

STUMP PASS BEACH STATE PARK

(Formerly: Port Charlotte Beach State Recreation Area)

UNIT MANAGEMENT PLAN

APPROVED

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Division of Recreation and Parks**

May 23, 2003



Department of Environmental Protection

Jeb Bush
Governor

Marjorie Stoneman Douglas Building
3900 Commonwealth Boulevard, MS 140
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

May 23, 2003

Ms. BryAnne White
Government Operations Consultant II
Office of Park Planning
Division of Recreation and Parks

Stump Pass Beach State Park

Lease Number: # 2545

Dear Ms. White:

The Division of State Lands has completed the review of the Stump Pass Beach State Park Land Management Plan and find that it fulfills all the requirements of Rule 18-2.021, F.A.C., and ss. 253.034 and 259.032, F.S. Therefore, on May 23, 2003, the Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund approves this plan. The plan's five-year update will be due in May 2008.

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.

Sincerely,

Delmas T. Barber

Delmas T. Barber, OMC Manager
Office of Environmental Services
Division of State Lands

"More Protection, Less Process"

Printed on recycled paper.

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INTRODUCTION

Stump Pass Beach State Park is located in the northwest corner of Charlotte County on the southwest coast of Florida about three miles south of the city of Englewood (see Vicinity Map). It is comprised of the southernmost mile of Manasota Key, which is actually a peninsula, in combination with three smaller, nearby islands in Lemon Bay. Access to the park by motor vehicle is from U.S. Highway 41, to County Road 776; crossing Tom Adams Bridge to the terminus of Gulf Boulevard on Manasota Key or by watercraft. The vicinity map also reflects significant land and water resources existing near the park.

The Manasota Key property and the three smaller islands: Peterson Island, Whidden Island and Little Whidden Key. For this plan, park acreage has been calculated based on the composition of natural communities, in addition to ruderal and developed areas. Currently the park contains 117.50 upland acres and 136.85 wetland/submerged acres. The land was acquired in 1971 and was funded through the LATF and LWCF programs. The park was previously known as Port Charlotte Beach State Recreation Area until 1998.

Manasota Key is part of a chain of barrier islands stretching from Anclote Key to the north in Pasco County to Cape Romano south in Collier County. The park section of Manasota Key is highly unstable, constantly changing shape in response to the forces of artificial groins north of the park boundary, wave action, wind and rising sea levels. Maps of 1884 show Stump Pass inlet, presently south of the peninsula to have been 1.5 miles farther north, approximately where the park entrance is now located. The park is overwashed in several places during weather episodes of high winds, or tides, and waves.

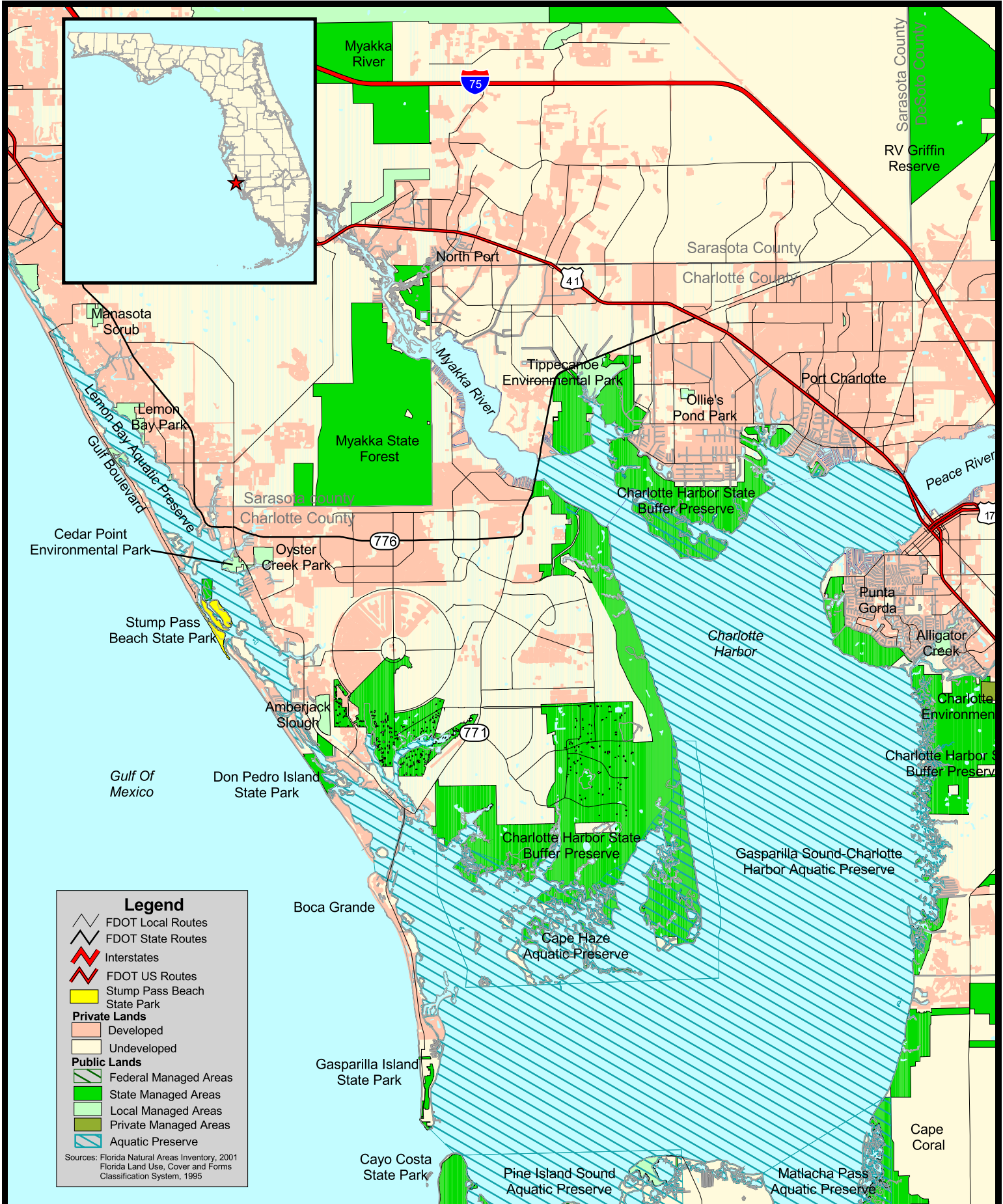
The main feature of the park is the white sand beach, important aesthetically and as an asset to the local tourist based economy. As a natural resource, the beach functions as a significant site for sea turtle and shorebird nesting, due to the absence of any development along the southern expanse of the island. The barrier islands protect the productive intertidal zone and the estuary systems behind them, and the mainland as well, from the wave energy of the Gulf of Mexico.

At Stump Pass Beach State Park, public outdoor recreation and conservation 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 SCOPE OF THE PLAN

This plan serves as the basic statement of policy and direction for the management of Stump Pass Beach State Park as a unit of Florida's state park system. It identifies the objectives, criteria and 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 intended to be consistent with the State Lands Management Plan. With approval, this management plan will supercede and replace the current approved plan of July 18, 1997. All development and resource alteration encompassed 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. This plan is also intended to meet the requirements for beach and shore preservation, as defined in Chapter 161, Florida Statutes, and Chapters 62B-33, 62B-36 and 62R-49, Florida Administrative Code.

The plan consists of two interrelated components. Each component corresponds to a particular aspect of the administration of the park. The resource management component

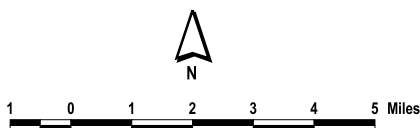


Legend

- FDOT Local Routes
- FDOT State Routes
- Interstates
- FDOT US Routes
- Stump Pass Beach State Park
- Private Lands**
 - Developed
 - Undeveloped
- Public Lands**
 - Federal Managed Areas
 - State Managed Areas
 - Local Managed Areas
 - Private Managed Areas
 - Aquatic Preserve

Sources: Florida Natural Areas Inventory, 2001
 Florida Land Use, Cover and Forms Classification System, 1995

**Stump Pass Beach State Park
Vicinity Map**



Florida Department of Environmental Protection
 Division of Recreation and Parks
 Office of Park Planning

provides a detailed inventory and assessment of the natural and cultural resources of the park. Resource management problems and needs are identified, and specific management objectives are established for each resource type. This component provides guidance on the application of such measures as prescribed burning, exotic species removal, and restoration of natural conditions.

The land use component is the recreational resource allocation plan for the unit. Based on considerations such as access, population, and adjacent land uses, an optimum allocation of the physical space of the park is made, locating use areas and proposing types of facilities and volume of use to be provided.

In the development of this plan, the potential of the park to accommodate secondary management purposes (“multiple uses”) was analyzed. These secondary purposes were considered within the context of the Division’s statutory responsibilities and an analysis of 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 or the management purposes of the park and should be discouraged.

The potential for generating revenue to enhance management was also analyzed. Visitor fees 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 unit 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 Division of Recreation and Parks (Division) 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 also granted management authority of certain sovereign submerged lands to the Division 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 impact public recreational uses.

Many operating procedures are standard system wide and are set by policy. These procedures are outlined in the Division **Operations Procedures Manual** (OPM) and cover such areas as personnel management, uniforms and personal appearance, training, signs, communications, fiscal procedures, interpretation, concessions, camping regulations, resource management, law enforcement, protection, safety and maintenance.

In the management of Stump Pass Beach State Park, a balance is sought between the goals of maintaining and enhancing natural conditions and providing various recreational opportunities. Natural resource management activities are aimed at management of natural systems. Development in the park is directed toward providing public access to and within the park, and to providing recreational facilities, in a reasonable balance, that are both convenient and safe. Program emphasis is on interpretation on the park's natural, aesthetic, and educational attributes.

Park Goals and Objectives

The following park goals and objectives express the Division long-term intent in managing the state park. At the beginning of the process to update this management plan, the Division reviewed the goals and objectives of the previous plan to determine if they remain meaningful and practical and should be included in the updated plan. This process ensures that the goals and objectives for the park remain relevant over time.

Estimates are developed for the funding and staff resources needed to implement the management plan based on these goals, objectives and priority management activities. Funding priorities for all state park management and development activities are reviewed each year as part of the Division legislative budget process. The Division prepares an annual legislative budget request based on the priorities established for the entire state park system. The Division also aggressively pursues a wide range of other funds and staffing resources, such as grants, volunteers, and partnerships with agencies, local governments and the private sector, for supplementing normal legislative appropriations to address unmet needs. The ability of the Division to implement the specific goals, objectives and priority actions identified in this plan will be determined by the availability of funding resources for these purposes.

Natural and Cultural Resources

1. Eradicate and control invasive exotic plants and restore natural communities.
 - A. Eradicate Australian pine trees, Brazilian pepper, and other exotics, wherever they occur, within five years.
 - B. Prevent re-establishment in zones where exotic plants have been removed.
 - C. Replant native species where diversity has been reduced due to competitive exclusion by exotic plants.
 - D. Continue to secure grants and funding to attain these objectives.
2. Monitor and protect nesting sea turtles, gopher tortoises, manatees, nesting, and wintering shorebirds.

- A. Seek staffing with volunteers, if necessary, to assist with monitoring park resources.
 - B. Use education, interpretation, signs, barriers, law enforcement and humane control to prevent disturbance of sea turtles, gopher tortoises, and nesting and wintering shorebirds by domestic and terrestrial predators.
 - C. Monitor recreational impacts to sensitive resources, particularly resting and nesting shorebirds, and institute appropriate management measures if necessary.
 - D. If nesting shorebird disturbance occurs, provide and designate alternate anchoring and boater use areas within the park jurisdiction.
 - E. Survey and monitor health of seagrass beds within park jurisdiction.
3. Ameliorate soil erosion problems.
- A. Apply for designation as a critically eroding shoreline by DEP Bureau of Beaches and Wetland Resources to assist with receiving financial support for beach renourishment.
 - B. Establish an erosion control line to delineate the boundary between private and sovereign land.
4. Protect, preserve and manage cultural resources.
- A. Conduct a Level I archaeological survey to determine the locations of prehistoric and historic sites.
 - B. Protect existing sites and artifacts from vandalism, erosion and other forms of encroachment.
 - C. Conduct ground disturbing activities in accordance with DHR guidelines.

Recreational Goals

5. Continue to provide quality resource based outdoor recreational and interpretive programs and facilities at the state park.
- A. Maintain facilities for beach access, including parking, restrooms and boardwalk access points.
 - B. Monitor visitor-use impacts with photo points.
 - C. Conduct off-site interpretive programs whenever possible, such as career days at schools, community events, etc.
6. Seek funding to expand recreational and interpretive opportunities through the improvement of programs and the development of new areas and facilities, as outlined in the management plan.
- A. Promote canoe/kayak opportunities in waters adjacent to the park by establishing designated rest stops on the east side of Peterson Island.
 - B. Promote visitation to the park by constructing a ferry boat dock and associated facilities.

Park Administration/Operations

7. Provide efficient and effective management of park resources and facilities while maintaining a high level of visitor service.
- A. Seek funding for two additional full time positions (Park Ranger and Park Services Specialist) to assist with ongoing resource management projects, to conduct interpretive programming and to assist with visitor services.
 - B. Seek funding for a service dock and small equipment storage building to assist with resource management and maintenance activities.
 - C. Provide universally accessible public facilities.
 - D. Assure that appropriate training is provided to all staff in visitor services, park information, and emergency procedures.
 - E. Maintain high maintenance standards to provide clean and safe facilities to ensure visitor safety and enjoyment.
 - F. Recruit and maintain volunteer support to assist park staff with the maintenance of park facilities, protection of park resources and implementation of park programs.

- G. Monitor activities outside the park that may affect parklands, and promote awareness of outside threats to park resources.
- H. Expand partnerships to promote ecotourism programs and host special events.

Management Coordination

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

The Department of Agriculture and Consumer Services, Division of Forestry (DOF), assists park staff in the development of wildfire emergency plans and furnishes permits 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 park boundaries. In addition, the FFWCC aids the Division of Recreation and Parks with wildlife management programs, including the development and management of Watchable Wildlife programs. The Department of State, Division of Historical Resources (DHR) assists staff to assure protection of archaeological and historical sites. The Department of Environmental Protection (DEP), Office of Coastal and Aquatic Managed Areas (CAMA) aids staff in aquatic preserves management programs. The DEP, Bureau of Beaches and Wetland Resources aids staff in planning and construction activities seaward of the Coastal Construction Line. In addition, the Bureau of Beaches and Wetland Resources aids the staff in the development of erosion control projects. Emphasis is placed on protection of existing resources as well as the promotion of compatible outdoor recreational uses.

A partnership agreement exists between the Division and Charlotte County to provide assistance for operational staff, facilities development and maintenance.

Public Participation

The Division provided an opportunity for public input by conducting a public workshop and an advisory group meeting. A public workshop was held on August 22, 2002 . The purpose of this meeting was to present this draft management plan to the public. A DEP Advisory Group meeting was held on August 23, 2002 . The purpose of this meeting was to provide the Advisory Group members the opportunity to discuss this draft management plan. Addendum 1 contains a list of advisory group members and the advisory group meeting staff report.

Other Designations

Stump Pass Beach State Park is not within an Area of Critical State Concern as defined in section 380.05, Florida Statutes. Currently it is not under study for such designation. The park is a component of the Florida Greenways and Trails System.

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 classified as Class III waters by DEP. This park is within or adjacent to Lemon Bay Aquatic Preserve, and Cape Haze-Gasparilla Sound Aquatic Preserve, and Gasparilla Sound-Charlotte Harbor Aquatic Preserve, as designated under the Florida Aquatic Preserve Act of 1975 (section 258.35, Florida Statutes).

RESOURCE MANAGEMENT COMPONENT

INTRODUCTION

The Division of Recreation and Parks 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 plan describes the natural and cultural resources of the park and identifies the methods that will be used to manage them. The stated management measures in this plan are consistent with the Department's overall mission in ecosystem management. Cited references are contained in Addendum 2.

The Division's philosophy of resource management is natural systems management. Primary emphasis is on restoring and maintaining, to the degree practicable, the natural processes that shape the structure, function and species composition of Florida's diverse natural communities as they occurred in the original domain. Single species management may be implemented when the recovery or persistence of a species is problematic provided it is compatible with natural systems management.

The management goal of cultural resources is to preserve sites and objects that represent all of Florida's cultural periods as well as significant historic events or persons. This goal may entail 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 is often affected by conditions and occurrences beyond park boundaries. Ecosystem management is implemented through a resource management evaluation program (to assess resource conditions, evaluate management activities, and refine management actions), review of local comprehensive plans, and review of permit applications for park/ecosystem impacts.

RESOURCE DESCRIPTION AND ASSESSMENT

Natural Resources

Topography

Stump Pass Beach State Park is located on the west coast of Florida on the southernmost portion of Manasota Key between the Gulf of Mexico and Lemon Bay. It is part of the chain of barrier islands along the southwest coast of Florida characterized by low relief. The low-energy coastline, with a relatively shallow, sloping bottom prevents the buildup of large waves. Consequently, the dune system is not well developed. Elevations rise above five feet, but do not exceed ten. Accretion due to the southerly transport of sand along the Gulf shore has broadened the tip of Manasota Key. The channel known as "Stump Pass" separates Manasota Key from Knight Island and is sufficiently deep to permit transit by powerboats.

Geology

The park is within the gulf coastal lowlands physiographic region of Florida. The islands of the park are part of a barrier-inlet system along the west-central part of the Florida peninsula which has the most diverse morphology in the world (Davis, 1994). This system extends for about 186 miles and includes 29 barrier islands and 30 tidal inlets. (Randazzo and Jones, 1997). The sands of the surface formation rest upon Pleistocene-aged limestone. The upper strata of this limestone belong to a series of sedimentary deposits called the Anastasia Formation, made up of coquina limestone, sand and clay.

Barrier islands are unstable land masses, constantly changing shape in response to the forces of wave action, artificial groins, wind and rising sea levels. They are highly

susceptible to being breached and flooded during hurricanes. (Charlotte Harbor National Estuary Program, 1998). The narrowest and one of the lowest points of the park is at the developed area, just south of the groins. These factors combine to make this portion of the park most susceptible to overwash and possible breakthrough in a major storm or hurricane. (Reynolds, 1976). Waves are driven ashore by winds that come predominantly from the west and northwest (University of Florida study, 1972). Stump Pass was a natural inlet until a navigation channel was dredged in 1980. (DEP Strategic Beach Management Plan, 2000) Storms of record have relocated the pass at this locale, and to the north, as well as the south, for a considerable distance. (Reynolds, 1976).

Soils

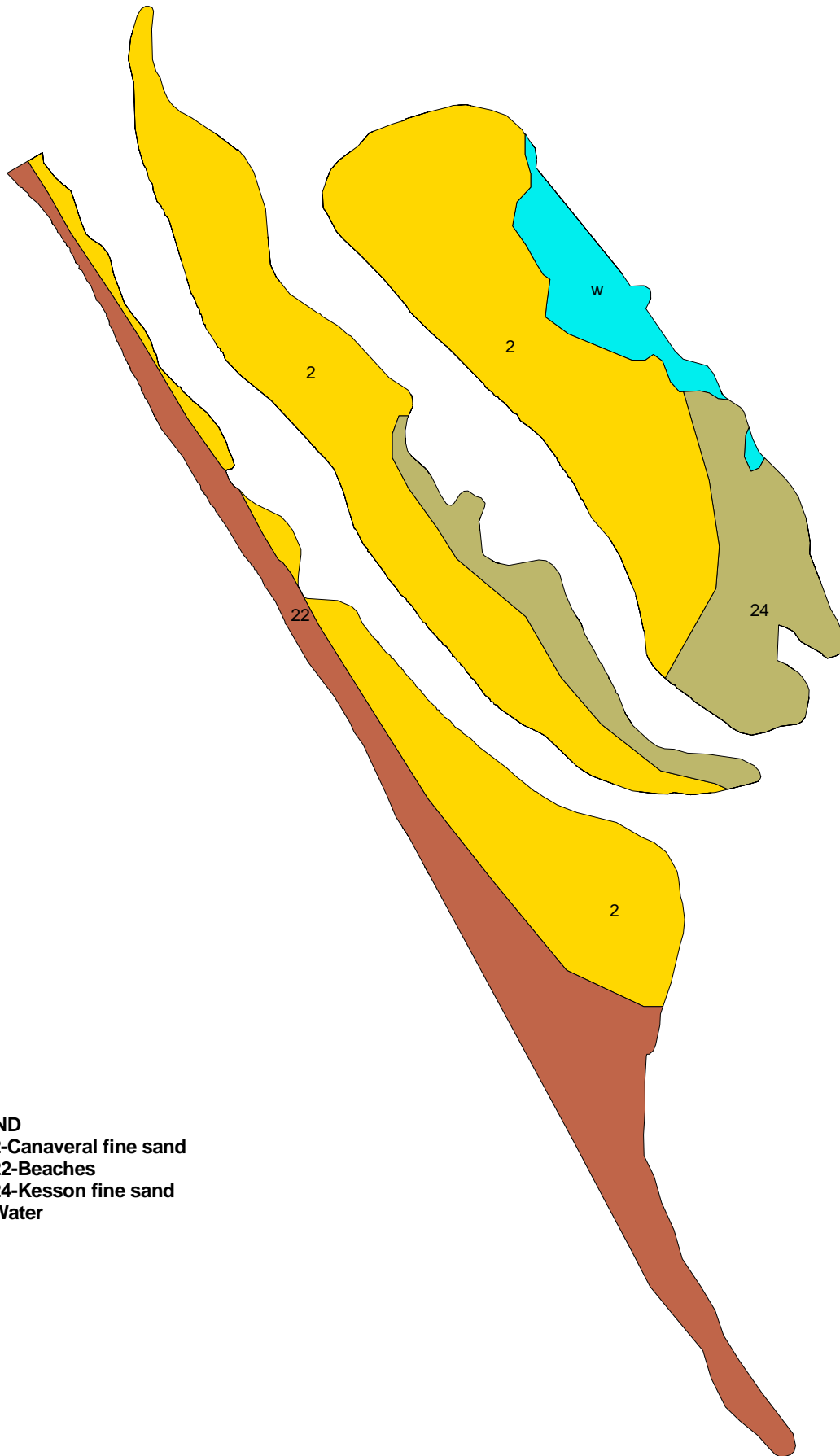
The soils of the coastal barrier islands of Southwest Florida are relatively young, lacking well-developed horizons. The coastal beach soils are composed predominately of fine quartz sand and calcareous shell material deposited by wind and wave action. The proportion of sand to shell in coastal soils varies. Most are mixtures of shells, shell fragments, and fine sand; however, pure sediments of both shell material and sand are common. Little organic matter occurs in these young, sandy soils (Reynolds, 1976).

In the 1984 soil survey of Charlotte County three types are identified (see Soils Map) within the park boundaries: Canaveral fine sand, Kesson fine sand and a type known simply as "Beaches". Complete soil descriptions are contained in Addendum 2. Several soil samples were taken during a study of the park in 1976. All of the samples were of the Canaveral Series, a sandy soil mixed with shell fragments and little organic material. The texture ranged from fine sand to coarse sand; the shell particles were stratified or homogeneously mixed through the soil. The Canaveral Series is mildly alkaline and moderately well drained, although drainage is limited by the shallow water table.

Two types of the Canaveral Series were found. The Canaveral Series (Low) has a seasonally high water table within 10 inches of the surface, while the Canaveral Series (High) has a seasonally high water table from 10 to 40 inches deep. The boundaries of the Canaveral Series (Low) were found the same as the boundaries of those plant communities that are tolerant of excessively wet or flooded conditions.

The boundaries of the Canaveral Series (High) were the same as the vegetation communities that cannot withstand the flooding or saline conditions of the Canaveral Series (Low) in this area. The communities found in association with the Canaveral Series (High) were the unconsolidated substrate, maritime hammock, beach dune, coastal strand and ruderal areas. Definite ecotones marked the boundaries between the Canaveral Series (Low) and Canaveral Series (High) soils. This was particularly evident in those areas where old shorelines had formed alternating lines of ridges and swales. The Canaveral Series (Low) occurred in those areas low in elevation which were subject to tidal flooding or accumulation of rainwater runoff during the rainy season. The Canaveral Series (High) occurred in those areas of higher elevation, above the reach of the tides and where water could not accumulate during heavy rains (Reynolds, 1976).

Soil erosion occur is reported to occur along the eastern shoreline of the Manasota Key portion of the park due to wave action of speeding boats. Management measures will follow generally accepted best management practices to prevent soil erosion and conserve soil on the site. The net littoral drift is from north to south. . Privately built groin fields north of the park boundary interrupt this flow of sand resulting in a scarcity of beach material in the developed area of the northern part of the park. (Reynolds, 1976). Tide gauge data show that the average rate of sea level rise in Florida over the last fifty years (1-2 mm/yr, Evans and Hine, 1983), is greater than the average for the last several thousand



LEGEND

- 2-Canaveral fine sand
- 22-Beaches
- 24-Kesson fine sand
- Water



**STUMP PASS BEACH
STATE PARK**

Florida Department of Environmental Protection
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Office of Park Planning

SOILS MAP

years. (Ewel and Myers, 1990). In the last 20 years, the pass has been dredged three times. Future beach renourishment projects are scheduled for south of the pass on Knight's Island, using dredged material from the pass.

Minerals

There are no known minerals of commercial value at this park.

Hydrology

The park lies within the Southern Coastal Watershed of the Southwest Florida Water Management District. "The watershed has a high degree of coastal urbanization which strongly influences the quality of the surrounding natural areas." (SFWMD, 2001) The only natural source of fresh water in the park is rainfall. The rain rapidly percolates through the sandy soil into the Gulf of Mexico. Presently, all water for park use is piped from the mainland. It is not anticipated that there will ever be any withdrawals of ground water. Therefore, hydrology should not be a concern in the management of this small park.

Natural Communities

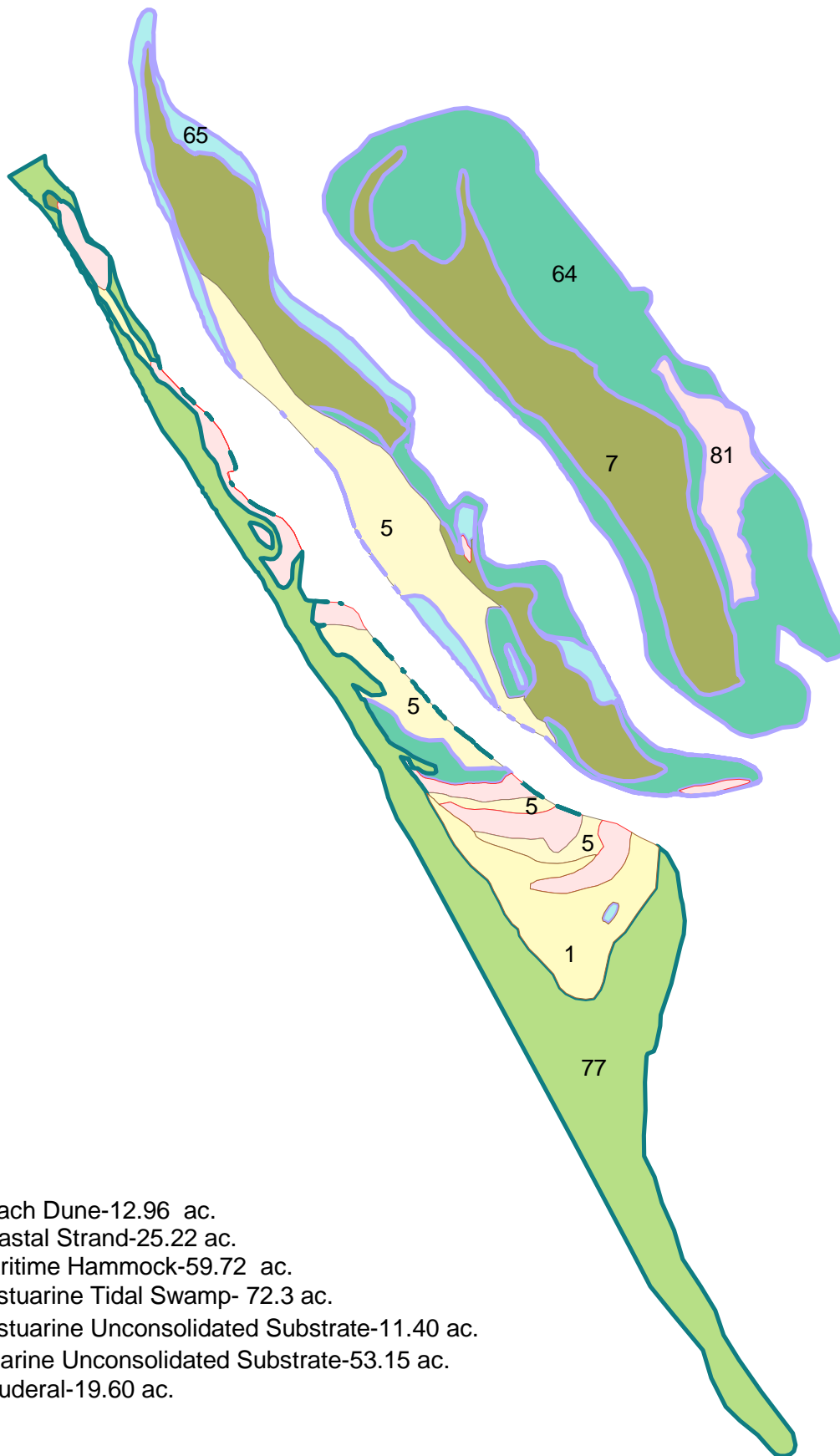
The system of classifying natural communities employed in this plan was developed by the Florida Natural Areas Inventory (FNAI) **FNAI Descriptions**. The premise of this system is that physical factors, such as climate, geology, soil, hydrology and fire frequency generally determine the species composition of an area, and that areas which are similar with respect to these factors will tend to have natural communities with similar species compositions. Obvious differences in species composition can occur, 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.

The park contains six distinct natural communities (see Natural Communities Map) in addition to ruderal areas. Park specific assessments of the existing natural communities are provided in the narrative below. A list of plants and animals occurring in the unit is contained in Addendum 4.

Beach dune. This community occupies a wide zone at the southern end of Manasota Key, which has been accreting in recent years. Elsewhere it forms a narrow band paralleling the beach to the north where it is periodically encroached upon, or entirely dissipated, by heavy surf during storms. There are several disjunct patches of beach dune broad enough to persevere through most storms. Consequently, the acreage of beach dune at this park may vary from year to year. To prevent visitors damaging the dunes by walking on them, two dune walkovers have been constructed on the more heavily used northern end of the park and interpretive signs are posted.

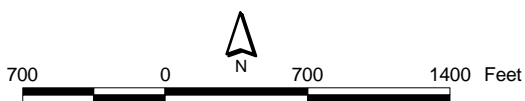
Typical plant species include sandspur, railroad vine, and beach elder. The accreting beach dune at the pass, where still unvegetated, is the primary nesting habitat for numerous shorebirds including listed species such as the least tern, snowy plover and black skimmer. At present, the beach dune community is considered to be in good to excellent condition.

Coastal strand. This natural community is found on the Manasota Key parcel, the western portion of Peterson Island, and much of Whidden Key. The substrate is composed of wave-washed sand, deposited long ago when the site fronted on the Gulf of Mexico. Much of the vegetation is short and sparse, with muhly grass being common, but also with clumps of small trees and shrubs that are expanding and coalescing in a successional trend toward maritime hammock. A healthy, abundant population of Florida coontie is found on Whidden Key. Common shrubs found are lantana, golden creeper, necklace pod, myrsine,



LEGEND

- 1 - Beach Dune-12.96 ac.
- 5 - Coastal Strand-25.22 ac.
- 7 - Maritime Hammock-59.72 ac.
- 64 - Estuarine Tidal Swamp- 72.3 ac.
- 65 - Estuarine Unconsolidated Substrate-11.40 ac.
- 77 - Marine Unconsolidated Substrate-53.15 ac.
- 81 - Ruderal-19.60 ac.



**STUMP PASS BEACH
STATE PARK**

Florida Department of Environmental Protection
Division of Recreation and Parks
Office of Park Planning

**NATURAL COMMUNITIES
MAP**

Jamaican caper, Florida privet, wax myrtle and white indigo berry. Extensive stands of Brazilian pepper and Australian pine have been removed and the coastal strand community is being restored with appropriate plantings of typical strand and hammock suites. It is in fair to good condition.

Maritime hammock. The eastern portion of Peterson Island is covered with hammock vegetation and vestiges of hammock remain in the interior of Whidden Key. The most abundant native canopy species are cabbage palm and seagrape. Where the hammock has matured, white stopper is an abundant understory tree, with other species being much reduced and with little foliage springing from the mat of leaves covering the ground. However, much of the hammock fringe on the western side of Peterson Island is in a transitional stage from an earlier serere of coastal strand vegetation; it is dense with large shrubs like myrsine and wax myrtle. The well-developed hammocks on these islands mark the uplands that have been continuously in existence since at least 1884. The blackened trunks of cabbage palm trees in the hammock on Peterson Island are evidence of a past fire. A fire was reported in 1974 (Reynolds, 1976). Efforts to eradicate large Australian pines continue on all the islands with replanting of hammock vegetation in appropriate sites

Estuarine tidal swamp. Little Whidden Key, and a smaller unnamed island, is made up entirely of mangroves. Mangroves also encircle Whidden Key, being wider on the east side of the island and forming only a fringe along the western shore. At Peterson Island, a narrow band of mangroves lines the eastern border, overlapping at both ends to continue partway down the western shore. The community is much less common on Manasota Key. At three sites on the two larger bay islands, salt pans occur between the landward edge of the tidal estuarine swamp and the maritime hammock communities. Here, halophytic species are common: saltwort, saltgrass, glasswort, sea oxeye and Christmas berry.

Marine unconsolidated substrate. The beach at Manasota Key is composed of sand darker in color than is usual along the high-energy shores of Florida. This location is near the apex of southwest Florida's protuberant coastline and, indeed, this barrier island, which converges with the mainland a few miles to the north, is apparently a feature of an eroding headland; this the quantity of dark material mixed with the usual siliceous sand and shell particles. Shark's teeth and skeletal fragments from an ancient geologic time, unearthed by waves eating away at the mainland, are commonly found on the beach. This is a narrow, linear community exceeding 6,000 feet in length. This feature is the primary reason that many people visit the park and is among the most important asset to the local tourist based economy. It is in good to excellent condition.

Ruderal. Ruderal sites, made up of Australian pines are found on all the islands.

Designated Species

Designated species are those that are listed by the Florida Natural Areas Inventory (FNAI), U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FFWCC), and the Florida Department of Agriculture and Consumer Services (FDA) as endangered, threatened or of special concern. Addendum 5 contains a list of the designated species and their designated status for this park. Management measures will be addressed later in this plan.

The species making the most demands on management are marine turtles, manatees, gopher tortoises and least terns. Loggerhead turtles nest on the beach and nesting records from 1996 to 2000 reflect that there were 1,180 nests. Green turtles have been found nesting occasionally in the last few years. Gopher tortoises are present on the three largest islands, but in numbers so small it is unlikely they can persist. Least terns and Snowy

plovers nest on elevated patches of sand and shell near Stump Pass, changing location from year to year as the sites they favor are erased and reconstituted nearby. Aerial surveys have documented the presence of manatees in waters around the park (Mote, 1987-present).

Special Natural Features

There are no known special natural features at this unit.

Cultural Resources

Evaluating the condition of cultural resources is accomplished using a three part evaluative scale, expressed as good, fair, and poor. These terms describe the present state of affairs, rather than comparing what exists against the ideal, a newly constructed component. 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 judgment is cause for concern. Poor describe 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 to reestablish physical stability.

The Florida Master Site File (FMSF) lists one site (8CH367) within the park. It is a shell scatter site on Peterson Island.

RESOURCE MANAGEMENT PROGRAM

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 the Division'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 early successional communities such as sand pine scrub and coastal strand.

A timber management analysis was not conducted for this park. The total acreage for the unit is below the 1,000-acre threshold established by Florida Statutes. Timber management will be reevaluated during the next 5-year revision of this management plan.

Management Needs and Problems

1. The principal resource management need at this unit is the elimination of exotic plants. A companion measure will be to restore native species where they have been displaced by exotics. There is a need to census gopher tortoises and map their burrows. The nesting of marine turtles and least terns, and other listed species should continued to be monitored each year.
2. An increase in passive boating such as kayaking and canoeing will be promoted.
3. The historic shoreline will continue to change, due to the placement of the artificial groins north of the park border and the effect of currents, storms, and waves. The northern portion of the park has been designated as critically eroded by the Bureau of Beaches and Wetland Resources. This designation automatically includes the area in the Florida Strategic Beach Management Plan and makes the area eligible for funding.
4. Dogs are sometimes allowed to run unleashed on the beach where they can disturb nesting, or resting, shorebirds. Commercial anglers have been known to pull seine nets

up on the beach where they leave unwanted fish to rot. These problems will be corrected now that the park has an assigned ranger.

5. The channel known as Stump Pass is currently being dredged to improve navigation. The project is slated to be completed by May 2003. While the Pass is not within the park boundaries, the dredging will have an impact to the existing park boundary. The Division has been engaged in a dialogue with the County to develop a project that addresses the concerns of all parties. The pass was dredged in 1979-80 but at great cost and the alleged destruction of several acres of marine grass beds. The dredging was largely undone by summer storms a year after their completion. In 1998 and 2000, interim dredging in the Pass took place. The current plan to dredge the pass proposes to excavate a pass at the approximate location of the 1980 dredged pass. The dredging will sever the southernmost sandspit portion of the park from the main portion of Manasota Key; an area used by least terns, black skimmers and snowy plovers for nesting. As the natural littoral drift is from north to south, the severed land will most probably attach to Knight's Island outside the park's management boundary, creating operational and management challenges for park staff. In response to these concerns, Charlotte County has agreed to assume management responsibility for the severed portion of the spit upon completion of the project.

Management Objectives

The resources administered by the Division are divided into two principal categories: natural resources and cultural resources. The Division primary objective in natural resource management is to maintain and restore, to the extent possible, to the conditions that existed before the ecological disruptions caused by man. The objective for managing cultural resources is to protect these resources from human-related and natural threats. This will arrest deterioration and help preserve the cultural resources for future generations to enjoy.

1. The management objective for invasive exotic plants is elimination of the standing crop of targeted species within five years.
2. The management objective for the restoration of natural communities invaded and disturbed by exotic plants is replacement with appropriate native plants.
3. Conduct a Phase I archaeology survey.

Management Measures for Natural Resources

Hydrology

In the small islands that make up Stump Pass Beach State Park, hydrology is not expected to be a consideration in resource management. It is not anticipated that there will ever be any withdrawals of ground water here. In addition, because the park is made up of several small islands of shifting sand there is no surface drainage of fresh water.

Prescribed Burning

The objectives of prescribed burning are to create those conditions that are most natural for a particular community, and to maintain ecological diversity within the unit's natural communities. To meet these objectives, the park is partitioned into burn zones, and burn prescriptions are implemented for each zone. The park burn plan is updated annually to meet current conditions. All prescribed burns are conducted with authorization from the Department of Agriculture and Consumer Services, Division of Forestry (DOF). Wildfire suppression activities will be coordinated between the Division and the DOF.

Due to the small size, urban nature and unsuitability of most of the habitats, no prescribed burning is conducted.

Designated Species Protection

The welfare of designated species is an important concern of the Division. In many cases,

these species will benefit most from proper management of their natural communities. At times, however, additional management measures are needed because of the poor condition of some communities, or because of unusual circumstances that aggravate the particular problems of a species. The Division will consult and coordinate with appropriate federal, state and local agencies for management of designated species.

The vertebrate list for this park is a partial one. However, four species named on the list will require special management attention: marine turtles, gopher tortoises, manatees and least terns.

Marine turtle nesting is monitored by volunteers under permit from the DEP. The program is well established, having operated smoothly since 1987. Seasonal data are forwarded to the District 4 office each year.

Coordination with Mote Marine Research Institute, FWC, other agencies will continue in order to protect manatees which frequent the Pass area.

Gopher tortoise burrows will be surveyed and mapped by district biology staff using GPS technology. Exotic removal projects will afford increased access to areas of tortoise activity. The nesting of least terns, black skimmers and plovers is recorded annually for all state parks where it occurs.

Exotic Species Control

Exotic species are those plants or animals that are not native to Florida, but were introduced because of human-related activities. Exotics have fewer natural enemies and may have a higher survival rate than do native species, as well. They may also harbor diseases or parasites that significantly affect non-resistant native species. Consequently, it is the strategy of the Division to remove exotic species from native natural communities.

The primary species of concern in this park are Brazilian peppers and Australian pines. During 1999-2000, a combined total of 21,055 Australian pines and Brazilian peppers were removed and replaced, where appropriate, with \$ 11,000 of native plantings. Grant funding was obtained from South Florida Water Management District. Efforts are underway to obtain additional grant funding to continue and complete exotic removal and replanting with native plants. The Bureau of Invasive Plant Management is providing herbicide for follow-up treatment.

Problem Species

Problem species are defined as native species whose habits create specific management problems or concerns. Occasionally, problem species are also a designated species, such as alligators. The Division will consult and coordinate with appropriate federal, state and local agencies for management of designated species that are considered a threat or problem.

On occasion, raccoon numbers increase to such an extent that hunger motivates them to depredate sea turtle nests. They will be controlled in a humane manner.

Management Measures for Cultural Resources

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. Approval from Department of State, Division of Historical Resources (DHR) must be obtained before taking any actions, such as development or site improvements that could affect or disturb the cultural resources on state lands (see **DHR Cultural Management Statement**).

Actions that require permits or approval from DHR include development, site excavations

or surveys, disturbances of sites or structures, disturbances of the substrate, and any other actions that may affect the integrity of the cultural resources. These actions could damage evidence that would someday be useful to researchers attempting to interpret the past.

The sole identified cultural site, 8CH367 is afforded some protection by its relative inaccessibility. A cultural resources survey of the park should be conducted.

Research Needs

Natural Resources

Any research or other activity that involves the collection of plant or animal species on park property requires a collecting permit from the Department of Environmental Protection. Additional permits from the Florida Fish and Wildlife Conservation Commission, the Department of Agriculture and Consumer Services, or the U.S. Fish and Wildlife Service may also be required.

1. Stump Pass Beach State Park is in need of a complete vertebrate list and a list of vascular plants. Surveys of gopher tortoise burrows would also be of use.
2. Surveys of the West Indian manatee near the park have been conducted for several years past by Mote Marine Laboratory of Sarasota. The data from these searches has been added to the park file.
3. Research is needed to determine the effects of boater and visitor activity on shorebird colonies and if needed, appropriate management measures should be undertaken.

Cultural Resources

4. As noted in the management objectives, arrangements for a Phase I archaeology survey should be conducted.

Resource Management Schedule

A priority schedule for conducting all management activities which is based on the purposes for which these lands were acquired, and to enhance the resource values, is contained in Addendum 6. Cost estimates for conducting priority management activities are based on the most cost effective methods and recommendations currently available (see Addendum 6).

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 of the Internal Improvement Trust Fund (board) are being managed for the purposes for which they were acquired and in accordance with a land management plan adopted pursuant to s. 259.032, the board of trustees, acting through the Department of Environmental Protection (department). The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required 5-year update of its management plan.

Stump Pass Beach State Park was subject to a land management review on January 25, 2002. The review team made the following determinations:

1. That the land is being managed for the purpose for which it was acquired.
2. That 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 Division of Recreation and Parks. 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. Input to the plan is provided by experts in environmental sciences, cultural resources, park operation and management, through public workshops, and environmental groups. With this approach, the Division 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, adjacent land uses, and the park interaction with other facilities.

The park is located within the Punta Gorda Metropolitan Statistical Area (MSA) that includes Charlotte County. The Florida Statistical Abstract 2000 reported nearly 137,000 residents in the Punta Gorda MSA in 1999--a 23 percent increase over 1990. Punta Gorda, with a population of 13,646 is the largest urban area within the MSA, and accounts for 10 percent of the population of Charlotte County. In addition to Punta Gorda, the incorporated areas of Cape Coral, Sarasota, North Port, and Venice are within 30 miles of the park. The latter three cities are located in adjacent Sarasota County. Strong growth rates are projected over the next decade for Charlotte and Sarasota Counties, at 25 and 16 percent, respectively.

The location of the park within a rapidly expanding urban area contributes to increasing rates of visitation. The 191,368 visitors to the park in fiscal year 2000-01 represented a 3.5-fold increase in visitation in the last three years. In fiscal year 1999-00, park visitors contributed over \$4.9 million in direct economic impact plus 147 jobs to the local economy.

Existing Use of Adjacent Lands

Stump Pass Beach State Park is comprised of the southernmost mile of Manasota Key, Peterson Island, Whidden Island, and Little Whidden Key. The park is located about one mile south of Chadwick County Park at Englewood Beach. The town of Englewood is located immediately north, with private residences, both single and multi-family, and rental units adjacent to the north boundary on Manasota Key. The Gulf of Mexico is to

the west of Manasota Key. Peterson Island, Whidden Island, and Little Whidden Key are located in Lemon Bay east of Manasota Key and north of Knight Island. A little more than three miles to the south is Don Pedro Island State Park. The bay waters of the park are part of the Lemon Bay Aquatic Preserve.

Planned Use of Adjacent Lands

Rapid urbanization is expected to continue as a land use trend in southwest Florida. The remaining undeveloped land south of Stump Pass is in private ownership. Any other undeveloped land in the bay area will likely be utilized for additional residential development. As development increases, the role of the park as provider of public beach recreation, wildlife habitat and resource protection will become increasingly important.

The current dredging project at Stump Pass could have significant impacts to park property. The project proposes to re-establish the 1980 channel, which would require severing a significant portion of the accreted area at the southern tip of Manasota Key. The Division is coordinating with the Bureau of Beaches and Wetland Resources and Charlotte County to ensure that resource affects and management concerns from this project are given due consideration and appropriately mitigated.

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

There are approximately 230 acres within the park boundary including over 35 acres of submerged lands. The low topographic profile of the islands that comprise the park makes them susceptible to washover during large storm events. The dynamic nature of the coastline, lack of stable uplands and widespread presence of ecologically sensitive and unique natural communities severely limits the degree of recreational development that can occur at the park. While ruderal areas account for a significant portion of the park, areas exist that remain largely undisturbed and exemplify the historical natural conditions of the barrier islands.

Water Area

There is a small, seasonal, interior wetland at the south end of Manasota Key. This brackish wetland provides habitat for wading birds and other aquatic life. The recreational potential of this area is limited to nature study. With the Intracoastal Waterway to the east and the Gulf of Mexico to the west, water related recreational activities dominate at Stump Pass Beach State Park.

Shoreline

The Gulf of Mexico borders the western and southwestern shoreline of Manasota Key, whereas Lemon Bay surrounds the three islands. Only the portions of shoreline along Manasota Key are accessible by vehicle. The Gulf beach on Manasota Key provides the

most suitable area for saltwater beach recreation. The eastern shoreline of Manasota Key and western shoreline of Peterson Island is accessible by boat. The southern tip of Manasota Key, abutting Stump Pass, is also a popular anchor point for boaters. With the steady accretion of sand on the southern tip of Manasota Key, the beach shoreline of the park now stretches nearly 1.7 miles. Since 1994, an additional 1,600 feet of shoreline has accreted at this end of the park. The extensive presence of tidal mangrove swamp limits shoreline access at Whidden Island and Little Whidden Key and portions of the eastern shoreline of Peterson Island. Appropriate protective measures will be taken to avoid visitor activities that contribute to erosion problems on any of the shoreline areas.

Natural Scenery

The natural scenery at the park is variable. Although much of the property is still in a natural state, the Australian pines and adjacent residential developments are a visual distraction. The gradual restoration of native vegetation in areas infested with Australian pines will serve to improve the visual quality of the park. Views along the beach and across the Gulf are excellent, as well as view of the undeveloped coastline and its vegetation.

Significant Wildlife Habitat

The Gulf beach on Manasota Key is used extensively by marine turtles for nesting. Gopher tortoises inhabit the two islands in the bay. Least terns shift their nesting sites as elevated patches of sand and shell are eroded and reconstituted in other areas. Manatees have been spotted in waters around the park.

Natural Features

The most outstanding natural feature of the park is the Gulf front beach. This is the focal point for most of the recreational activities on the property. Like that of other sandy, high-energy coastlines, the beach at this unit is in a constant state of flux, making this the unstable part of the island. Saltwater beach activities, such as swimming, fishing, shell collecting and nature observation are popular activities along the beach. This dynamic coastal zone provides opportunities for interpreting the natural processes of the barrier islands.

Archaeological and Historical Features

The park contains one scattered shell site that is recorded in the Florida Master Site File. Due to its location on Peterson Island, public access is not encouraged at this site.

Assessment of Use

Legal boundaries, significant natural features, structures, facilities, roads, trails and easements existing in the unit are delineated on the base. Specific uses made of the unit are briefly described in the following sections.

Past Uses

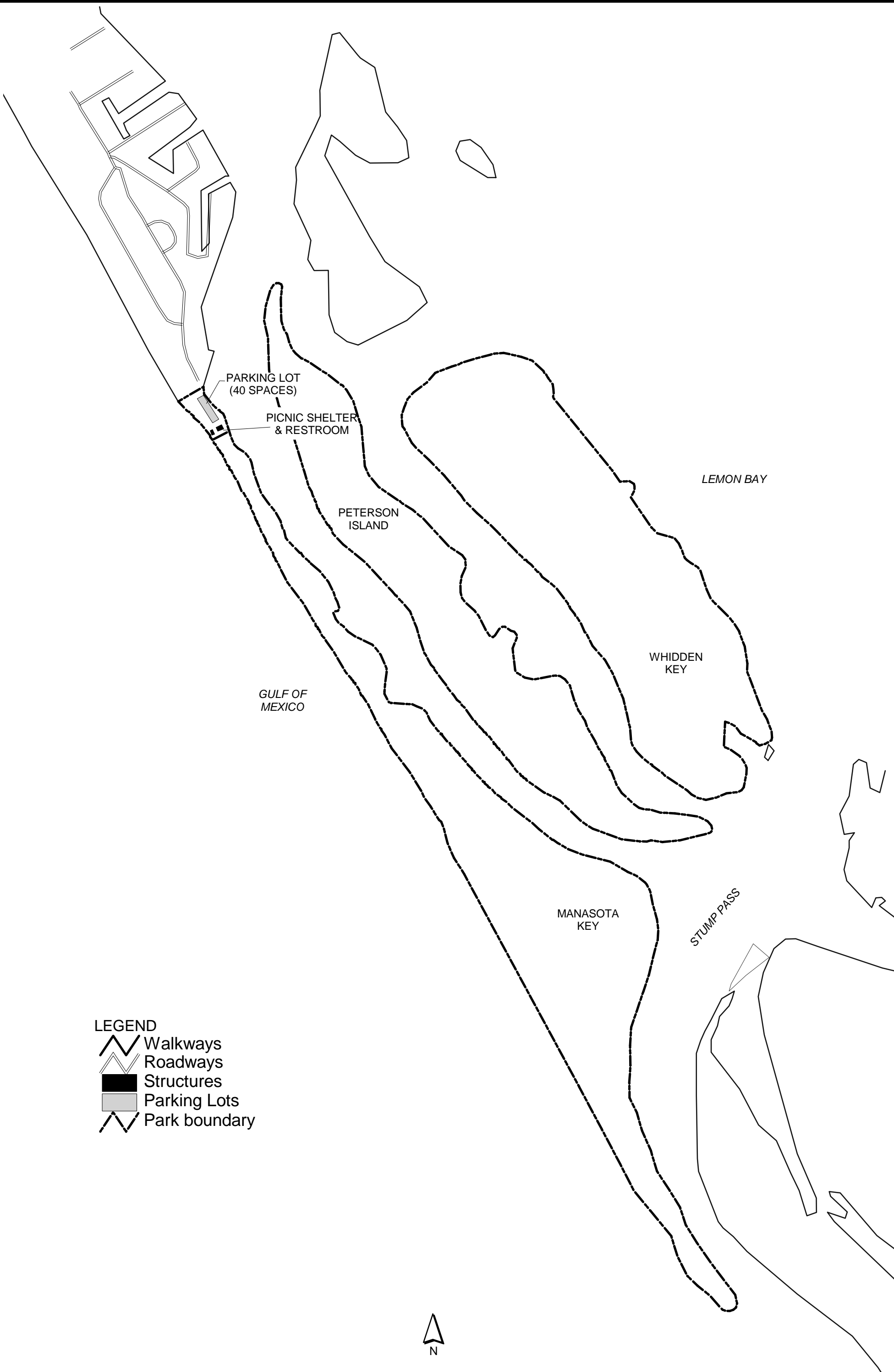
Before acquisition by the state, local residents and visitors for saltwater beach recreation used the property.






Recreational Uses

Recreation at Stump Pass Beach State Park includes, picnicking, swimming, sunbathing, shoreline fishing, hiking and other beach use activities. The protected waters of the bay are ideal for small boat cruising, sailing, and water skiing. Boat launching sites are located within one mile of Stump Pass and the nearby islands. Fishing is popular around Stump Pass and on the nearby grass flats. Birdwatching is popular at the park as a variety of shorebirds uses the beach dune community for resting and nesting.

Other Uses

Some inappropriate uses of the peninsula and islands have occurred in recent times. Beach driving, illegal fires, beaching of boats, illegal dumping and camping occurred



- LEGEND**
-  Walkways
 -  Roadways
 -  Structures
 -  Parking Lots
 -  Park boundary



600 0 600 1200 Feet

**STUMP PASS BEACH
STATE PARK**

Florida Department of Environmental Protection
Division of Recreation and Parks
Office of Park Planning

BASE MAP

before state ownership.

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 Stump Pass Beach State Park the beach dune, coastal strand, estuarine tidal swamp, estuarine and marine unconsolidated substrate communities have been designated as protected zones as delineated on the Natural Communities Map.

Existing Facilities

Existing facilities at the park are restricted to the northern end of the Manasota Key parcel and include stabilized parking, a dune boardwalk, restrooms with park storage area, a picnic shelter, and outside showers. A nature trail runs approximately half way down the interior of Manasota Key. The following is a complete listing of existing facilities.

Recreation Facilities

Small picnic shelter
Nature trail
Interpretive sign

Support Facilities

Stabilized parking (up to 40 vehicles)
Restrooms and storage facility
Outside showers
Dune boardwalk

CONCEPTUAL LAND USE PLAN

The following narrative represents the current conceptual land use proposal for this park. 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. 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.

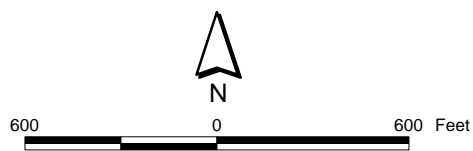
During the development of the unit management plan, the Division assesses potential impacts of proposed uses on the resources of the property. Uses that could result in unacceptable impacts are not included in the conceptual land use plan. Potential impacts are more thoroughly identified and assessed through the site planning process once funding is available for the development project. At that stage, design elements, such as sewage disposal and stormwater management, and design constraints, such as designated species or cultural site locations, are more thoroughly investigated. 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 avoid impacts and to mitigate those that cannot be avoided. Federal, state and local permit and regulatory requirements are met by the final design of the projects. 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.

Potential Uses and Proposed Facilities

The existing forms of recreation at Stump Pass Beach State Park should continue.



Stump Pass Beach State Park Conceptual Land Use Plan



Department of Environmental Protection
Division of Recreation and Parks
Office of Park Planning
ARC Draft

Although the property on Manasota Key is accessible by land, and can support a variety of beach related activities, its narrow configuration limits construction of additional recreation and support facilities. The location of the Coastal Construction Control Line along the eastern shoreline of Manasota Key further limits development potential. Development of any facilities will require a permit for construction seaward of that line.

Listed species near the trail and on the beach will continue to be monitored on a regular basis. If unacceptable visitor affects to natural communities or wildlife populations on the island occur, management measures will be implemented, which may include closure of sensitive areas. The practice of posting and restricting access to shorebird resting and nesting areas and turtle nesting areas will be continued in the future.

A service dock is recommended on the bay shoreline of Manasota Key near the existing use area. Construction of this facility will eliminate the need for the park to pay for a boat slip at a nearby marina and assist with park operations. This facility is not intended for public access and will not be available as a public boat dock. A flammable storage building is recommended to be located within the existing storage area under the elevated restroom facility.

The Division supports local efforts to promote canoe/kayak opportunities in waters of Lemon Bay. Designated rest stops are recommended at appropriate locations on Peterson Island and Whidden Island to serve as destinations for paddling enthusiasts exploring the area. These stops should be located outside of Ski Alley, in suitable areas of the shoreline that allow easy landing of canoes/kayaks and minimize disturbance to wildlife. No developed facilities are recommended at these locations. Signage is proposed along the cleared shoreline of Manasota Key near the site of the proposed service dock that identifies safe routes and discourages canoe/kayak traffic within Ski Alley.

A ferry service is planned at Don Pedro Island State Park a short distance to the south that would shuttle visitors from the mainland to Don Pedro Island. To provide an alternative destination for park visitors and further enhance public access to the area's Gulf beaches a ferry boat dock is recommended along the bay shoreline at the south end of Manasota Key once the Don Pedro Island ferry service is established. The proposed location is within a ruderal area recently cleared of Australian pines. A waiting shelter is recommended to be designed as part of this facility to shelter visitors in case of inclement weather. A boardwalk is proposed which would connect the dock with the Gulf beach, provide universal access and protect the beach dune community. An interpretive kiosk is proposed in this area to educate visitors to the dynamic coastal process that continue to shape Manasota Key and the significant natural resources of the park. The feasibility of a restroom in this area should be explored. If deemed unfeasible, concession operators will be expected to provide restroom facilities aboard their vessels.

Facilities Development

Preliminary cost estimates for the list below of proposed facilities are provided in Addendum 6. These cost estimates are based on the most cost-effective construction standards available at this time. The preliminary estimates are provided to assist the Division in budgeting future park improvements, and may be revised as more information is collected through the planning and design processes.

Proposed Recreation and Support Facilities

Service dock
Small storage building
Canoe/kayak rest stops and informational signage
Ferry dock
Waiting shelter

Interpretive kiosk
 Restroom
 Dune boardwalk

Existing Use and Optimum 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 1). The optimum 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 approximately increase the unit's carrying capacity as shown in Table 1.

Table 1—Existing Use And Optimum Carrying Capacity

Activity/Facility	Existing Capacity		Proposed Additional Capacity		Estimated Optimum Capacity	
	One Time	Daily	One Time	Daily	One Time	Daily
Beach Use	500	2,500	40	120	540	2,620
Canoe/kayaking			20	40	20	40
TOTAL	500	2,500	60	160	560	2,660

The proposed increase in beach use carrying capacity will depend on development of a ferry service.

Optimum Boundary

As additional needs are identified through park use, development, research, and as adjacent land uses change on private properties, modification of the unit's optimum boundary may occur for the enhancement of natural and cultural resources, recreational values, and management efficiency. At this time, no additional lands have been identified for acquisition and no land has been identified as surplus to the needs of the park.

Addendum 1—Acquisition History

**Stump Pass Beach State Park
Acquisition History**

Purpose and Sequence of Acquisition

The Board of Trustees of the Internal Improvement Trust Fund (Trustees) acquired Stump Pass Beach State Park (formerly known as Port Charlotte Beach State Recreation Area) to develop, operate, and maintain the property for outdoor recreation, park, conservation, historic, and related purposes.

On May 10, 1971, the Trustees obtained title property constituting the initial area of Stump Pass Beach State Park. The Trustees purchased the property with LATF and LWCF funds. Since this initial purchase, the Trustees acquired two additional parcels, one through donation and purchased with LATF and LWCF funds, and added them to Stump Pass Beach State Park.

Title Interest

The Trustees hold fee simple title to Stump Pass Beach State Park. On May 4, 1971, the Trustees conveyed management authority of Stump Pass Beach State Park to the Division of Recreation and Parks (DRP) under Lease No. 2545. The lease is for a period of ninety-nine (99) years, which will expire on May 4, 2070.

According to the lease, the DRP is to manage Stump Pass Beach State Park for the conservation and protection of natural, historic and cultural resources, and to provide resource-based public outdoor recreation compatible with the conservation and protection of the property.

Special Conditions On Use

The Stump Pass Beach State Park is designated single-use to provide resource-based 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 this unit management plan) are not consistent with the unit management plan or management purposes of the park and will be discouraged.

Outstanding Reservations

Following is a listing of outstanding rights, reservations, and encumbrances that apply to Stump Pass Beach State Park.

Instrument:	Indenture
Instrument Holder:	Venture Out in America, Inc.
Beginning Date:	July 9, 1971
Ending Date:	No specific date is given.
Outstanding Rights, Uses, Etc.:	The indenture is subject to certain utility as described in Deed Book 48, page 29 of Charlotte County public records.

Instrument:	Special Warranty Deed
Instrument Holder:	General Development Corporation
Beginning Date:	June 28, 1971
Ending Date:	Forever
Outstanding Rights, Uses, Etc.:	If said lands are not used for purposes outlined, they will revert to instrument holder.

Instrument:	Deed
Instrument Holder:	Walter Van B. Roberts, Alice W. Roberts, Thomas C. Roberts, Sylvia Roberts, Richard B. Roberts, Josephine T. Roberts
Beginning Date:	May 14, 1971
Ending Date:	No specific date is given.
Outstanding Rights, Uses, Etc.:	The deed is subject to certain utility easements as described in Deed Book 48, page 29 of Charlotte County public records.

Instrument:	Deed
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**Stump Pass Beach State Park
Acquisition History**

Instrument Holder: Robert A. Epperson and Glorida M.
Epperson, Hazen Kreis and Marie M.
Kreis
Beginning Date: May 6, 1971
Ending Date: No specific date is given.
Outstanding Rights, Uses, Etc.: The deed is subject to certain utility easements as described in
Deed Book 48, page 29 of Charlotte County public records.

**Stump Pass Beach State Park
DEP Advisory Group Members**

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Represented by:
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**Stump Pass Beach State Park
DEP Advisory Group Staff Report**

The Advisory Group appointed to review the proposed land management plan for Stump Pass Beach State Park met at the Tringali Recreation Complex in Englewood on August 23, 2002. Kathleen Rohrer represented Walter Meanwell. Tom Pinder, Doug Voltolina, Kathy Olson, and Bobbie Lee Hasty did not attend. All other appointed advisory group members attended. Attending staff was Robert Wilhelm, Reggie Norman, Sally Braem, Ken Alvarez and Michael Kinnison.

Mr. Kinnison began the meeting by explaining the purpose of the advisory group and reviewing the meeting agenda. He then provided a brief overview of the Division's planning process, and comments from the previous evening's public workshop. Mr. Kinnison then asked each member of the advisory group to express his or her comments on the plan.

Summary Of Advisory Group Comments

Commissioner Horton expressed his support for the park and a willingness to see county support enhanced. He discussed the shortage of boat ramps in the area and expressed a desire for boat launching facilities to be considered as part of future plans at Don Pedro Island State Park.

Reggie Norman emphasized the need for an additional ranger position to meet the resource management and operational demands of the park. He indicated that expanding outreach to area schools and acquiring funding for native plant revegetation were priorities at the park. He also reiterated the need for a service dock to improve access for park staff.

Larry Campbell indicated that his primary concern was protection of wildlife and that the plan appeared to address inventory and database gathering sufficiently. He added that he was confident in the Division's ability to manage the resources of the park in an appropriate manner.

Laura Kliess-Hoeft encouraged staff to consider how the park may support local efforts to promote canoeing/kayaking. She suggested minor changes to improve the pay station and outside shower at the park, and noted that current beach access points were not universally accessible.

Ken Musolf supports efforts to increase public access to the park. He encouraged consideration of additional docking facilities for private boaters as a means of spreading use along Manasota Key and limiting resource impacts. He expressed support for the ferry concept but noted that a successful private operation may prove difficult to maintain. He also recommended against establishing facilities that would increase canoe/kayak traffic on ski alley.

Kathy Radar-Gibson discussed ADA requirements for recreation facilities and the need to consider incorporating a universally accessible route from the proposed ferry dock to the beach. She also indicated that protection of shorebirds was an important issue at the park and should remain a priority resource management concern.

Becky Bovell encouraged development of the area as a multiple use/multiple access destination and expressed support for the proposed management plan. She explained the importance of Eco-tourism to Charlotte County's tourism program and encouraged efforts to increase public access. She suggested the use of signage and interpretive programs to mitigate problems associated with increased public access and those alternative modes of transportation, such as a ferry system, would be a positive addition for tourists. She added that a feasible plan for docking facilities could benefit both residents and visitors alike.

Brenda Bossman commented that protection of nesting shorebirds has improved through posting and enforcement. She would like to see funding dedicated to maintenance of beach boardwalks for universal accessibility. Ms. Bossman added that she would be opposed to providing additional dockage beyond the proposed service dock and ferry dock.

Kathleen Rohrer stated that a primary interest of the park CSO is having additional staff assigned to the park. She indicated that shifting staff from other units in the Geopark would not meet the needs of the park and that additional positions were needed. Ms. Rohrer would also like to see more emphasis placed on resource protection and less on public recreation. She added that given the amount of public use at the park it is even more important to have an adequate staff presence

**Stump Pass Beach State Park
DEP Advisory Group Staff Report**

for enforcement and protection.

B.J. Galberaith indicated that local homeowners were in support of the proposed pass dredging. She encouraged the park to remove Australian pines that have been killed as part of the park's exotic control program since they can pose a hazard in adjacent waters.

Summary Of Public Comments

Richard Spiro encouraged the park to remove nearshore rocks adjacent to the parking area to address erosion problems.

Summary Of Written Comments

The following is a summary of written comments submitted by Doug Voltolina and Ellen Hawkinson on behalf of Peace River Audubon.

Mr. Voltolina commended the Division for a well-written plan worthy of adoption. He indicated that the plan reflected the Division's hard work and lack of funding for needed projects.

Ms. Hawkinson expressed opposition to the proposed dredging project at Stump Pass. She stated that excavation of the pass through the southern end of the park will have serious detrimental impacts to nesting shorebirds, sea turtles, and other bird species and result in a loss of a significant area of the park. She also opposed the proposed ferry dock and associated structures out of concern for habitat fragmentation, potential manatee impacts and the cost of these facilities.

Staff Responses And Recommendations

Staff recommends approval of the proposed management plan for Stump Pass Beach State Park as presented with the following comments and changes.

Boating Access. The Land Use Component will be revised to discuss canoe/kayak opportunities in waters adjacent to the park and propose the establishment of rest stops on the east side of Peterson Island. The need for signage that identifies safe routes and discourages canoe/kayak traffic within Ski Alley will also be discussed.

The Division does not feel that private boat docking facilities are appropriate at the park. A proliferation of docking facilities is not desirable within the narrow pass between Manasota Key and Peterson Island and a sufficient number of facilities could not be practically provided to service the numbers of boaters using this area.

Universal Accessibility. In the past, significant investments were made to provide universally accessible boardwalks at the park. However, these structures were repeatedly damaged during storm events, became chronic maintenance problems, and presented threats to public safety. Due to the configuration of the shoreline in this area, seemingly modest storm events can damage or destroy boardwalks. Maintaining beach boardwalks is not feasible at this time given the extreme vulnerability to structures on the Gulf side of the island. Future beach restoration projects should widen the shoreline sufficiently to improve conditions for universal access. The feasibility of providing boardwalk access points will be re-addressed at this time.

Shoreline Erosion. The Resource Management Component will be revised to identify the need to approach the Bureau of Beaches and Wetland Systems for an opinion and recommended action regarding the rocks associated with the jetty adjacent to the parking area.

Pass Dredging. The Division has reviewed the proposed project and provided comments identifying a number of concerns regarding impacts to park resources. The Division will continue to communicate with the Bureau of Beaches and Wetland Resources and the county to ensure that these concerns are given due consideration.

Ferry Dock Concept. The ferry dock concept is viewed as an acceptable way to spread use along the 1.7 miles of Gulf shoreline and open areas to the public without access to private boats. It is worth noting that a primary reason for acquisition of this property was to provide public beach

**Stump Pass Beach State Park
DEP Advisory Group Staff Report**

access. Construction of facilities associated with this concept will be pursued once the Division has identified a concessionaire that is capable of operating a successful venture. A boardwalk has been proposed to minimize resource impacts and all facilities will be designed and constructed in as sensitive a manner as possible.

Addendum 2—References Cited

Stump Pass Beach State Park
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Addendum 3—Soil Descriptions

Stump Pass Beach State Park Soil Descriptions

(2) Canaveral Fine Sand - The soils of the Canaveral series are very rapidly permeable soils that formed in thick marine deposits of sand and shell fragments. These nearly level soils are on low ridges and in depressions along the Gulf Coast. They are associated with beaches.

Canaveral Fine Sand is nearly level, moderately well drained and somewhat poorly drained soil on low ridges. Slopes are smooth to slightly convex and range from 0 to 2 percent.

Typically, the surface layer is black and dark gray fine sand mixed with shell fragments and is about 15 inches thick. The underlying layers are light brownish gray and light gray fine sand mixed with shell fragments to a depth of 80 inches or more. The available water capacity is very low. Natural fertility is low. Permeability is very rapid. Natural vegetation includes seagrape, wild coffee and myrsine.

(24) Kesson Fine Sand - Kesson Fine Sand is associated with Wulfert Muck. It is a nearly level, very poorly drained soil in tidal swamps. Areas are subject to tidal flooding. Slopes are smooth and range from 0 to 1 percent.

Typically, the surface layer is about 6 inches of sand that contains shell fragments. The underlying layers are fine sand that contains shell fragments, and they extend to a depth of 80 inches or more. Natural vegetation consists of mangrove trees, pickel weed and oxeye daisy.

(22) Beaches - Beaches consist of narrow strips of nearly level, mixed sand and shell fragments along the Gulf of Mexico. These areas are covered with saltwater at daily high tides. Usually bare of vegetation, they are unstable and subject to being shifted by storms and longshore currents. Beaches are geographically with Canaveral soils.

Addendum 4—Plant And Animal List

Stump Pass Beach State Park

Plants

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
FERNS		
Whisk fern	<i>Psilotum nudum</i>	
Shoestring fern	<i>Vittaria lineata</i>	
GYMNOSPERMS AND CYCADS		
Slash pine	<i>Pinus elliottii</i>	
Florida arrowroot; Coontie	<i>Zamia pumila</i>	7
MONOCOTS		
Sandspur	<i>Cenchrus spinifex</i>	
Dayflower	<i>Commelina erecta</i>	
Crowfoot grass *	<i>Dactyloctenium aegyptium</i>	
Salt grass	<i>Distichlis spicata</i>	
Hairgrass; hairawn muhly	<i>Muhlenbergia capillaris</i>	
Salt jointgrass	<i>Paspalum distichum</i>	
Cabbage palm	<i>Sabal palmetto</i>	
Saw palmetto	<i>Serenoa repens</i>	
Knotroot foxtail	<i>Setaria parviflora</i>	
Greenbriar	<i>Smilax auriculata</i>	
Smooth cordgrass	<i>Spartina alterniflora</i> var. <i>glabra</i>	
Virginia dropseed	<i>Sporobolus virginicus</i>	
Oyster-plant *	<i>Tradescantia spathacea</i>	
Sea oats	<i>Uniola paniculata</i>	
Spanish bayonet	<i>Yucca aloifolia</i>	
DICOTS		
Chaff flower	<i>Alternanthera flavescens</i>	
Ragweed	<i>Ambrosia artemisiifolia</i>	
Marlberry	<i>Ardisia escallonioides</i>	
Black mangrove	<i>Avicennia germinans</i>	
Groundsel tree	<i>Baccharis halimifolia</i>	
Saltwort	<i>Batis maritima</i>	
Spanish needles	<i>Bidens alba</i> var. <i>radiata</i>	
Samphire	<i>Blutaparon vermiculare</i>	
Sea oxeye; sea daisies	<i>Borrichia frutescens</i>	
Gumbo limbo	<i>Bursera simaruba</i>	
Gray nicker	<i>Caesalpinia bonduc</i>	
Jamaica caper	<i>Capparis cynophallophora</i>	
Australian pine *	<i>Casuarina equisetifolia</i>	
Madagascar periwinkle *	<i>Catharanthus roseus</i>	
Spurge	<i>Chamaesyce mesembrianthemifolia</i>	
Snowberry	<i>Chiococca alba</i>	
Sea grape	<i>Coccoloba uvifera</i>	
Buttonwood	<i>Conocarpus erectus</i>	
Dwarf horseweed	<i>Conyza canadensis</i> var. <i>pusilla</i>	

* Non-native Species

Stump Pass Beach State Park

Plants

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
Tickseed	<i>Coreopsis leavenworthii</i>	
Coastal croton	<i>Croton punctatus</i>	
Milkweed vine	<i>Cynanchum angustifolium</i>	
Coin vine	<i>Dalbergia ecastaphyllum</i>	
Beach creeper; golden creeper	<i>Ernodea littoralis</i>	
White stopper	<i>Eugenia axillaris</i>	
Seaside gentian	<i>Eustoma exaltatum</i>	
Strangler fig	<i>Ficus aurea</i>	
Cuban laurel *	<i>Ficus microcarpa</i>	
Florida privet	<i>Forestiera segregata</i>	
Bedstraw	<i>Galium hispidulum</i>	
Southern gaura	<i>Gaura angustifolia</i>	
Beach sunflower	<i>Helianthus debilis</i> subsp. <i>vestitus</i>	1
Heliotrope	<i>Heliotropium polyphyllum</i>	
Camphorweed	<i>Heterotheca subaxillaris</i>	
Morning glory	<i>Ipomoea indica</i> var. <i>acuminata</i>	
Railroad vine	<i>Ipomoea pes-caprae</i> subsp. <i>brasiliensis</i>	
Blood leaf	<i>Iresine diffusa</i>	
Life plant *	<i>Kalanchoe pinnata</i>	
Tubular bells *	<i>Kalanchoe tubiflora</i>	
White mangrove	<i>Laguncularia racemosa</i>	
Lantana	<i>Lantana involucrata</i>	
Sea lavender	<i>Limonium carolinianum</i>	
Christmas berry	<i>Lycium carolinianum</i>	
Florida mayten	<i>Maytenus phyllanthoides</i>	5
Creeping cucumber	<i>Melothria pendula</i>	
Climbing hempweed	<i>Mikania scandens</i>	
Wild balsam apple *	<i>Momordica charantia</i>	
Horsemint; Spotted beebalm	<i>Monarda punctata</i>	
Wax myrtle	<i>Myrica cerifera</i>	
Seaside evening primrose	<i>Oenothera humifusa</i>	
Cut-leaved evening primrose	<i>Oenothera laciniata</i>	
Twistpine prickly pear cactus	<i>Opuntia humifusa</i>	
Prickly pear cactus	<i>Opuntia stricta</i>	5
Corkystem passionflower	<i>Passiflora suberosa</i>	
Frog fruit; carpetweed	<i>Phyla nodiflora</i>	
Leaf flower *	<i>Phyllanthus urinaria</i>	
Ground cherry	<i>Physalis walteri</i>	
Pokeweed	<i>Phytolacca americana</i>	
Painted leaf	<i>Poinsettia cyathophora</i>	
White bachelor's button	<i>Polygala balduinii</i>	
Large-flowered polygala	<i>Polygala grandiflora</i>	
Purslane	<i>Portulaca oleracea</i>	
Purslane	<i>Portulaca rubricaulis</i>	
Wild coffee	<i>Psychotria nervosa</i>	
White indigo berry	<i>Randia aculeata</i>	
Myrsine	<i>Rapanea punctata</i>	
Red mangrove	<i>Rhizophora mangle</i>	

* Non-native Species

Stump Pass Beach State Park

Plants

Common Name	<i>Scientific Name</i>	Primary Habitat Codes (for designated species)
Bloodberry	<i>Rivina humilis</i>	
Perrenial glasswort	<i>Salicornia perennis</i>	
Sage	<i>Salvia coccinea</i>	
Water pimpernel	<i>Samolus ebracteatus</i>	
Indigo berry	<i>Scaevola plumieri</i>	1
Brazilian pepper *	<i>Schinus terebinthifolius</i>	
Sea purslane	<i>Sesuvium portulacastrum</i>	
Saffron plum	<i>Sideroxylon celastrinum</i>	
Common nightshade	<i>Solanum americanum</i>	
Seaside goldenrod	<i>Solidago sempervirens</i>	
Necklace pod	<i>Sophora tomentosa</i> var. <i>truncata</i>	
Sea blite	<i>Suaeda linearis</i>	
Bay cedar	<i>Suriana maritima</i>	
Saltmarsh aster	<i>Symphyotrichum subulatum</i>	
Poison ivy	<i>Toxicodendron radicans</i>	
Blue curls	<i>Trichostema dichotomum</i>	
Cow pea	<i>Vigna luteola</i>	
Hercules club	<i>Zanthoxylum clava-herculis</i>	

Stump Pass Beach State Park

Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
REPTILES		
Gopher tortoise	<i>Gopherus polyphemus</i>	5
Atlantic loggerhead	<i>Caretta caretta caretta</i>	77
Cuban brown anole *	<i>Anolis sagrei sagrei</i>	7
Southern ringneck snake	<i>Diadophis punctatus punctatus</i>	7
Eastern coachwhip	<i>Masticophis flagellum flagellum</i>	5
Yellow rat snake	<i>Elaphe obsoleta quadrivittata</i>	5
BIRDS		
Eastern brown pelican	<i>Pelecanus occidentalis carolinensis</i>	77
Double-crested cormorant	<i>Phalacrocorax auritus</i>	77
Magnificent frigatebird	<i>Fregata magnificens</i>	OF
Great blue heron	<i>Ardea herodias</i>	76
Little blue heron	<i>Egretta caerulea</i>	77
Reddish egret	<i>Egretta rufescens</i>	77
Great egret	<i>Ardea alba</i>	77
Snowy egret	<i>Egretta thula</i>	77
Yellow-crowned night heron	<i>Nycticorax violaceus</i>	76
Wood stork	<i>Mycteria americana</i>	77
Roseate spoonbill	<i>Ajaia ajaja</i>	77
Red-breasted merganser	<i>Mergus serrator</i>	77
Red-shouldered hawk	<i>Buteo lineatus</i>	8
Southern bald eagle	<i>Haliaeetus leucocephalus</i>	8
Osprey	<i>Pandion haliaetus</i>	8
Peregrine falcon	<i>Falco peregrinus tundrius</i>	8
Northern bobwhite	<i>Colinus virginianus</i>	8
American oystercatcher	<i>Haematopus palliatus</i>	1,77
Semipalmated plover	<i>Charadrius semipalmatus</i>	1,77
Piping plover	<i>Charadrius melodus</i>	77
Southeastern snowy plover	<i>Charadrius alexandrinus tenuirostris</i>	1,77
Wilson's plover	<i>Charadrius wilsonia</i>	1,77
Killdeer	<i>Charadrius vociferus</i>	77
Black-bellied plover	<i>Pluvialis squatarola</i>	77
Ruddy turnstone	<i>Arenaria interpres</i>	77
Spotted sandpiper	<i>Actitis macularia</i>	77
Willet	<i>Catoptrophorus semipalmatus</i>	77
Red knot	<i>Calidris canutus</i>	77
Least sandpiper	<i>Calidris minutilla</i>	77
Semipalmated sandpiper	<i>Calidris pusilla</i>	77
Sanderling	<i>Calidris alba</i>	77
Short-billed dowitcher	<i>Limnodromus griseus</i>	77
Herring gull	<i>Larus argentatus</i>	77
Ring-billed gull	<i>Larus delawarensis</i>	77
Laughing gull	<i>Larus atricilla</i>	77
Bonaparte's gull	<i>Larus philadelphia</i>	77
Forster's tern	<i>Sterna forsteri</i>	77
Common tern	<i>Sterna hirundo</i>	77

* Non-native Species

Stump Pass Beach State Park

Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
Least tern	<i>Sterna antillarum</i>	1,77
Royal tern	<i>Sterna maxima</i>	77
Sandwich tern	<i>Sterna sandvicensis</i>	77
Black skimmer	<i>Rynchops niger</i>	77
Mourning dove	<i>Zenaida macroura</i>	8
Common ground-dove	<i>Columbina passerina</i>	8
Chimney swift	<i>Chaetura pelagica</i>	81
Ruby-throated hummingbird	<i>Archilochus colubris</i>	5,81
Belted kingfisher	<i>Ceryle alcyon</i>	OF
Pileated woodpecker	<i>Dryocopus pileatus</i>	OF
Red-bellied woodpecker	<i>Melanerpes carolinus</i>	8
Downy woodpecker	<i>Picoides pubescens</i>	8
Great crested flycatcher	<i>Myiarchus crinitus</i>	OF
Eastern phoebe	<i>Sayornis phoebe</i>	8
Eastern wood-pewee	<i>Contopus virens</i>	8
Bank swallow	<i>Riparia riparia</i>	OF
Barn swallow	<i>Hirundo rustica</i>	OF
Blue jay	<i>Cyanocitta cristata</i>	MTC
American crow	<i>Corvus brachyrhynchos</i>	MTC
Fish crow	<i>Corvus ossifragus</i>	MTC
House wren	<i>Troglodytes aedon</i>	8
Carolina wren	<i>Thryothorus ludovicianus</i>	8
Blue-gray gnatcatcher	<i>Polioptila caerulea</i>	8
Ruby-crowned kinglet	<i>Regulus calendula</i>	7,8
European starling *	<i>Sturnus vulgaris</i>	8
White-eyed vireo	<i>Vireo griseus</i>	8
Black-whiskered vireo	<i>Vireo altiloquus</i>	7,8
Red-eyed vireo	<i>Vireo olivaceus</i>	7,8
Black and white warbler	<i>Mniotilta varia</i>	7,8
Prothonotary warbler	<i>Protonotaria citrea</i>	7,8
Worm-eating warbler	<i>Helmitheros vermivorus</i>	7,8
Blue-winged warbler	<i>Vermivora pinus</i>	7,8
Northern parula	<i>Parula americana</i>	7,8
Yellow warbler	<i>Dendroica petechia</i>	7,8
Yellow-rumped warbler	<i>Dendroica coronata</i>	7,8
Cerulean warbler	<i>Dendroica cerulea</i>	7,8
Blackburnian warbler	<i>Dendroica fusca</i>	7,8
Pine warbler	<i>Dendroica pinus</i>	8
Prairie warbler	<i>Dendroica discolor</i>	8,76
Ovenbird	<i>Seiurus aurocapillus</i>	81
Northern waterthrush	<i>Seiurus noveboracensis</i>	81
Common yellowthroat	<i>Geothlypis trichas</i>	8
Hooded warbler	<i>Wilsonia citrina</i>	8
American redstart	<i>Setophaga ruticilla ruticilla</i>	7,8,81
Northern cardinal	<i>Cardinalis cardinalis</i>	8
Eastern towhee	<i>Pipilo erythrophthalmus</i>	8

MAMMALS

* Non-native Species

Stump Pass Beach State Park

Animals

Common Name	<i>Scientific Name</i>	Primary Habitat Codes (for all species)
Gray Squirrel	<i>Sciurus carolensis</i>	7
Raccoon	<i>Procyon lotor</i>	all types
West Indian manatee	<i>Trichechus manatus latirostris</i>	Offshore waters

Habitat Codes

Terrestrial

1. Beach Dune
2. Bluff
3. Coastal Berm
4. Coastal Rock Barren
5. Coastal Strand
6. Dry Prairie
7. Maritime Hammock
8. Mesic Flatwoods
9. Coastal Grasslands
10. Pine Rockland
11. Prairie Hammock
12. Rockland Hammock
13. Sandhill
14. Scrub
15. Scrubby Flatwoods
16. Shell Mound
17. Sinkhole
18. Slope Forest
19. Upland Glade
20. Upland Hardwood Forest
21. Upland Mixed Forest
22. Upland Pine Forest
23. Xeric Hammock

Palustrine

24. Basin Marsh
25. Basin Swamp
26. Baygall
27. Bog
28. Bottomland Forest
29. Depression Marsh
30. Dome
31. Floodplain Forest
32. Floodplain Marsh
33. Floodplain Swamp
34. Freshwater Tidal Swamp
35. Hydric Hammock
36. Marl Prairie
37. Seepage Slope
38. Slough
39. Strand Swamp
40. Swale
41. Wet Flatwoods
42. Wet Prairie

Lacustrine

43. Clastic Upland Lake
44. Coastal Dune Lake
45. Coastal Rockland Lake

Lacustrine—Continued

46. Flatwood/Prairie Lake
47. Marsh Lake
48. River Floodplain Lake
49. Sandhill Upland Lake
50. Sinkhole Lake
51. Swamp Lake

Riverine

52. Alluvial Stream
53. Blackwater Stream
54. Seepage Stream
55. Spring-Run Stream

Estuarine

56. Estuarine Composite Substrate
57. Estuarine Consolidated Substrate
58. Estuarine Coral Reef
59. Estuarine Grass Bed
60. Estuarine Mollusk Reef
61. Estuarine Octocoral Bed
62. Estuarine Sponge Bed
63. Estuarine Tidal Marsh
64. Estuarine Tidal Swamp
65. Estuarine Unconsolidated Substrate
66. Estuarine Worm Reef

Marine

67. Marine Algal Bed
68. Marine Composite Substrate
69. Marine Consolidated Substrate
70. Marine Coral Reef
71. Marine Grass Bed
72. Marine Mollusk Reef
73. Marine Octocoral Bed
74. Marine Sponge Bed
75. Marine Tidal Marsh
76. Marine Tidal Swamp
77. Marine Unconsolidated Substrate
78. Marine Worm Reef

Subterranean

79. Aquatic Cave
80. Terrestrial Cave

Miscellaneous

81. Ruderal
82. Developed
- MTC** Many Types Of Communities
- OF** Overflying

Addendum 5—Designated Species List

**Rank Explanations
For FNAI Global Rank, FNAI State Rank,
Federal Status And State Status**

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 man-made factor.
- G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction 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 and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
- 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)

**Rank Explanations
For FNAI Global Rank, FNAI State Rank,
Federal Status And State Status**

LEGAL STATUS

- N = Not currently listed,nor currently being considered for listing,by state or federal agencies.
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.
- LT = Listed 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 as a consequence is destined or very likely to become an endangered species within the foreseeable 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 which,in the foreseeable 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.

Stump Pass Beach State Park

Designated Species

Plants

Common Name/ <i>Scientific Name</i>	<u>Designated Species Status</u>		
	FDA	USFWS	FNAI
Beach sunflower <i>Helianthus debilis subsp. vestitus</i>			G5T2,S2
Florida mayten <i>Maytenus phyllanthoides</i>		LT	
Prickly pear cactus <i>Opuntia stricta</i>		LT	
Indigo berry <i>Scaevola plumieri</i>		LT	
Florida arrowroot; Coontie <i>Zamia pumila</i>		CE	

Stump Pass Beach State Park

Designated Species

Animals

Common Name/ <i>Scientific Name</i>	Designated Species Status		
	FFWCC	USFWS	FNAI
REPTILES			
Atlantic loggerhead <i>Caretta caretta</i>	LT	LT	
Gopher tortoise <i>Gopherus polyphemus</i>	SSC		S3
BIRDS			
Roseate spoonbill <i>Ajaia ajaia</i>	LS		G5,S2,S3
Great egret <i>Casmerodius albus</i>			S4
Piping plover <i>Charadrius melodus</i>	LT	LT	G3,S2
Southeastern snowy plover <i>Charadrius alexandrinus</i>	LT		
Reddish egret <i>Egretta rufescens</i>	SSC		S2
Snowy egret <i>Egretta thula</i>	SSC		S4
Magnificent frigatebird <i>Eregata magnificens</i>			S1
Peregrine falcon <i>Falco peregrinus</i>	LE		G4,S2
American oystercatcher <i>Haematopus palliatus</i>	SSC		S3
Worm-eating warbler <i>Helmitheros vermivorus</i>			G5, S1
Yellow-crowned night heron <i>Nycticorax violaceus</i>			S3?
Osprey <i>Pandion haliaetus</i>			S3S4
Eastern brown pelican <i>Pelecanus occidentalis</i>	SSC		
Black skimmer <i>Rynchops niger</i>			S3
Least tern <i>Sterna antillarum</i>	LT		S3
Royal tern <i>Sterna maxima</i>			S3
Sandwich tern <i>Sterna sandvicensis</i>			S2
Black-whiskered vireo <i>Vireo altiloquus</i>			S3
MAMMALS			
West Indian (=Florida) manatee <i>Trichechus manatus</i>	LE	LE	G2, S2?

Addendum 6—Priority Schedule And Cost Estimates

**Stump Pass Beach State Park
Priority Schedule And Cost Estimates**

Estimates are developed for the funding and staff resources needed to implement the management plan based on goals, objectives and priority management activities. Funding priorities for all state park management and development activities are reviewed each year as part of the Division's legislative budget process. The Division prepares an annual legislative budget request based on the priorities established for the entire state park system. The Division also aggressively pursues a wide range of other funds and staffing resources, such as grants, volunteers, and partnerships with agencies, local governments and the private sector for supplementing normal legislative appropriations to address unmet needs. The ability of the Division to implement the specific goals, objectives and priority actions identified in this plan will be determined by the availability of funding resources for these purposes.

1. Exotic removal, completed over five years. Contracted cost includes manpower, herbicide and travel. Replanting of native species where diversity has been impacted. Equipment needed includes: two ATVs and trailer over five years @ \$5,500 per unit; five chain saws @ \$200 unit; revegetation @ 15,000 per year; full time ranger position to conduct this work @ \$22,000 per year. **Estimated Cost for five years: \$177,100.**
2. Monitor and protect sea turtle nesting, shorebird nesting, gopher tortoise nesting, wintering shorebirds. Provide protection from disturbance due to recreational use with signs, barriers, education and interpretation. OPS intern would patrol and survey. **Estimated Cost for five years: \$70,000.**
3. Conduct a Level I archaeological survey of the park. **Estimated Cost: \$20,000.**
4. Funding for FTE Park Specialist. **Estimated Cost for five years: \$70,000.**

Total Estimated Cost:

\$337,100

**Stump Pass Beach State Park
Priority Schedule And Cost Estimates**

Item	Quantity	Unit	Unit Price	Multiplier	Amount
Recreation and Support Facilities					
6 Ft. Elevated Boardwalk	500.000	LF	\$165.00	1.25	\$103,125.00
Restroom	1.000	ea.	\$20,000.00	1.25	\$25,000.00
Fixed Boat Dock	2.000	slip	\$9,000.00	1.25	\$22,500.00
Small Storage Building	1.000	ea.	\$9,600.00	1.25	\$12,000.00
Interpretive Kiosk	1.000	ea.	\$20,000.00	1.25	\$25,000.00
Small Waiting / Rain Shelter	1.000	ea.	\$21,000.00	1.25	\$26,250.00
				Sub-Total	\$213,875.00
				20% Design/Permitting and Contingency Fee	<u>\$42,775.00</u>
				Total	\$256,650.00

NOTE: These preliminary cost estimates, based on Divisions standards, do not include costs for site-specific elements not evident at the conceptual level of planning. Additional costs should be investigated before finalizing budget estimates.