florida Coastal Islands Sanctuaries) expressed appreciation for the cooperative relationship between Audubon and the Park Service. She is concerned about the small number of staff that is available for interpretive or educational programming and law enforcement related to resource protection on the islands, citing dogs as one of the most significant threats to shorebirds.

Ms. Paul explained the justification for the wide buffer zones around shorebird nests to additionally protect the space that shorebirds require for resting and foraging. Given the critical importance of this space for shorebird habitat, she inquired whether more funding can be allocated specifically for the purpose of law enforcement in the park. Although interpretive or educational program volunteers are useful for improving shorebird protection, she comments that volunteers do not typically motivate the same level of rule compliance as law enforcement.

Ms. Paul suggested tailoring a version of the North Pinellas and West Pasco Boater's Guides specifically to address seagrass and barrier island habitat protection. This Boater's Guides are widely distributed and have the potential to effectively educate the public.

Randy Runnels (Florida Coastal Office (FCO)) inquired whether there are honor fee boxes or iron rangers on any of the islands. He noted that significant and much needed revenue for funding additional park staff could be gained by collecting access fees or through various alternative fundraising strategies.

Mr. Runnels inquired whether the proposed well drilling at the ranger residence area on Anclote Key is to draw water from the Floridan Aquifer or the near-surface freshwater lens on the island. He further inquired what advantages the well would provide over the current reverse osmosis system. If the well is drilled only to the near-surface freshwater lens, there may be risk of water contamination associated with the lead and mercury content in the soil around the lighthouse.

Mr. Runnels is concerned about the reports of commercial shrimping that allegedly takes place within the Pinellas County Aquatic Preserve and state park boundary.

Mr. Runnels inquired about the recent history of accretion whereby South Anclote Bar merged with Anclote Key proper.

Mr. Runnels noted that there is not much characterization of the proposed bunkhouse structure in the conceptual land use plan. He inquired what the footprint of this structure would be and whether it would be have a composting toilet or use a septic tank.

Mr. Runnels inquired whether the new prescribed burn plan for Anclote Key would extend to the palm groves and how this might benefit or adversely affect gopher tortoise habitat.

Mr. Runnels suggested that the park service post bilingual signs and print brochures in various foreign languages that are commonly spoken by tourists to the region.

Mr. Runnels inquired whether the interpretive signage along the proposed nature trail on Anclote Key could explain the Australian pine issue. This would be a generally informative topic for visitors to the island, but may also reduce public criticism that the Park Service has degraded the quality of the viewshed. Additionally, he encourages not only clear-cutting the Australian pines, but also phasing in native vegetation to restore the viewshed for the public and accelerate habitat restoration. FCO strives to remove exotic species in aquatic preserves and is available to cooperate with the Park Service for this management objective.

Traci Castellon (Florida Fish & Wildlife Conservation Commission (FWC)) suggested implementing an FWC designated Critical Wildlife Area (CWA) on Three Rooker Island to reduce or altogether preclude recreational visitor access. Although the island is a popular site for boaters and beach recreation, she advised that the island's location and features make it uniquely critical for shorebird species to merit a CWA designation.

Steve Spencer (Adjacent Landowner) stated that he is willing to help facilitate removal of the Australian pines on the North Key private inholding. He is open to negotiating potential acquisition of his land by the State of Florida for addition to the park.

Cristina Esposito (St. Petersburg/Clearwater Area Convention & Visitors Bureau) commented that Pasco Palms Preserve is not identified in the plan or on the vicinity map. As a popular local park, she finds that this would be a useful reference in the plan.

Audrey Howe (Visit Pasco County) appreciated the park's continued contribution to the regional tourism economy. Public workshops and advisory group meetings help to ensure that local governments and stakeholders are informed about the resources and recreational opportunities that the parks offer.

Summary of Written Comments

Save Our Sandbar requests clarification in the plan document of the difference between land-based rules and those rules which would not apply on board private vessels, such as a bringing dogs and consuming alcohol.

The organization further requests substantiation of the descriptions of impacts to seagrass beds near the islands, given that the north tip of Anclote Key proper is near a deep water channel.

Mooring buoys are not appropriate for several reasons one being the dynamic movement of the bars. Buoys would be a cost prohibitive method of seagrass protection given the amount that would be needed to provide access for the large number of users.

Motor exclusion zones are not acceptable on the east side of these islands, given that it is the protected anchorage.

Since dogs are only allowed on North Anclote Bar, it would be the only island in the preserve that would require additional management action. The organization has discussed an aggressive educational program to address these concerns with the park management in lieu of law enforcement action.

Friends of Anclote Key State Park and Lighthouse (Citizen Support Organization (CSO)) notes that the explanations and purposes for proposed management actions and land use are very clear. The CSO understands the history behind the park's management. Data and field observations support the plan. Plans for the ranger residence and lighthouse area are appropriate. The CSO would like to participate in the implementation of some aspects of the plan. The CSO board and members may be able to use the unit management plan as a guide.

Staff Recommendations

Division staff recommends approval of the proposed management plan for Anclote Key Preserve State Park as presented, with the following changes:

- On page 26, the general management measures for marine seagrass beds will be revised to remove language describing the potential designation of motor exclusion zones and installation of mooring buoys. The revised language is as follows:

  General Management Measures: Protection efforts for this community type require routine monitoring of potential causes of impacts. Recreational boaters are advised to raise their boat motors and navigate over seagrass beds by drifting or poling. Local boating guidebooks and signs at marinas or boat ramps inform boaters of the locations of seagrass beds and boating practices necessary to reduce impacts to this community type.

- Reference to the 590-foot shorebird protection buffer guideline on page 43 will be removed.
- Descriptions of the proposed facilities on Anclote Key on page 61 will be revised to include:

  The building will include a small office space and sleeping area with bunk beds to accommodate up to four volunteers overnight. It is recommended that the building be between 300 and 400 square feet and include a composting toilet or be connected to the existing disposal system that currently serves the ranger residence.

  Recognizing the sensitivity of the barrier island environment, the new facilities will be designed according to lowest impact and best management practices.

- Additional county and municipal parks will be identified on the maps and in the descriptions of the state park vicinity and adjacent lands.

Additional revisions were made throughout the document to address editorial corrections, consistency of spellings and notations, and other minor corrections.

Division staff has made the following recommendations for park operations:

The Division will continue working with FWC, FCO, Pasco and Pinellas counties, Save Our Sandbar, Audubon Florida, and other agencies and organizations to coordinate visitor education, interpretation, environmental protection needs and law enforcement in the park. This collaboration is intended to improve shorebird protection and conservation of other park resources, while continuing to provide enjoyable public recreation opportunities on the islands.

Notes on Composition of the Advisory Group

Florida Statutes Chapter 259.032 Paragraph 10(b) establishes a requirement that all state land management plans for properties greater than 160 acres will be reviewed by an advisory group:

"Individual management plans required by s. 253.034(5), for parcels over 160 acres, shall be developed with input from an advisory group. Members of this advisory group shall include, at a minimum, representatives of the lead land managing agency, co-managing entities, local private property owners, the appropriate soil and water conservation district, a local conservation organization, and a local elected official."

Advisory groups that are composed in compliance with these requirements complete the review of State park management plans. Additional members may be appointed to the groups, such as a representative of the park's Citizen Support Organization (if one exists), representatives of the recreational activities that exist in or are planned for the park, or representatives of any agency with an ownership interest in the property. Special issues or conditions that require a broader representation for adequate review of the management plan may require the appointment of additional members. DRP's intent in making these appointments is to create a group that represents a balanced cross-section of the park's stakeholders. Decisions on appointments are made on a case-by-case basis by DRP staff.

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Addendum 4—Soils Descriptions

Pasco County

(75) Beaches - Beaches are natural deposits of tide-washed, very rapidly permeable sand. They are along the edges of a few small islands in the Gulf of Mexico. Beaches are narrow, commonly less than 200 feet in width but ranging up to 300 feet. The seaward half has a uniform gentle slope and is flooded during normal daily high tides. The landward half consists predominantly of gentle slopes and areas of short, stronger slopes that may range up to 15 percent. This landward part is not flooded during normal high tides, but is frequently flooded during periods of storm tides. Tidal action and waves produce minor changes in beach shape and slope almost daily. Storm tides, high waves, and strong winds may produce radical changes through erosion and deposition of beach materials.

The material making up beaches is of a highly variable composition both over short surface distances and within the profile. This is a result of the frequent natural reworking and mixing that occurs. The most common type of soil in most areas is pale brown to light gray uncoated quartz sand. Mixed with this sand are varying amounts of sand-size or larger fragments of shells and unbroken shells. Most areas of beaches have this variable mixture of sand and shell to a depth of more than 80 inches.

Included with beaches in mapping are areas that are more densely vegetated than is typical for beaches. These included areas are adjacent to the landward portion of the beaches, but they are slightly more elevated and are not covered by water except during times of extremely high storm tides. They also consist of variable mixture of sand, shell fragments, and commonly contain a layer stained with organic material about 10 inches below the surface. The vegetation in these included areas is mainly cabbage palm with an understory of various species of smilax. Also included with beaches are small areas of soils that have hard limestone rock within 80 inches of the surface and small areas of soils that have layers or organic or silty material in the profile.

When not covered by water, the beaches have a water table at a depth of 0 to 6 feet. The depth to the water table increases with distance form open water. Both the available water capacity and natural fertility are low, and the organic matter content is very low. When not impeded by a water table, permeability is rapid. Most of the beaches are devoid of vegetation, but inland edges are sometimes very sparsely covered by railroad vine, scattered clumps of sea oats, and seashore Bermuda grass. Beaches are not suitable for cultivation or use as woodland. Beaches are in capability subclass VIIIw. They have not been assigned to a range site.

(76) Bessie Muck - This very poorly drained, nearly level organic soil is in mangrove swamps on islands in the Gulf of Mexico. It is mainly on the eastern side of the islands and is exposed to tidal flooding. Individual areas are usually narrow and long, conforming to the overall shape of the island. Slopes are less than 1 percent.

Typically, the surface layer is black muck about 35 inches thick. Below this is very dark brown sandy clay 8 inches thick. Below this, to a depth of more than 80 inches, is a layer of gray fine sand mixed with varying amounts of whole or fragmented shell.

Included with this soil in mapping are very similar soils that do not have a clay or sandy clay layer. Also included are similar soils that have hard rock within 60 inches of the surface. The included soils make up about 25 percent of the mapped area.

Normal daily tides flood much of the mapped area, and storm tides cover the mapped area totally. The available water capacity is very high in the organic surface layer, high in the clayey underlying layer, and low in the sandy underlying layer. Natural fertility is high. Permeability is slow to very slow in the clayey layer and rapid in the other layers.

All areas of this soil remain in natural vegetation, which consists of red and black mangrove and, in more sheltered locations, a few white mangrove. Scattered glasswort, bushy sea-oxeye, and scattered clumps of salt-tolerant grasses are also present.

This soil is not suitable for cultivation or for use as pasture or woodland.
This soil in capability subclass VIIIw. It has not been assigned to a range site.

Pinellas County

Coastal Beaches (Co) - Coastal beaches consists of narrow strips of tide-washed sand bordering islands and parts of the mainland. Most areas are covered during storms and daily at high tide. These beaches range from a few feet to as much as 500 feet in width. Long stretches are practically without vegetation, but sparse salt-tolerant grasses and other plants grow in places. Depth to the water table varies with the tide.

The beach sand has been deposited, mixed and reworked by waves. It is firm or compact when moist and loose when dry. This sand is light gray to white and consists mainly of fine quartz particles in which there are varying quantities of medium to coarse shell fragments. The sand contains a few, fine, rounded, weakly cemented very dark gray to very dark brown particles. Coastal beaches are used primarily for recreation. It provides habitat for shore birds. (No capability classification; woodland group 9)

St. Lucie Fine Sand, Shell Substratum (Su) - This is a nearly level soil on low ridges on barrier islands in the western part of the county. In most places, the surface layer is very dark gray fine sand about 3 inches thick. Below this is light gray loose fine sand about 34 inches thick. The next layer is very pale brown, loose fine sand that extends to a depth of 40 inches or more. This is underlain by layers of mixed light-gray or white sand, seashells, and shell fragments. Reaction is medium acid in the surface layer and mildly alkaline below. The water table is at a depth of 40 to 60 inches for 6 months or more in most years. It is within 40 inches for less than 60 days. Included in mapping are small areas of Palm Beach sand that make up no more than 15 percent of any mapped area and of Made land that make up as much as 5 percent.

Most areas of St. Lucie fine sand, shell substratum, are in State or county parks or have been used for building lots. No areas are available for farming. (Capability unit VIs-2; woodland group 3)

Tidal Swamp (Ts) - Tidal swamp is on small islands and in low, broad coastal areas that are covered with seawater. It occurs mostly in the southeastern part of the county. The water is several inches deep at low tide and 1 or 2 feet deep at high tide. Tidal swamp differs from Tidal marsh mainly in vegetation. Tidal swamp has a thick growth of mangrove trees and a few small patches of salt-tolerant plants. Tidal swamp is subject to wave action, whereas Tidal marsh usually is not.

This land type consists mainly of sand, peaty sand, a few organic soils, seashells, and shell fragments. The dense forest of mangrove trees and high water make detailed investigation of the soils impractical. In places, the surface layer is fibrous peat, 6 to 18 inches thick, over gray to pale-brown sand mixed with shell fragments. In places, the surface layer is sandy clay and the subsurface layers are loam or marl. Other areas are stratified sand and organic material. Most areas contain varying amounts of seashells and shell fragments at irregular depths.

Tidal swamp is not extensive in the county. It is mainly a source of food, cover, and breeding grounds for numerous shorebirds and animals. Mosquito-control ditches have been dug in most areas to remove water trapped by falling tides. The shallow water in these ditches provides food and breeding areas for many species of fish. Some areas near St. Petersburg, Clearwater, and Honeymoon Island have been filled with dredged material to provide waterfront home sites. (No capability classification; woodland group 9)

Addendum 5—Plant and Animal List

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)

PTERIDOPHYTES

Japanese climbing fern*.....*Lygodium japonicum*
Silverback fern * .....*Pityrogramma calomelanos*
Lacy bracken.....*Pteridium aquilinum* var. *caudatum*
Chinese ladder brake* .....*Pteris vittata*

GYMNOSPERMS

South Florida slash pine.....*Pinus elliottii* var. *densa*
Coontie.....*Zamia pumila*

ANGIOSPERMS

MONOCOTS
Ticklegrass.....*Agrostis hiemalis*
Bushy blue stem .....*Andropogon glomeratus* var. *pumilus*
Tall threeawn .....*Aristida patula*
Arrowfeather threeawn.....*Aristida purpurascens*
Crested saltbush.....*Atriplex pentandra*
Coastal sandbur.....*Cenchrus incertus*
Sawgrass.....*Cladium jamaicense*
Alabama swamp flatsedge.....*Cyperus ligularis*
Rusty flatsedge .....*Cyperus odoratus*
Crowfoot grass *.....*Dactyloctenium aegyptium*
Air potato *.....*Dioscorea bulbifera*
Salt grass.....*Distichlis spicata*
Love grass.....*Eragrostis secundiflora* subsp. *oxylepis*
Saltmarsh finger grass .....*Eustachys glauca*
Pinewoods finger grass .....*Eustachys petraea*
Carolina fimbry .....*Fimbristylis caroliniana*
Hurricanegrass*.....*Fimbristylis cymosa*
Marsh fimbry .....*Fimbristylis spadicea*
Turtle grass .....*Halodule wrightii*
Cogongrass*.....*Imperata cylindrical*
Forked rush.....*Juncus dichotomous*
Black rush .....*Juncus roemerianus*
Bitter panicum .....*Panicum amarum*
Switchgrass .....*Panicum virgatum*
Blue paspalum .....*Paspalum caespitosum*
Seashore paspalum .....*Paspalum vaginatum*
Sandyfield beaksedge.....*Rhynchospora megalocarpa*
Cabbage palm .....*Sabal palmetto*
Saw palmetto .....*Serenoa repens*

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
Coral bristlegrass	*Setaria macrosperma*	
Ear-leaf greenbriar	*Smilax auriculata*	
Smooth cordgrass	*Spartina alterniflora*	
Marshhay cordgrass	*Spartina patens*	
Beach dropseed	*Sporobolus virginicus*	
St. Augustine grass *	*Stenotaphrum secundatum*	
Manatee grass	*Syringodium filiforme*	
Shoal grass	*Thalassia testudinum*	
Spanish moss	*Tillandsia usneoides*	
Sea oats	*Uniola paniculata*	
Spanish bayonet	*Yucca aloifolia*	
Soldier's orchid*	*Zeuxine statematica*	
DICOTS		
Marlberry	*Ardisia escallonioides*	
Black mangrove	*Avicennia germinans*	
Saltwort	*Batis maritima*	
Bidens	*Bidens laevis*	
Sea daisy	*Borrichia frutescens*	
American bluehearts	*Buchnera americana*	
Gray nickerbean	*Caesalpinia bonduc*	
Coastal searocket	*Cakile lanceolata*	
Australian pine *	*Casuarina equisetifolia*	
Madagascar periwinkle *	*Catharanthus roseus*	
Hackberry	*Celtis laevigata*	
Hyssopleaf sandmat	*Chamaesyce hyssopifolia*	
Coastal sandmat	*Chamaesyce mesembrianthemifolia*	
Snowberry	*Chiococca alba*	
Coco plum	*Chrysobalanus icaco*	
Buttonwood	*Conocarpus erectus*	
Beach tea; seaside croton	*Croton punctatus*	
Gulf coast swallow-wort	*Cynanchum angustifolium*	
Coin-vine	*Dalbergia ecastophyllum*	
Florida tasselflower*	*Emilia fosberii*	
Scouring rush	*Equisetum hyemale* var.*affine*	
Fireweed	*Erechtites hieraciifolius*	
Coral bean	*Erythrina herbacea*	
White stopper	*Eugenia axillaris*	
Dogfennel	*Eupatorium capillifolium*	
Seaside gentian	*Eustoma exaltatum*	
Strangler fig	*Ficus aurea*	
Florida yellowtops	*Flaveria floridana*	
Florida privet	*Forestiera segregata*	
Southern gaura	*Gaura angustifolia*	

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
Pineland heliotrope	*Heliotropium polyphyllum*	
Beach pennywort	*Hydrocotyle bonarienesis*	
Moonvine	*Ipomoea alba*	
Railroad vine	*Ipomoea pes-caprae* subsp. *brasiliensis*	
Beach morning glory	*Ipomoea stolonifera*	
Juba's bush	*Iresine diffusa*	
Beach elder	*Iva imbricata*	
Southern red cedar	*Juniperus virginiana*	
Saltmarsh mallow	*Kosteletzkya virginica*	
White mangrove	*Laguncularia racemosa*	
Virginia pepperweed	*Lepidium virginicum*	
Frog's-bit	*Limnobium spongia*	
Toad flax	*Linaria canadensis*	
Christmas berry	*Lycium carolinianum*	
Latex plant	*Morrenia odorata*	
Wax myrtle	*Myrica cerifera*	
Evening primrose	*Oenothera humifusa*	
Shell-mound prickly-pear	*Opuntia stricta*	CS
Redbay	*Persea borbonia*	
Beach cherry	*Physalis walteri*	
Painted leaf or Wild poinsettia	*Poinsettia cyathophora*	
Large flowered polygala	*Polygala violacea*	
Rustweed	*Polypremum procumbens*	
Rose purslane *	*Portulaca grandiflora*	
Purslane	*Portulaca pilosa*	
Guava	*Psidium guava*	
Virginia live oak	*Quercus virginiana*	
Red mangrove	*Rhizophora mangle*	
Perennial glasswort	*Sarcocornia perennis*	
Inkberry	*Scaevola plumieri*	BD
Beach naupaka*	*Scaevola taccada* var. *sericea*	
Brazilian pepper *	*Schinus terebinthifolia*	
Sweet broom	*Scoparia dulcis*	
Sea purslane	*Sesuvium portulacastrum*	
Saffron plum	*Sideroxylon celastrinum*	
Seaside goldenrod	*Solidago sempervirens*	
Necklace pod	*Sophora tomentosa* var. *truncata*	
Sea blite	*Suaeda linearis*	
Poison ivy	*Toxicodendron radicans*	
Cow-pea	*Vigna luteola*	
Wild lime	*Zanthoxylum fagara*	

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
GASTROPODS		
Lightning whelk	*Busycon sinistrum*	MSGB
Crown conch	*Melongena corona*	MSGB
Shark's eyes	*Neverita duplicata*	MSGB
Lettered olive	*Oliva sayana*	MSGB
Florida horse conch	*Triplofusus giganteus*	MSGB
Florida fighting conch	*Strombus alatus*	MSGB
BIVALVES		
Sunray venus clam	*Macrocallista nimbosa*	MSGB
Pen shell	*Pinna carnea*	MUS
CRUSTACEANS		
Mangrove crab	*Aratus pisonii*	MS
Common blue crab	*Callinectes sapidus*	MSGB, MS
Striped hermit crab	*Clibanarius vittatus*	MSGB, MS
Southern spider crab	*Libinia dubia*	MSGB, MS
Horseshoe crab	*Limulus polyphemus*	MSGB, MS
Stone crab	*Menippe mercenaria*	MSGB, MS
Ghost crab	*Ocypode quadrata*	BD
Long-wristed hermit crab	*Pagurus longicarpus*	MSGB, MS
Shrimp species	*Palaemonetes sp.*	MSGB, MS
Gulf coast fiddler crab	*Uca panacea*	MSGB, MS
ECHINODERMS		
Purple sea urchin	*Arbacia puctulata*	MSGB
Lined sea star	*Luidia clathrat*	MSGB
Five-holed keyhole urchin	*Mellita quinquiesperforata*	MSGB
SHARKS, RAYS		
Bull shark	*Carcharhinus leuca*	MSGB, MUS
Blacktip shark	*Carcharhinus limbatu*	MSGB, MUS
Southern stingray	*Dasyatis Americana*	MSGB, MUS
Atlantic Stingray	*Dasyatis Sabina*	MSGB, MUS
Nurseshark	*Ginglymostoma cirratum*	MSGB, MUS
Lemon shark	*Negaprion brevirostis*	MSGB, MUS
Cownose ray	*Rhinoptera bonasus*	MSGB, MUS
Great hammerhead shark	*Sphyrna mokarran*	MUS
Bonnethead shark	*Sphyrna tibuto*	MSGB, MUS

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
BONY FISHES		
Sheepshead	*Archosargus probatocephalus*	MSGB, MUS
Hardhead catfish	*Arius felis*	MSGB, MUS
Sailfin catfish	*Bagre marinus*	MSGB, MUS
Common snook	*Centropomus undecimalis*	MSGB, MUS
Black seabass	*Cetropristis striata*	MSGB, MUS
Striped burrfish	*Chilomycterus schoepfi*	MSGB, MUS
Spotted seatrout	*Cynoscion nebulosus*	MSGB, MUS
Silver seatrout	*Cynoscion nothus*	MSGB, MUS
Ladyfish	*Elops saurus*	MSGB, MUS
Gulf killifish	*Fundulus grandis*	MSGB, MUS
Pinfish	*Lagodon rhomboids*	MSGB, MUS
Tarpon	*Megalops atlantica*	MSGB, MUS
Black mullet	*Mugil cephalus*	MSGB, MUS
Gag grouper	*Mycteroperca microlepis*	MSGB, MUS
Toadfish	*Opsanus beta*	MSGB, MUS
Gulf flounder	*Paralichthys albigutta*	MSGB, MUS
Black drum	*Pogonias cromis*	MSGB, MUS
Cobia	*Rachycentron canadum*	MUS
Remora	*Remora remora*	MU
Red drum	*Sciaenops ocellatus*	MSGB, MUS
Spanish mackerel	*Scomberomorus maculates*	MSGB, MUS
Atlantic needlefish	*Strongylura marina*	MSGB, MUS
Scalloped hammerhead shark	*Sphyrna lewini*	MUS
Great barracuda	*Spyyraena barracuda*	MUS
Atlantic needlefish	*Strongylura marina*	MSGB, MUS
Lizardfish	*Synodus foetens*	MSGB
Florida pompano	*Trachinotus carolinus*	MUS
Permit	*Trachinotus falcatus*	MUS, MS
AMPHIBIANS		
Greenhouse frog *	*Eleutherodactylus planirostris*	MTC
REPTILES		
TURTLES and TORTOISES		
Loggerhead sea turtle	*Caretta caretta*	BD, MUS
Green sea turtle	*Chelonia mydas*	BD, MUS
Atlantic hawksbill sea turtle	*Eretmochelys imbricata imbricate*	BD, MUS
Gopher tortoise	*Gopherus polyphemus*	BD, CS, MF
Kemp's ridley sea turtle	Lepidochelys kempii	BD, MUS
Ornate diamondback terrapin	*Malaclemys terrapin macrospilota*	MS, SAM
Florida box turtle	*Terrapene carolina bauri*	MAH, MF

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
LIZARDS		
Cuban brown anole *	*Anolis sagrei sagrei*	CS, MAH, MF, DV
Ground skink	*Scincella lateralis*	MAH, MF
SNAKES		
Eastern diamondback rattlesnake	*Crotalus adamanteus*	CS, MAH, MF
Common kingsnake	*Lampropeltis getulus*	MAH, MF
BIRDS		
Ducks		
Blue-winged teal	*Anas discors*	SAM
Mottled duck	*Anas fulvigula*	SAM
Lesser scaup	*Aythya affinis*	SAM
Hooded merganser	*Lophodytes cucullatus*	SAM
Common merganser	*Mergus merganser*	SAM
Red-breasted merganser	*Mergus serrator*	SAM
Loons		
Common loon	*Gavia immer*	OF
Grebes		
Pied-billed grebe	*Podilymbus podiceps*	MUS
Sulids		
Northern gannet	*Morus bassanus*	OF
Pelicans		
American white pelican	*Pelecanus erythrorhynchos*	BD
Eastern brown pelican	*Pelecanus occidentalis carolinensis*	MUS
Cormorants		
Double-crested cormorant	*Phalacrocorax auritus*	BD
Darters		
Anhinga	*Anhinga anhinga*	OF
Frigatebirds		
Magnificent frigatebird	*Fregata magnificens*	OF
Bitterns and Herons		
Great egret	*Ardea alba*	MTC
Great blue heron	*Ardea herodias herodias*	MTC
Cattle egret	*Bubulcus ibis*	MTC
Green heron	*Butorides virescens*	SAM, MS
Little blue heron	*Egretta caerulea*	MTC

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
Reddish egret	*Egretta rufescens*	MTC
Snowy egret	*Egretta thula*	MTC
Tricolored heron	*Egretta tricolor*	MTC
Least bittern	*Ixobrychus exilis*	SAM,MS
Black-crowned night-heron	*Nycticorax nycticorax*	BD, MS
Yellow-crowned night-heron	*Nyctanassa violacea*	BD, MS
Ibises and Spoonbills		
White ibis	*Eudocimus albus*	MTC
Roseate Spoonbill	*Platalea ajaja*	MS, BD
Storks		
Wood stork	*Mycteria americana*	OF
Vultures		
Turkey vulture	*Cathartes aura*	OF
Black vulture	*Coragyps atratus*	OF
Ospreys		
Osprey	*Pandion haliaetus*	MTC
Hawks, Eagles and Kites		
Cooper's hawk	*Accipiter cooperii*	MF,CS
Sharp-shinned hawk	*Accipiter striatus*	MF,CS
Northern harrier	*Circus cyaneus*	MF,CS
Southern bald eagle	*Haliaeetus leucocephalus*	MF,CS
Falcons		
Peregrine falcon	*Falco peregrinus*	CS, BD
American kestrel	*Falco sparverius*	MF,CS
Rails and Coots		
Clapper rail	*Rallus longirostris*	SAM
Plovers		
Piping plover	*Charadrius melodus*	BD
Snowy plover	*Charadrius nivosus*	BD
Semipalmated plover	*Charadrius semipalmatus*	BD
Killdeer	*Charadrius vociferus*	RD
Wilson's plover	*Charadrius wilsonia*	BD
Black-bellied Plover	*Pluvialis squatarola*	BD
Snipes and Sandpipers		
Spotted sandpiper	*Actitis macularius*	MS

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
Ruddy turnstone	*Arenaria interpres*	BD
Sanderling	*Calidris alba*	BD
Dunlin	*Calidris alpina*	BD
Red knot	*Calidris canutus*	BD
Western sandpiper	*Calidris mauri*	BD
Least sandpiper	*Calidris minutilla*	BD
Semipalmated sandpiper	*Calidris pusilla*	BD
Willet	*Catoptrophorus semipalmatus*	BD
American oystercatcher	*Haematopus palliates*	BD
Marbled godwit	*Limosa fedoa*	BD
Short-billed dowitcher	*Limnodromus griseus*	BD
Long-billed dowitcher	*Limnodromus scolopaceus*	BD
Long-billed curlew	*Numenius americanus*	BD
Whimbrel	*Numenius phaeopus*	BD
Greater yellowlegs	*Tringa melanoleuca*	BD
Gulls and Terns		
Brown noddy	*Anous stolidus*	OF
Black tern	*Chlidonias niger*	BD
Herring gull	*Larus argentatus*	BD
Laughing gull	*Larus atricilla*	BD
Ring-billed gull	*Larus delawarensis*	BD
Lesser black-backed gull	*Larus fuscus*	OF
Black skimmer	*Rynchops niger*	BD
Least tern	*Sterna antillarum*	BD
Caspian tern	*Sterna caspia*	BD
Forster's tern	*Sterna forsteri*	BD
Common tern	*Sterna hirundo*	BD
Royal tern	*Thalasseus maxima*	BD
Sandwich tern	*Thalasseus sandvicensis*	BD
Doves		
Common ground-dove	*Columbina passerina*	CS, MF
Mourning dove	*Zenaida macroura*	CS, MF
Cuckoos		
Mangrove cuckoo	*Coccyzus minor*	MS
Owls		
Great horned owl	*Bubo virginianus*	MF
Kingfishers		
Belted kingfisher	*Ceryle alcyon*	SAM, MS

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
Woodpeckers		
Red-bellied woodpecker	*Melanerpes carolinus*	CS, MF
Downy woodpecker	*Picoides pubescens*	CS, MF
Southern hairy woodpecker	*Picoides villosus audubonii*	CS, MF
Flycatchers and Kingbirds		
Gray kingbird	*Tyrannus dominicensis*	CS, MF
Western kingbird	*Tyrannus verticalis*	CS, MF
Jays and Crows		
American crow	*Corvus brachyrhynchos*	MTC
Fish crow	*Corvus ossifragus*	MTC
Swallows and Martins		
Barn swallow	*Hirundo rustica*	BD
Tree swallow	*Tachycineta bicolor*	OF
Thrashers		
Gray catbird	*Dumetella carolinensis*	CS, MF
Northern mockingbird	*Mimus polyglottos*	CS, MF
Warblers		
Prairie warbler	*Dendroica discolor*	CS, MF, MAH
Yellow-throated warbler	*Dendroica dominica*	CS, MF, MAH
Palm warbler	*Dendroica palmarum*	CS, MF, MAH
Sparrows		
Saltmarsh sharp-tailed sparrow	*Ammodramus caudacutus*	SAM
Song sparrow	*Melospiza melodia*	BD
Savannah sparrow	*Passerculus sandwichensis*	BD
Cardinals, Tanagers, Grosbeaks, and Buntings		
Indigo bunting	*Passerina cyanea*	CS
Meadowlarks, Blackbirds and Orioles		
Red-winged blackbird	*Agelaius phoeniceus*	BD, CS
MAMMALS		
Didelphids		
Virginia opossum	*Didelphis virginiana*	MTC
Cingulata		
Nine-banded armadillo*	*Dasypus novemcintus*	MTC

Common Name	*Scientific Name*	Primary Habitat Codes (for all species)
Carnivores		
Raccoon	*Procyon lotor*	MTC
Sirens		
Florida manatee	*Trichechus manatus*	MUS
Cetaceans		
Bottle-nosed dolphin	*Tursiops truncatus*	MUS

TERRESTRIAL

Beach Dune	BD
Coastal Berm	CB
Coastal Grassland	CG
Coastal Strand	CS
Dry Prairie	DP
Keys Cactus Barren	KCB
Limestone Outcrop	LO
Maritime Hammock	MAH
Mesic Flatwoods	MF
Mesic Hammock	MEH
Pine Rockland	PR
Rockland Hammock	RH
Sandhill	SH
Scrub	SC
Scrubby Flatwoods	SCF
Shell Mound	SHM
Sinkhole	SK
Slope Forest	SPF
Upland Glade	UG
Upland Hardwood Forest	UHF
Upland Mixed Woodland	UMW
Upland Pine	UP
Wet Flatwoods	WF
Xeric Hammock	XH

PALUSTRINE

Alluvial Forest	AF
Basin Marsh	BM
Basin Swamp	BS
Baygall	BG
Bottomland Forest	BF
Coastal Interdunal Swale	CIS
Depression Marsh	DM
Dome Swamp	DS
Floodplain Marsh	FM
Floodplain Swamp	FS
Glades Marsh	GM
Hydric Hammock	HH
Keys Tidal Rock Barren	KTRB
Mangrove Swamp	MS
Marl Prairie	MP
Salt Marsh	SAM

Seepage Slope ..... SSL
Shrub Bog ..... SHB
Slough ..... SLO
Slough Marsh ..... SLM
Strand Swamp ..... STS
Wet Prairie ..... WP

LACUSTRINE
Clastic Upland Lake ..... CULK
Coastal Dune Lake ..... CDLK
Coastal Rockland Lake ..... CRLK
Flatwoods/Prairie ..... FPLK
Marsh Lake ..... MLK
River Floodplain Lake ..... RFLK
Sandhill Upland Lake ..... SULK
Sinkhole Lake ..... SKLK
Swamp Lake ..... SWLK

RIVERINE
Alluvial Stream ..... AST
Blackwater Stream ..... BST
Seepage Stream ..... SST
Spring-run Stream ..... SRST

SUBTERRANEAN
Aquatic Cave ..... ACV
Terrestrial Cave ..... TCV

ESTUARINE
Algal Bed ..... EAB
Composite Substrate ..... ECPS
Consolidated Substrate ..... ECNS
Coral Reef ..... ECR
Mollusk Reef ..... EMR
Octocoral Bed ..... EOB
Seagrass Bed ..... ESGB
Sponge Bed ..... ESPB
Unconsolidated Substrate ..... EUS
Worm Reef ..... EWR

MARINE
Algal Bed ..... MAB
Composite Substrate ..... MCPS

Consolidated Substrate ..... MCNS
Coral Reef ..... MCR
Mollusk Reef ..... MMR
Octocoral Bed ..... MOB
Seagrass Bed ..... MSGB
Sponge Bed ..... MSPB
Unconsolidated Substrate ..... MUS
Worm Reef ..... MWR

ALTERED LANDCOVER TYPES

Abandoned field ..... ABF
Abandoned pasture ..... ABP
Agriculture ..... AG
Canal/ditch ..... CD
Clearcut pine plantation ..... CPP
Clearing CL
Developed ..... DV
Impoundment/artificial pond ..... IAP
Invasive exotic monoculture ..... IEM
Pasture - improved ..... PI
Pasture - semi-improved ..... PSI
Pine plantation ..... PP
Road ..... RD
Spoil area ..... SA
Successional hardwood forest ..... SHF
Utility corridor ..... UC

MISCELLANEOUS

Many Types of Communities ..... MTC
Overflying ..... OF

Addendum 6—Imperiled Species Ranking Definitions

The Nature Conservancy and the Natural Heritage Program Network (of which FNAI is a part) define an element as any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave or other ecological feature. An element occurrence (EO) is a single extant habitat that sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element.

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

Federal and State status information is from the U.S. Fish and Wildlife Service; and the Florida Game and Freshwater Fish Commission (animals), and the Florida Department of Agriculture and Consumer Services (plants), respectively.

FNAI GLOBAL RANK DEFINITIONS

G1 .....Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or fabricated factor.

G2 .....Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.

G3 .....Either very rare or local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.

G4 .....apparently secure globally (may be rare in parts of range)

G5 .....demonstrably secure globally

GH .....of historical occurrence throughout its range may be rediscovered (e.g., ivory-billed woodpecker)

GX.....believed to be extinct throughout range

GXC.....extirpated from the wild but still known from captivity or cultivation

G#? .....Tentative rank (e.g.,G2?)

G#G#.....range of rank; insufficient data to assign specific global rank (e.g., G2G3)

G#T# .....rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)

G#Q.....rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)
G#T#Q.....same as above, but validity as subspecies or variety is questioned.
GU .....due to lack of information, no rank or range can be assigned (e.g., GUT2).
G?.....Not yet ranked (temporary)
S1 .....Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 .....Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 .....Either very rare or local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
S4 .....apparently secure in Florida (may be rare in parts of range)
S5 .....demonstrably secure in Florida
SH .....of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
SX.....believed to be extinct throughout range
SA .....accidental in Florida, i.e., not part of the established biota
SE .....an exotic species established in Florida may be native elsewhere in North America
SN .....regularly occurring but widely and unreliably distributed; sites for conservation hard to determine
SU .....due to lack of information, no rank or range can be assigned (e.g., SUT2).
S?.....Not yet ranked (temporary)
N .....Not currently listed, nor currently being considered for listing, by state or federal agencies.

LEGAL STATUS

FEDERAL

(Listed by the U. S. Fish and Wildlife Service - USFWS)

LE.....Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species that is in danger of extinction throughout all or a significant portion of its range.
PE.....Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.LTListed as Threatened Species. Defined as any species that is likely to become an endangered species within the near future throughout all or a significant portion of its range.

PT.....Proposed for listing as Threatened Species.
C .....Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Defined as those species for which the USFWS currently has on file sufficient information on biological vulnerability and threats to support proposing to list the species as endangered or threatened.
E(S/A).....Endangered due to similarity of appearance.
T(S/A).....Threatened due to similarity of appearance.

STATE

ANIMALS ...(Listed by the Florida Fish and Wildlife Conservation Commission - FFWCC)
LE.....Listed as Endangered Species by the FFWCC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state, or which may attain such a status within the immediate future.
LT.....Listed as Threatened Species by the FFWCC. Defined as a species, subspecies, or isolated population, which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat, is decreasing in area at a rapid rate and therefore is destined or very likely to become an endangered species within the near future.
LS.....Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance or substantial human exploitation that, in the near future, may result in its becoming a threatened species?

PLANTS .....(Listed by the Florida Department of Agriculture and Consumer Services - FDACS)
LE.....Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973,as amended.
LT.....Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered.

Addendum 7—Cultural Information

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

A. General Discussion

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

B. Agency Responsibilities

Per State Policy relative to historic properties, state agencies of the executive branch must allow the Division of Historical Resources (Division) the opportunity to comment on any undertakings, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the project, permit, grant, etc.

State agencies shall preserve the historic resources which are owned or controlled by the agency.

Regarding proposed demolition or substantial alterations of historic properties, consultation with the Division must occur, and alternatives to demolition must be considered.

State agencies must consult with Division to establish a program to location, inventory and evaluate all historic properties under ownership or controlled by the agency.

C. Statutory Authority

Statutory Authority and more in depth information can be found at:
http://www.flheritage.com/preservation/compliance/guidelines.cfm

D. Management Implementation

Even though the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual. Specific information regarding individual projects must be submitted to the Division for review and recommendations.

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

Projects such as additions, exterior alteration, or related new construction regarding historic structures must also be submitted to the Division of Historical Resources for review and comment by the Division's architects. Projects involving structures fifty years of age or older, must be submitted to this agency for a significance determination. In rare cases, structures under fifty years of age may be deemed historically significant. These must be evaluated on a case by case basis.

Adverse impacts to significant sites, either archaeological sites or historic buildings, must be avoided. Furthermore, managers of state property should make preparations for locating and evaluating historic resources, both archaeological sites and historic structures.

E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at:
http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf .

* * *

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

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

Phone: (850) 245-6425

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

The criteria to be used for evaluating eligibility for listing in the National Register of Historic Places are as follows:

1) Districts, sites, buildings, structures, and objects may be considered to have significance in American history, architecture, archaeology, engineering, and/or culture if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- **a)** are associated with events that have made a significant contribution to the broad patterns of our history; and/or
- **b)** are associated with the lives of persons significant in our past; and/or
- **c)** embody the distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and/or
- **d)** have yielded, or may be likely to yield, information important in prehistory or history.

2) Ordinarily cemeteries, birthplaces, or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years shall not be considered eligible for the *National Register*. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- **a)** a religious property deriving its primary significance from architectural or artistic distinction or historical importance; or
- **b)** a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- **c)** a birthplace or grave of an historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or
- **d)** a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, distinctive design features, or association with historic events; or
- **e)** a reconstructed building, when it is accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and no other building or structure with the same association has survived; or a property primarily commemorative in intent, if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
- **f)** a property achieving significance within the past 50 years, if it is of exceptional importance.

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations and additions while preserving those portions or features that convey its historical, cultural, or architectural values.

Stabilization is defined as the act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Addendum 8—2010 Land Management Review Report With Responses

Memorandum

Florida Department of
Environmental Protection

February 18, 2011

TO: Marianne Gengenbach, Program Administrator
Division of State Lands

FROM: Parks Small, Chief, Bureau of Natural and Cultural Resources
Division of Recreation and Parks

Albert Gregory, Chief, Office of Park Planning
Division of Recreation and Parks

SUBJECT: Response to Draft Land Management Review (LMR)
Anclote Key Preserve State Park

The Land Management Review draft report provided to DRP determined that management of Anclote Key Preserve State Park by the Division of Recreation and Parks met the two tests prescribed by law. Namely, the review team concluded that the land is being managed for the purposes for which it was acquired and in accordance with the land management plan.

Below are Additional Recommendations and Checklist Findings (items the LMR determined should be further addressed in the management plan update) of the draft LMR report, with our Manager's Response to each. The responses were prepared via a coordinated effort of the park, district office, and our offices.

The team recommends that DRP continue financial support for monitoring and treatment of exotics. (VOTE: 5+, 0-)
Managing Agency Response: Agree. Park Management seeks funding on an annual basis from two exotic plant working groups whose jurisdictions encompass the park. We are also looking for other grant funding as it becomes available.

The team recommends that the composting toilet presently located at the primitive camping area on the north end of the island be relocated to the area of more intensive public use in the vicinity of the lighthouse. (VOTE: 5+, 0-)
Managing Agency Response: Disagree. The composting toilet on the north end serves as the primary sanitary facility for the north end of the park and campers utilizing the campground there. To disassemble the toilet and attempt to relocate it would compromise its integrity. The division will consider installation of new sanitary facilities in the area of the lighthouse during the next Unit Management Plan cycle and as funding becomes available.

The team recommends that DRP shift the emphasis of present picnic area/shelter toward use as an outdoor classroom and camping area for service groups. (VOTE: 5+, 0-)
Managing Agency Response: Disagree. The picnic area still serves its original purpose with many park visitors using it for picnicking. There have been no requests in the last 5 years for any type of outdoor classroom on the island. Accommodations for service groups are considered when a request for this type of activity arises.

The team recommends that DRP seek opportunities to monitor and survey areas of broad scale exotics removal and landform changes from natural processes. (VOTE: 5+, 0-)

Managing Agency Response: Agree. DRP will take advantage of every opportunity when researchers become available to conduct monitoring and surveys of exotic removal areas and landform changes.

The team recommends that DRP increase protection and awareness education for shorebird conservation at Three Rooker Bar, for example through the use of Bird Stewards. (VOTE: 5+, 0-)
Managing Agency Response: Agree. DRP works closely with FWC and the Pinellas County Sheriffs office, along with DEP's Division of Law Enforcement, to increase protection of the Island's shorebirds. Park Management is also working closely with Clearwater Audubon to establish a Bird Steward program on the Island.

The team recommends that DRP reassess the value of the Critical Wildlife Area designation for the Three Rooker Bar as a tool to better protect shorebirds. (VOTE: 5+, 0-)
Managing Agency Response: Agree. DRP will consult with other state agencies and private organizations to determine whether Three Rooker Island should be considered for designation as a critical wildlife area.

Discussion in the management plan regarding natural communities, specifically marine grassbeds.
Managing Agency Response: The Division will address this during the next unit management plan revision.

Discussion in the management plan regarding natural resources survey, specifically other non-game species or habitat monitoring.
Managing Agency Response : [This item did not receive a score less than .5 on average.]

Discussion in the management plan regarding managed area uses, specifically interpretive center and observation facilities.
Managing Agency Response: The Division will consider these managed area uses during the next unit management plan revision.

The need for management resources, specifically sanitary facilities, with documentation in the management plan.
Managing Agency Response: The Division will address these checklist items during the next unit management plan revision.

Discussion of the deficiencies in management resources, specifically funding, with documentation in the management plan.
Managing Agency Response: Agree on funding (assuming land management issues are the concern). The updated unit management plan will address land management funding needs. However, Division funding is determined annually by the Florida Legislature and funds are allocated to the 160 state parks according to priority needs.

Thank you for your attention.

GK

CC: Valinda Subic, Chief, Bureau of Parks District 4
Ezell Givens, Assistant Chief, Bureau of Parks District 4
Pete Krulder, Park Manager, Anclote Key Preserve State Park
Terry Hingtgen , Environmental Specialist, Bureau of Parks District 4